# Civic Center Master Plan

## Final Environmental Impact Report (EIR)

## SCH No. 2022050175


Prepared for

Community Development Department
City of Moorpark
799 Moorpark Ave,
Moorpark, California 93021

Prepared by

Psomas
5 Hutton Centre Drive, Suite 300
Santa Ana, California 92707


July 2023

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# 1.0 INTRODUCTION

## 1.1 PURPOSE

This Final Environmental Impact Report (Final EIR) has been prepared by the City of Moorpark (City), for the Civic Center Master Plan Project (Project). This Final EIR has been prepared consistent with California Environmental Quality Act (CEQA) statutes (Cal. Pub. Res. Code, Sections 21000 et seq., as amended) and implementing guidelines (Cal. Code Regs., Title 14, Sections 15000 et seq.).

Before approving a project, CEQA requires that the Lead Agency prepare and certify a Final EIR per State CEQA Guidelines Section 15090. As Lead Agency, the City has the principal responsibility for approval of the Project.

According to Section 15132 of the State CEQA Guidelines, the Final EIR must include:

- The Draft EIR or a revision of the Draft EIR;
- Comments and recommendations received on the Draft EIR either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the Lead Agency.

## 1.2 FORMAT OF THIS FINAL EIR

This Final EIR consists of the May 2023 Draft EIR (Appendix C) and the following four sections:

- Section 1 – Introduction. This section describes the purpose of this Final EIR, as well as its format and contents. Section 1 also provides an overview of the environmental review process for this Project.
- Section 2 – Response to Comments. This section provides a list of the persons, organizations, and public agencies that commented on the Draft EIR. A copy of each public agency comment letter and the City's responses to each comment received is provided in Section 2. Comments received from persons and organizations are provided in Appendix D. Section 2 of this Final EIR provides a summary of comments received from persons and organizations as well as responses grouped by theme.
- Section 3 – Draft EIR Revisions and Clarifications. This section contains minor revisions and clarifications to the information contained in the May 2023 Draft EIR.

- Section 4 – Mitigation Monitoring and Reporting Program. This section provides the Project's mitigation monitoring and reporting program (MMRP), which is presented in table format and identifies mitigation measures for the Project, the timing of implementation for each measure, and the responsible party.

## 1.3 PUBLIC REVIEW PROCESS

A summary of the public review process for the Project is provided below.

### Notice of Preparation

As part of the EIR process, a Notice of Preparation (NOP) was released on May 9, 2022, beginning the 30-day public scoping period for the EIR to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR (Appendix A). During the scoping period, the City received eight public agency comment letters and one comment from an individual person. No comments were received from a Native American Tribe. The Draft EIR incorporated the comments received from persons and organizations in response to the NOP.

### Public Review of Draft EIR

The Draft EIR was made available for public review and comment pursuant to State CEQA Guidelines Section 15087. Hard copies of the Draft EIR and Appendices were available for a review period of 45 calendar days from Monday, May 22, 2023 to Thursday, July 6, 2023 at the following locations:

City of Moorpark, Community Development Department
799 Moorpark Avenue Moorpark, CA 93021

and the

Moorpark City Library
699 Moorpark Ave, Moorpark, CA 93021

The Draft EIR and appendices were also available online at: https://moorparkca.gov/568/Environmental-Documents.

Written comments regarding the Draft EIR were required to be submitted no later than 5:00 PM on Thursday, July 6, 2023. Comments were able to be submitted in-person, by mail and e-mail.

On May 22, 2023, at the beginning of the public review period, an electronic copy of the Draft EIR with appendices, was submitted to the State Clearinghouse along with a Notice of Availability of a Draft EIR (NOA) (Appendix B), Notice of Completion & Environmental Document Transmittal (NOC) form, and a Summary Form for Electronic Document Submittal (i.e., SCH Summary Form). Also on May 22, 2023, the NOA was mailed via United States Postal Service (USPS) standard mail to 45 public entities and interested parties; and was filed with the Ventura County Clerk-Recorder and remained posted through the end of the public

review period. A printed copy of the Notice of Availability (NOA) was posted on the public information bulletin board of the County Clerk's building as well as at the Moorpark Library within the Project site. The NOA described where the Draft EIR was available and how to submit written comments on the Draft EIR.

## Final EIR

This Final EIR addresses the six written comments received during the public review period and includes minor revisions to the text of the Draft EIR in accordance with written comments that necessitated revisions. This Final EIR will be presented to the Planning Commission for potential certification of the environmental document prior to taking action on the Project. All agencies who commented on the Draft EIR will be provided with a copy of the Final EIR a minimum of 10 days prior to potential certification, pursuant to State CEQA Guidelines Section 15088(b). The Final EIR will also be posted at the same time on the City's website at: https://moorparkca.gov/568/Environmental-Documents.

Pursuant to State CEQA Guidelines Section 15091, the City shall make findings for any significant effects identified per State CEQA Guidelines Section 15382 in the Draft EIR and shall support any findings with substantial evidence in the record. After considering the Final EIR in conjunction with making findings under State CEQA Guidelines Section 15091 should they be required, the Lead Agency may decide whether or how to approve or carry out the Project. When a Lead Agency approves a project that will result in the occurrence of significant effects that are identified in the Final EIR but are not avoided or substantially lessened, the agency is required by CEQA to state in writing the specific reasons to support its action based on the Final EIR and/or other information in the administrative record. This "statement of overriding considerations" must be supported by substantial evidence in the administrative record and is prepared pursuant to State CEQA Guidelines Section 15093. The Final EIR for the Project did not identify potentially significant effects that could result from Project implementation. As such, a statement of overriding considerations prepared pursuant to State CEQA Guidelines Section 15093 is not required for this Project.

# 2.0 RESPONSE TO COMMENTS

All of the written comment letters and email comments received during the public review period by the City have been included and responded to in this Final EIR. Comments that raise significant environmental issues have been addressed in these responses. Comments that do not require a response include those that (1) do not address the adequacy or completeness of the Draft EIR; (2) do not raise substantive environmental/CEQA issues; (3) do not address the Project; or (4) request the incorporation of additional information not relevant to environmental issues.

Section 15088(d) of the State CEQA Guidelines, Evaluation of and Response to Comments, states:

a) The Lead Agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response. The Lead Agency shall respond to comments raising significant environmental issues received during the noticed comment period and any extensions and may respond to late comments.

b) The Lead Agency shall provide a written proposed response, either in a printed copy or in an electronic format, to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.

c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice. The level of detail contained in the response, however, may correspond to the level of detail provided in the comment (i.e., responses to general comments may be general). A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment.

d) The response to comments may take the form of a revision to the Draft EIR or may be a separate section in the Final EIR. Where the response to comments makes important changes in the information contained in the text of the Draft EIR, the Lead Agency should either:

    1. Revise the text in the body of the EIR; or
    2. Include marginal notes showing that the information is revised in the response to comments.

In the process of reviewing and responding to the comments, there were minor revisions to the text of the Draft EIR which are provided in Section 3.0, Draft EIR Revisions and Clarifications, of this Final EIR.

As discussed in more detail below in Section 3.0, none of the comments, responses, or revisions to the Draft EIR constitute "significant new information", and none of the conditions set forth in Section 15088.5(a) of the State CEQA Guidelines that would require recirculation of the Draft EIR have been met.

## 2.1 LIST OF COMMENTERS

A list of the persons, organizations, and public agencies that submitted written comments on the Draft EIR is provided in Table 2-1. Public agency comments as well as comments by individual persons or organizations are provided below in Section 2.2.

**TABLE 2-1**
**COMMENT LETTERS**

| Comment Letter | Name |
|---|---|
| **Public Agencies** | |
| 1 | California Department of Transportation (Caltrans) |
| 2 | Ventura County Air Pollution Control District |
| 3 | Ventura County Resource Management Agency: Cultural Heritage Board (CHB) |
| 4 | Ventura County Resource Management Agency: Environmental Health Division |
| **Persons and Organizations** | |
| 5 | Hugh Riley (On behalf of Moorpark's Historic High Street Arts Center) |
| 6 | Mitchell M. Tsai (On behalf of Southwest Carpenters) |

## 2.2 RESPONSES TO COMMENTS

As required by Section 15088 of the State CEQA Guidelines, the City as Lead Agency has evaluated all comments on environmental issues received from people who reviewed the Draft EIR, including comment letters received from four public agencies and two other persons and organizations. All of these comments will be considered as a part of the public record when the City deliberates regarding whether to approve the Project.

Consistent with Section 15088(b) of the State CEQA Guidelines, the City has responded to the four public agencies, and responses will be sent to these entities at least ten days prior to the City's certification of the EIR.

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# Comment Letter #1:

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY — Gavin Newsom, Governor

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 7- OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 266-3574
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

*Making Conservation a California Way of Life.*

July 5, 2023

City of Moorpark
Attn: Shanna Farley, Principal Planner
799 Moorpark Avenue
Moorpark, CA 93021

RE: Moorpark Civic Center Master Plan – Draft Environmental Impact Report (DEIR)
SCH# 2022050175
GTS# 07-VEN-2022-00547
Vic. VEN-23 PM 13.438

Dear Shanna Farley:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The Project would consist of the phased development of a new Civic Center within the Project site. The Project would be built in four phases, as detailed below. During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re -purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility. The two existing parking areas adjacent to the civic center and library would be maintained and reconfigured in Phases 1 and 2. During Phase 1, sidewalks and parking stalls would be added adjacent to the proposed library's frontage on West High Street. During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development. During Phase 2, additional parking and an additional driveway would be added on the west end of the Project site associated with development of the west commercial site. Phase 2 would also include the addition of angled parking spaces along the north side of West High Street. During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would require the removal of the existing city hall and community center/active adult center buildings, as well as the park that is located within the Project site. The northernmost parking area, which is adjacent to the existing city hall, would be removed during Phase 3. Also, during Phase 3 the driveway from Moorpark Avenue/Walnut Canyon Road would be realigned to eliminate the existing curves. During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

1-1

The nearest State facility to the proposed project is SR 23. After reviewing the DEIR, Caltrans has the following comments:

1-2

*"Provide a safe and reliable transportation network that serves all people and respects the environment"*

As stated in the Transportation Section (4.15) of the DEIR, the Project will not result in a significant VMT impact. However, the DEIR did identify Conditions of Approval in section 4.15.6 which will require coordination with the Caltrans Office of Permits and Office of Mobility Programs. Section 5 of the Traffic Impact Analysis describes the following:

1. Add a left turn lane on the northbound approach at the intersection of High Street and Moorpark Avenue to address conditions in both 2025 and 2037.

2. Change the existing full movement eastbound Charles Street approach to a right- in and right-out access in Phase 4 and re-route vehicles to enter or exit the project via the signalized intersection of High Street and Moorpark Avenue to the south.

1-2 cont.

Before the Lead Agency develops the permit application package, please be aware of the following requirements and recommendations:

- Conduct a signal warrants analysis for the Moorpark Avenue and Charles Steet intersection. Note: that the design at this intersection should also enhance pedestrian crossing safety to the greatest extent possible.
- All new or reconstructed sidewalk should meet or exceed all of the latest state standards.
- Install marking and signage along property frontage to enhance cyclist safety.
- A designated deceleration right-turn lane may be required for the Moorpark southbound approach at Charles Street to minimize stopping distance deficiency.
- The Project will result in new transportation infrastructure and these changes should always aim to create a comprehensive, integrated, connected network that is safe to use for all modes.

1-3

Please also be aware that the Project would be responsible for payment of applicable fees as required related to the transportation system, and Caltrans is not responsible for any fair-share contribution to the changes or improvements proposed or required by the Lead Agency.

During construction, temporary impacts to local roads such as lane closures may be needed to allow for the connection of utilities, and other related activities. As required by COA TRA-3 (refer to Mitigation Program in DEIR, section 4.15.6), traffic control plans would be developed and coordinated with the city to ensure that no substantial impacts to the circulation system occur as a result of Project construction. Caltrans requests that traffic control plan or Construction Traffic Management Plan (CTMP) be provided to Caltrans. The following elements shall be implemented, as appropriate:

- Construction traffic routes shall avoid residential areas. This would ensure travel in the surrounding residential neighborhoods is minimized and that construction vehicles travel along arterial roadways to access the Project site rather than through the neighborhoods or along pedestrian routes.

1-4

- Schedule construction activities to reduce the effects on traffic flows on surrounding arterial streets during peak hours.
- Obtain the required permits for truck haul routes from the City prior to issuance of any permit for the project.
- The project contractor shall identify and enforce truck haul routes deemed acceptable by the City for construction trucks.
- Signs shall be posted along roads identifying construction traffic access or flow limitations due to single lane conditions during periods of truck traffic, if needed.
- Accommodate all equipment and worker parking on-site to the extent feasible.
- Advance notification to adjacent property owners and occupants, as well as nearby schools, of upcoming construction activities, including durations and daily hours of construction.
- Provide safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers.
- Provide for temporary traffic control during all construction activities adjacent to the public right-of-way to improve traffic flow on public roadways (e.g., flag men).
- Any work that would affect the freeways and its facilities, Caltrans has the jurisdiction for review and approval.

1-5

Finally, the Project area is located immediately adjacent to the State Route 23. An encroachment permit will be required for any project work proposed on or in the vicinity of Caltrans right-of-way and all concerns must be adequately addressed.

1-6

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # 07-VEN-2022-00547.

Sincerely,

Miya Edmonson

MIYA EDMONSON
LDR Branch Chief

cc: State Clearinghouse

**Response to Comment Letter 1 from California Department of Transportation (Caltrans)**

**Response 1-1:** The commenter summarizes the Project description and thanks the City for including Caltrans in the review process. This comment is noted and does not raise any new significant environmental issues; therefore, no further response is necessary.

**Response 1-2:** The commentor states that the nearest State facility to the Project site is State Route (SR) 23. The commentor acknowledges that the Project would not result in a significant VMT impact; this statement is consistent with the findings within Section 4.15, Transportation, of the Draft EIR.

The commentor goes on to acknowledge that the Draft EIR identifies Conditions of Approval (COAs) which would require coordination with the Caltrans Office of Permits and Office of Mobility Programs. This comment is noted, and future Project coordination would occur accordingly. Given that this comment raises no new significant environmental issues, no further response is required.

**Response 1-3:** The commentor outlines requirements and recommendations for the development of the permit application package as required by Project specific COAs. This comment is noted. These requirements and recommendations would be implemented as required for future receipt of Caltrans permits. Given that this comment does not raise any new significant environmental issues; therefore, no further response is required.

**Response 1-4:** The commentor states that the Project would be responsible for payment of applicable fees as required. The commentor then requests that the traffic control plan or Construction Traffic Management Plan (CTMP), as required by COA TRA-3, be provided to Caltrans; furthermore, the commentor requests that specific elements be included within the aforementioned plan(s).

All future applicable fees will be paid as required by the Project applicant. As a responsible agency, Caltrans will receive the Project traffic control plan or CTMP prior to Project construction. The traffic control plan and CTMP elements requested by the commentor will be incorporated as appropriate; furthermore, as a responsible agency, Caltrans will have the ability to review and comment on Project specific plan(s) involving improvements within State right-of-way during future review periods. Given that this comment raises no new significant environmental issues, no further response is required.

**Response 1-5:** The commentor states that the Project area is located immediately adjacent to the State Route 23 and that an encroachment permit will be required for any Project work proposed on or in the vicinity of Caltrans right-of-way.

The Project would obtain all required permits, including an encroachment permit, as needed. Given that this comment letter raises no new significant environmental issues, no further response is required.

# Comment Letter #2:

Ventura County
Air Pollution
Control District

4567 Telephone Rd
Ventura, California 93003

tel 805/303-4005
fax 805/456-7797
www.vcapcd.org

Ali Reza Ghasemi, PE
Air Pollution Control Officer

**VENTURA COUNTY**
**AIR POLLUTION CONTROL DISTRICT**
Memorandum

TO: Shanna Farley, Principal Planner, City of Moorpark

DATE: July 5, 2023

FROM: Nicole Collazo, Air Quality Specialist, Planning Division NC

SUBJECT: Draft Program Environmental Impact Report for City of Moorpark Civic Center Master Plan Project (RMA 22-009-1)

Air Pollution Control District (APCD) staff have reviewed the available draft program environmental impact report (EIR), which identified any potential environmental impacts for the construction and upgrade of the City of Moorpark's (City) existing Civic Center. The project is located west of Moorpark Avenue/Walnut Canyon Road (State Route 23) and some portions on the north and south sides of West High Street. The Lead Agency is the City of Moorpark. 2-1

**GENERAL COMMENTS**

APCD submits the following comments regarding the City's EIR to the project referenced above.

Item 1- Mitigation Measure AQ-4. We recommend changing the wind speed language from 15 MPH to 25 MPH in order to be consistent with APCD's Rule 55, *Fugitive Dust*'s, High Wind Events Exemption provision. 2-2

Item 2- Page 4.2-8, 2nd paragraph. The draft EIR states that "VCAPCD is directly responsible for reducing emissions from stationary, mobile, and indirect sources.". APCD would like to clarify that we only have permitting and regulatory authority over stationary air emission sources. APCD may be *indirectly* responsible for the reduction of mobile and indirect sources by way of our mobile incentive programs and environmental review guidelines, but not directly responsible. 2-3

Item 3- Page 4.2-14, TACs. The section of Toxic Air Contaminants, or TACs, does not include the potential air quality impacts from potential exposure of asbestos to construction workers and surrounding sensitive receptors. APCD's Rule 62.7, *Asbestos- Demolition and Renovation*, contains certain requirements of abatement, certification of surveyors, and notifications to APCD, that the project must comply with. This should be added to this section and how asbestos exposure will be reduced to the greatest extent feasible. Note- The EIR does contain discussion on asbestos and TACs in its Hazardous Materials section, however neither the discussion nor conditions of approval suggested include any information about notification to APCD (COA HAZ-1 - -3). 2-4

Item 4- APCD cannot confirm aspects of the quantification of air emissions because the model report summary provided does not include any of the user input parameters and whether they are already-required assumptions (such as 50 g/L ROC max for general architectural coatings) or above what is required and should be counted as mitigation or emission reduction measures incorporated into a condition of approval (such as using Tier 3 off-road construction equipment). The discussion corresponding to the air emission operational and construction daily concentrations does not have this level of detail. For example, for Phase 3 estimated emissions in Table 4.2-6 calculated construction emissions at peak amounts of 22 lbs./day and 24 lbs./day for VOC and NOx, respectively. We cannot confirm what ROC max content of paints was entered or if any off-road equipment was selected to have Tier 3 or greater. If these assumptions were changed from what is already required, this should be considered mitigated if above 25 lbs./day for either ozone precursor pollutant. If the ROC max content of all architectural coatings applied, for example, was 25 g/L, this should be included as a condition of approval to ensure the contractors hired as using paints lower than was it currently required by APCD per Rule 74.2, *Architectural Coatings*. In addition, the model should have used trip information from the project's traffic study (e.g. 1,329 trips per day) and this also cannot be confirmed was used as an input parameter.

2-5

Thank you for the opportunity to comment on the draft EIR. If you have any questions, you may contact me at nicole@vcapcd.org.

**Response to Comment Letter 2 from Ventura County Air Pollution Control District**

**Response 2-1:** The commentor states that Air Pollution Control District (APCD) staff have reviewed the Draft EIR. This comment is noted and does not raise any new significant environmental issues; therefore, no response is necessary.

**Response 2-2:** The commentor states that the language within COA AQ-4[1] is inconsistent with Ventura APCD's Rule 55, Fugitive Dust. Specifically, the commentor states that while COA AQ-4 requires all clearing, earth moving, excavation, soil import, and/or soil export operations to cease during periods of high winds (greater than 15 miles per hour [mph] averaged over one hour), Ventura APCD Rule 55 identifies a high wind threshold of 25mph. While the 15mph threshold within COA AQ-4 is inconsistent with Ventura APCD Rule 55, Fugitive Dust, the 15mph threshold is a City of Moorpark standard COA; furthermore, a 15mph high wind threshold would further reduce impacts compared to the 25mph high wind threshold identified by Ventura APCD. As such, this comment is noted and does not raise any new significant environmental issues; no further response is necessary.

**Response 2-3:** The commentor states that they would like to clarify a statement made on Page 4.2-8 of the Draft EIR. The commentor clarifies that Ventura APCD only has permitting and regulatory authority over stationary air emission sources, and while APCD may be indirectly responsible for the reduction of mobile and indirect sources by way of their mobile incentive programs and environmental review guidelines, APCD is not directly responsible for reducing emissions from stationary, mobile, and indirect sources. This comment is noted and language has been removed from the EIR to reflect this clarification.

**Response 2-4:** The commentor states that the section on Toxic Air Contaminants (TACs) does not include the potential air quality impacts from potential exposure of asbestos to construction workers and surroundings sensitive receptors. Further, the commentor cites abatement, certification, and notification requirements within Ventura APCD's Rule 62.7, Asbestos- Demolition and Renovation, and requests that this information be included in the EIR. Compliance with Ventura APCD's Rule 62.7, Asbestos- Demolition and Renovation, has been added as COA AQ-6 within Section 4.2, Air Quality, of the EIR in response to this comment. This comment does not raise any new significant environmental issues; no further response is necessary.

**Response 2-5:** The commentor states that they cannot confirm aspects of quantification of air emissions because the model reports summary provided does not include any of the user input parameters; specifically, the commentor notes that the discussion corresponding to air emission operational daily concentrations does not have this level of detail. The commentor requests that if assumptions were changed to be more stringent than existing requirements, that this be called out as a condition of approval to ensure that the Project's contractor complies accordingly.

COA AQ-3 has been revised to reflect model assumptions that were used for the Project as requested in the comment letter. As revised, COA AQ-3 would be more effective in avoiding

[1] Commentor refers to COA AQ-4 as "MM AQ-4" in their letter.

air quality effects as it now specifies the maximum VOC content of the paint that was assumed within the air quality modeling, which the contractor would need to utilize during certain periods of the construction process. Consistent with State CEQA Guidelines Section 15088.5(b), recirculation of the Draft EIR is not required given that this new information being added to the Draft EIR merely clarifies what was assumed in the air quality modeling and reported in the Draft EIR. As such, this would not constitute significant new information requiring re-circulation,

Furthermore, the commenter states that the model should use trip information from the Project's traffic study (e.g., 1,329 trips per day); this value from the traffic study was used as an input during air quality/GHG quantifications. This comment letter does not raise any new significant environmental issues; therefore, no further response is necessary.

## Comment Letter #3:

COUNTY of VENTURA

RESOURCE MANAGEMENT AGENCY
**DAVE WARD**
Planning Director

**SUSAN CURTIS**
Assistant Planning Director

June 16, 2023

Anthony Ciuffetelli
RMA/Planning/EDR Coordinator

Sent via electronic mail: Anthony.ciufetelli@ventura.org

**SUBJECT: Moorpark Civic Center Master Plan Project Draft EIR**
SCH Number: 2022050175
RMA Ref#22-009-1

To Whom It May Concern,

Ventura County Cultural Heritage Board (CHB) staff is in receipt of the invitation to comment on the above-referenced project. Thank you for the opportunity to review and comment. CHB staff has researched the project site, as well as property within the vicinity, and found the following:

- The project site is within the vicinity of Ventura County Landmark #72: Pepper Trees along High Street, designated by the Ventura County Cultural Heritage Board in October 1981.
- The trees, planted along High Street from approximately Walnut Street to Magnolia Avenue, are the remaining California pepper trees planted by John Nubee and John Barrett in 1904. The exact number of trees originally growing along the street is not known, but it is estimated that they exceeded 40 in number. A number of trees have been lost over the years to disease and replaced.

3-1

Based on the above information, CHB staff offers the following comments:

- Section 4.4 of the Draft Environmental Impact Report (DEIR) should be revised to reflect the above-referenced historic landmark being located in proximity to the project site, along with any necessary revisions to Section 4.4.4: Impact Analysis; and
- Robust tree preservation measures should be enforced to ensure the pepper trees (Landmark #72) are protected throughout the entire construction process. A certified arborist should be consulted to ensure that the preservation measures are adequate.

3-2

HALL OF ADMINISTRATION #1740
(805) 654-2481 • FAX (805) 654-2509 • 800 South Victoria Avenue, Ventura, CA 93009 • vcrma.org

Thank you again for the opportunity to comment on the proposed project. Please contact me via phone at (805) 654-5042 or email at Dillan.Murray@ventura.org if you have any questions about this letter.

Sincerely,

Dillan Murray, Associate Planner
Planning Programs Section
Ventura County Planning Division

**Response to Comment Letter 3 from Ventura County Cultural Heritage Board**

**Response 3-1:** The commenter states that Ventura County Cultural Heritage Board (CHB) staff are in receipt of the invitation to comment on the Draft EIR and that staff have researched the Project site as well as the properties in the vicinity. The commenter goes on to state that the Project site is in the vicinity of Ventura County Landmark #72: Pepper Trees along High Street, designated by the Ventura County Cultural Heritage Board in October 1981. The commentor states that the trees, planted along High Street from approximately Walnut Street to Magnolia Avenue, are the remaining California pepper trees planted by John Nubee and John Barrett in 1904. This comment is noted. The Project would not require removal of any of these trees as these are east of Moorpark Avenue and not within the Project site.

**Response 3-2:** The commenter states that Section 4.4, Cultural Resources, of the Draft EIR should be revised to reflect Ventura County Landmark #72: Pepper Trees along High Street, being located in proximity to the project site, along with any necessary revisions to Section 4.4.4: Impact Analysis. As noted above, this County Landmark would not be affected by the Project. As such, this comment is noted but since it does not raise any new significant environmental issues, no further response is necessary.

## Comment Letter #4:

**COUNTY of VENTURA**

RESOURCE MANAGEMENT AGENCY
**CHARLES R. GENKEL**
Environmental Health Director

June 26, 2023

City of Moorpark,
RE: Moorpark Civic Center
ATTN: Shanna Farley, Community Development Department
799 Moorpark Ave,
Moorpark CA 93021

**Moorpark Civic Center Master Plan Project, Environmental Document Review – Notice of Availability of Draft Environmental Impact Report, (RMA REF # 22-009-01)**

Ventura County Environmental Health Division (Division) staff reviewed the information submitted for the subject project.

The Division provides the following comments:

1. The proposed project includes the construction of a city hall and a mercado/market area. Food facilities are subject to plan review and permitting by this Division. The applicant/food facility operator must submit plans to the Ventura County Environmental Health Division, Community Services Section and obtain plan approval prior to beginning any construction of any food facility. A Permit to Operate from this Division is also required prior to beginning any retail food operations.
   https://vcrma.org/consumer-food-protection

4-1

2. Project includes the construction of commercial business tenants that may handle, store, or transport hazardous materials, or they may generate hazardous waste. Hazardous materials and/ or hazardous waste at or above the reportable thresholds must be reported to the Division's Certified Unified Program Agency (CUPA). Contact the CUPA for reporting and/or permitting requirements.
   https://vcrma.org/en/cupa

4-2

If you have any questions, please contact me at (805) 654-2830 or Roxy.Cabral@ventura.org.

Roxy Cabral, R.E.H.S.
Land Use Section
Environmental Health Division

SH G:\Admin\TECH SERVICES\FINALED Letters\Land Use\SR0021033 ODR RMA 22-009-1 Civic Center Master Plan 6 26 2023.docx

HALL OF ADMINISTRATION #1730
805-654-2813 • FAX 805-654-2480 • 800 South Victoria Avenue, Ventura, CA 93009 • vcrma.org

**Response to Comment Letter 4 from Ventura County Environmental Health Division**

**Response 4-1:** The commenter states that the Project involves the construction of a Mercado/Market Area. Further, the commentor notes that food facilities are subject to plan review and permitting by the Ventura County Environmental Health Division. COA HAZ-4 has been added to the EIR in response to this comment.

**Response 4-2:** The commenter states the Project would involve construction of commercial business tenants that may handle, store, or transport hazardous waste. The commentor further states that hazardous materials and/or hazardous waste at or above the reportable thresholds must be reported to the Division's certified Unified Program Agency (CUPA). COA HAZ-5 has been added to the EIR in response to this comment. Given that this comment letter raises no new significant environmental issues, no further response is required.

## Comment Letter #5:

MOORPARK'S HISTORIC HIGH STREET ARTS CENTER

BOARD OF DIRECTORS

Hugh R. Riley
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Dr. Michael W. Marion
Vice President

Laurel Marion
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Ken Rayzor
General Manager

Bernardo M. Perez
Sponsors & Diversity

Megan Rayzor
Director of Education

Kathee Boyer
Stage Manager

Nora Morris
Social Media/Website

Sue Hearon
Concession Manager

David Pollock
Community Relations

July 6, 2023

Shanna Farley, Principal Planner
Community Development Department
City of Moorpark
799 Moorpark Avenue
Moorpark, CA, 93021

RE: Moorpark Civic Center Master Plan -Environmental Impact Report (EIR)

Dear Ms. Farley,

This letter represents our initial comments in response to the EIR for the Civic Center Master Plan. As a key player in the future revitalization and survival of the downtown district, we are vitally concerned about the impacts of future developments in the area, both commercial and residential, on High Street and the surrounding neighborhood. Our concerns are primarily with the impact on traffic flow and parking. 5-1

The existing High Street/Moorpark Avenue intersection is an impediment to safe and reasonable traffic flow on High Street in both directions. We believe the eventual widening of this intersection should be included in the plan and evaluated.

High Street offers parallel and off-street parking. The High Street Depot has removed significant off-street parking for High Street Businesses and visitors. We are hopeful that the city will accelerate its development plans for the post office parking lot and other nearby off-street opportunities including the west end of the South Metrolink Parking Lot to help address this shortage and to provide parking for our theatre patrons who must return to their vehicles late at night. 5-2

We realize that this is a Program EIR and that most features of the plan will be subject to further public review and comment. However we wanted to express the above briefly and we look forward to being included by the City of Moorpark as a major stake-holder in this planning effort.

Respectfully,

Hugh Riley
President/CEO

Cc: Board of Directors

Operated By the Moorpark Foundation for the Arts - 501 (c) (3) Corporation –FEIN 27-0319993
144 W. Los Angeles Ave., Moorpark, CA 93021 | Offices- 33 East High Street, Ste. 200, Moorpark, CA 93021

The High Street Arts Center has had a long and rich history as a source of culture and entertainment for the residents of Moorpark. In its early incarnation, the El Rancho, located at 45 East High Street in Moorpark, California, was built in 1927 to replace an old wooden structure that housed a silent movie theater. The El Rancho had the distinction of being the only "talking movie" theater in the east end of Ventura County. Sometimes referred to as the Moorpark Theatre, it closed as a movie house in the 1950´s and was used for school and community productions. It had many incarnations, even being used as a junk shop. In 1983 it re-opened as a "live" event theater known as the Magnificent Moorpark Melodrama & Vaudeville Co. Audiences came from all over Southern California to experience the unique melodramatic offerings. Ownership changed hands several times through the 80´s & 90´s with the doors finally closing on the Moorpark Playhouse in 1999.

5-3

In 2001 Larry Janss, whose father and grandfather developed much of Westwood and the San Fernando Valley, bought the building with the intent of creating a new cultural center for Moorpark. He revamped the theater inside and out, putting in lighting and sound equipment, a new concession area, a retractable movie screen, new plumbing and electrical systems, and a new marquee. After a light-hearted competition, the theater was renamed The Theater on High Street, and was transformed into a vibrant venue for classic films, live concerts and plays. The auditorium seating even featured wooden shelves, as it did in the 20s, allowing patrons to bring food and drinks purchased in the lobby into the auditorium. While the renovations were awesome, the cost of these upgrades were more than initially anticipated and Mr. Janss consequently began to look at buyers for the property. Having put so much effort into creating a theater, he hoped to sell the property to someone who would continue using the property as such.

In August of 2005 the City Council of Moorpark came to an agreement with Larry Janss, and voted to purchase the theater. After several rentals to local theater production companies, the city, via the Redevelopment Agency, embarked on a new venture: creating a performing arts venue for the Moorpark Community, and renaming it the High Street Arts Center (HSAC). The city's ambitious plans for the redevelopment of Historic High Street includes the HSAC and it has remained a key element of those plans for the past decade through a serious economic recession with the hope that other developments will follow.

After operating the HSAC as a part of the City's Community Services Department including a substantial financial subsidy, the City Council established the Non-Profit Moorpark Foundation for the Arts in 2009 that assumed daily operation of the HSAC. The City and the Foundation continued to manage the HSAC with the help of City funding and in July 2012, a three-year Operating Agreement was signed giving the growing Foundation full operating responsibility and reducing the City funding. A second three-year Operating Agreement was signed in July 2015 and all city funding was eliminated.

5-3 cont.

From 2010, the success of the HSAC has grown by leaps and bounds, with attendance and revenues increasing by huge percentages. The independent Foundation's management of the HSAC brought professional quality in aggressive show selection which attracts the best talents the region has to offer and the venue now enjoys the reputation as the finest of its kind in Ventura County.

As residents and visitors discover the jewel of the High Street Arts Center, they will also discover the wonderful new restaurants and shops that will soon line High Street as well.

**Response to Comment Letter 5 from Hugh Riley (Moorpark's Historic High Street Art Center)**

**Response 5-1:** The commenter states that they are concerned about the impacts of future developments in the area, both commercial and residential, on High Street and the surrounding neighborhood; specifically, the commentor notes their primary concerns are with the impact on traffic flow and parking. Project effects related to transportation are evaluated in Section 4.15 of the Draft EIR. This comment is noted; given that this comment letter raises no new significant environmental issues, no further response is required.

**Response 5-2:** The commenter states that the existing High Street/Moorpark Avenue intersection is an impediment to safe and reasonable traffic flow on High Street in both directions and requests that the eventual widening of this intersection be included in the plan and evaluated. Further, the commentor states that the High Street Depot has removed significant off-street parking for High Street businesses and visitors and the commenter requests that the City accelerate their development plans for the post office parking lot and other nearby off-street opportunities including the west end of the South Metrolink Parking Lot.

The Project would be required to provide parking in compliance with the Moorpark Zoning Code. The Project's Traffic Study did not identify any required improvements for the High Street/Moorpark Avenue intersection based on current City standards. Although the Project does not include pedestrian or other improvements to the specified intersection, the Project would in no way impede the City from improving the intersection as a separate project. This comment is noted; as these comments raises no new significant environmental issues pursuant to CEQA, no further response is required.

**Response 5-3:** The commenter provides a history of the High Street Arts Center. This comment is noted; as the comment raises no new significant environmental issues pursuant to CEQA, no further response is required.

# Comment Letter #6:

P: (626) 314-3821
F: (626) 389-5414
E: info@mitchtsailaw.com

**Mitchell M. Tsai**
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

**VIA E-MAIL**

May 31, 2023

Shanna Farley
Principal Planner
City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021
Em: sfarley@moorparkca.gov

**RE: City of Moorpark's Civic Center Master Plan (SCH# 2022050175).**

Dear Shanna Farley,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments for the City of Moorpark's ("**City**") Civic Center Master Plan ("**Project**").

The Southwest Carpenters is a labor union representing over 63,000 union carpenters in 10 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

6-1

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the Draft Environmental Impact Report (DEIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland*

(2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

## I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

6-1 cont.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

> [L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

6-1 cont.

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[3]

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and

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[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

6-1 cont.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

## II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several

6-2

[4] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

construction sites have been identified as sources of community spread of COVID-19.[5]

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

**Construction Site Design:**

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.

6-2 cont.

[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- Provide hand washing stations throughout the construction site.

**Testing Procedures:**

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

6-2 cont.

**Planning**

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

6-2 cont.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

[6] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

[7] For details concerning Southwest Carpenters's ICRA training program, *see* https://icrahealthcare.com/.

| | |
|---|---|
| The City should require the Project to be built using a workforce trained in ICRA protocols. | 6-2 cont. |

Sincerely,

Mitchell M. Tsai
Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

**Response to Comment Letter 6 from Hugh Riley (Southwest Mountain States Regional Council of Carpenters (SWMSRCC))**

**Response 6-1:** The commenter states that this letter is being submitted on behalf of the Southwest Mountain States Regional Council of Carpenters (SWMSRCC) for the Project. The commentor goes on to provide a background of SWMSRCC and requests that the City provide notice of all notices referring or related to the Project issued under CEQA and the California Planning and Zoning Law. The commentor has been added to the mailing list for distribution of the Final EIR.

The commentor states that the City should require the use of local workforce, citing that this would benefit the community's economic development and environment.

This comment is noted; given that this comment letter raises no new significant environmental issues, no further response is required. The commentor states that local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions (GHG), and provide localized economic benefits, citing Matt Hagemann and Paul E. Rosenfield's March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements Considerations for Greenhouse Gas Modeling.

As stated in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, estimated total construction combined GHG emissions for all phases of the Project would be 971.29 $MTCO_2e$. Based on an SCAQMD recommendation, construction over the life of a project and a common value for project life is 30 years (SCAQMD 2008). Therefore, the 30-year amortized construction emissions were determined to be 32 $MTCO_2e/yr$. As such, the Project's construction related GHG emissions would result in a less than significant impact and no mitigation is required.

These comments are noted; as they raise no new significant environmental issues pursuant to CEQA, no further response is required.

**Response 6-2:** The commenter suggests that the City should impose training requirements for the Project's construction activities to prevent community spread of Covid-19 and other infectious diseases. This comment is noted; as it raises no new significant environmental issues pursuant to CEQA, no further response is required.

Attachments referenced in this letter can be found in Appendix D of this document.

# 3.0 DRAFT EIR REVISIONS AND CLARIFICATIONS

Any revisions to the Draft EIR text, tables, and figures generated either from responses to comments or independently by the City, are stated in this section of the Final EIR. The Draft EIR text, tables, and figures have not been modified and then published separately as the Final EIR in its entirety as a single document to reflect these EIR modifications.

These Draft EIR revisions are provided to clarify and amplify the Draft EIR. Revisions may be corrections or clarifications to the text and tables of the original Draft EIR. Other revisions to the Draft EIR clarify the analysis in the Draft EIR based upon the information and concerns raised by comments during the public review period. None of the information contained in these Draft EIR revisions constitutes significant new information or revisions to the analysis or conclusions of the Draft EIR.

None of the comments, responses, or revisions to the Draft EIR constitute "significant new information", and none of the conditions set forth in Section 15088.5(a) of the State CEQA Guidelines that would require recirculation of the Draft EIR has been met.

Pursuant to Section 15088.5 (a) of the State CEQA guidelines, (a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. The revisions to the Draft EIR included in these EIR revisions did not change the Draft EIR in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement a do not constitute "significant" new information. Therefore, recirculation of the Draft EIR is not required because the new information added to the EIR through these revisions clarify or amply information already provided or make insignificant modifications to the already adequate Draft EIR. The EIR revisions contained in the following pages are in the same order as the information appears in the Draft EIR. Revisions in text are identified by strikeouts (~~strikeouts~~) where text has been removed and by bold underlining (**underline**) where text has been added. The applicable page numbers from the Draft EIR are also provided where necessary for ease of reference.

**TABLE 3-1**
**MINOR REVISIONS AND CLARIFICATIONS**

| Draft EIR Page Number | Section | Revision or Clarification |
|---|---|---|
| 4.1-6<br>and<br>4.10-12 | 4.1.6<br>and<br>4.10.6 | **COA AES-1** As required by Section 12.12.070 of the City's Municipal Code, Tree Removal Permits – Requirements, no native oak tree, historic tree or other mature tree, where that tree is on public or private property, except as provided for in subsection B of this section, or is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the city. The **Parks, Recreation, and Community Services Department** Director ~~**of community services**~~ shall establish the format and information required for a tree removal permit consistent with this chapter. In no event shall a permit be denied if to do so would cause interference with the economic use and enjoyment of the property. |
| 4.2-8 | 4.2.2 | As a regional agency, the VCAPCD develops rules and regulations; establishes permitting requirements; inspects emissions sources; and enforces such measures though educational programs or fines, when necessary. ~~**The VCAPCD is directly responsible for reducing emissions from stationary, mobile, and indirect sources.**~~ |
| 4.2-16 | 4.2.6 | a. A copy of each unit's certified offroad engine Tier specification shall be provided to the City at the time of mobilization of each applicable unit of equipment.<br><br>**COA AQ-6** **As applicable, during construction of the Project, the City and its' contractors shall be required to comply with Ventura County Air Pollution Control District (VCAPCD) Rule 62.7, Asbestos- Demolition and Renovation, which imposes notification, emission control, training and licensing, warning signage, containment area, and record keeping requirements on projects involving the demolition and renovation operations and the associated disturbance of asbestos-containing material (ACM).** |
| 4.2-17 | 4.2.6 | **SC AQ-3** Reactive organic compounds, nitrogen oxides (ozone/smog precursor), and particulate matter (aerosols/dust) generated during construction operations must be minimized in accordance with City of Moorpark standards and the standards of the Ventura County Air Pollution Control District. When an air pollution Health Advisory has been issued, construction equipment operations (including but not limited to grading, excavating, earthmoving, trenching, |

**TABLE 3-1**
**MINOR REVISIONS AND CLARIFICATIONS**

| Draft EIR Page Number | Section | Revision or Clarification |
|---|---|---|
| | | material hauling, and roadway construction) and related activities must cease in order to minimize associated air pollutant emissions **Additionally, all paints used during phase 3 of the Project shall have a maximum VOC content of 30g/L to minimize VOC emissions.** (City of Moorpark SC 99). |
| 4.8-10 | 4.8.7 | If determined to be present, the Applicant shall prepare an abatement plan for their removal and safe transport in compliance with State and federal regulations, including Occupational Safety and Health Administration (OSHA) regulations in the Code of Federal Regulations (specifically Title 29, Part 1926) and South Coast Air Quality Management District (SCAQMD) Rule 1403. The abatement plan shall meet the satisfaction of the ~~**Manager, Orange County Health Care Agency (OCHCA)/Hazardous Materials Program**~~ County Environmental Health Division.<br>**COA HAZ-4** **As applicable, future land uses involving any food facilities shall submit plans to the Ventura County Environmental Health Division, Community Services Section to obtain plan approval prior to beginning any construction of any food facility. A permit to Operate form the Division shall also be required prior to beginning any retail food operations.**<br>**COA HAZ-5** **Any future tenant that may handle store, or transport hazardous materials, or generate hazardous waste at or above the reportable thresholds shall be reported to the Ventura County Environmental Health Division's Certified Unified Program Agency (CUPA).** |

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# 4.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21082.3 of CEQA and Section 15097 of the State CEQA Guidelines require a public agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) to ensure the implementation of required mitigation measures to reduce or avoid significant environmental effects that are identified in the EIR. Also, the specific reporting and/or monitoring requirements that will be enforced during Project implementation shall also be adopted simultaneously with final Project approval by the responsible decision-making body.

The MMRP for this Project is provided as Table 4-1, beginning on the next page. The MMRP consists of mitigation measures (MMs) identified in the EIR that are required for Project implementation. The MM identifier is provided in the first column. The text of each MM is provided in the second column. The timing of each MM's implementation is provided in the third column. The agency or party responsible for monitoring implementation of each MM is provided in the fourth column.

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| Aesthetics | | | |
| **COA AES-1** | As required by Section 12.12.070 of the City's Municipal Code, Tree Removal Permits – Requirements, no native oak tree, historic tree or other mature tree, where that tree is on public or private property, except as provided for in subsection B of this section, or is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the city. The Parks, Recreation, and Community Services Department Director shall establish the format and information required for a tree removal permit consistent with this chapter. In no event shall a permit be denied if to do so would cause interference with the economic use and enjoyment of the property. | Prior to construction | City of Moorpark Parks, Recreation, and Community Services Department Director. |
| Air Quality | | | |
| **COA AQ-1** | During construction of the Project, the City and its' contractors shall be required to comply with Ventura County Air Pollution Control District (VCAPCD) Rule 55, Fugitive Dust, which requires, among other provisions, that "No person shall cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road" (VCAPCD 2008). | During Project Construction | Ventura County Air Pollution Control District (VCAPCD) |
| **COA AQ-2** | A 15-mile per hour speed limit must be observed within all construction areas | During Project Construction | Contractor |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA AQ-3** | Reactive organic compounds, nitrogen oxides (ozone/smog precursor), and particulate matter (aerosols/dust) generated during construction operations must be minimized in accordance with City of Moorpark standards and the standards of the Ventura County Air Pollution Control District. When an air pollution Health Advisory has been issued, construction equipment operations (including but not limited to grading, excavating, earthmoving, trenching, material hauling, and roadway construction) and related activities must cease in order to minimize associated air pollutant emissions. Additionally, all paints used during phase 3 of the Project shall have a maximum VOC content of 30g/L to minimize VOC emissions. | During Project Construction | Contractor/VCAPCD |
| **COA AQ-4** | During clearing, grading, earth moving, excavation, soil import and/or soil export operations, the applicant shall comply with the City of Moorpark standard requirements for dust control, including, but not limited to, minimization of ground disturbance, application of water/chemicals, temporary/permanent ground cover/seeding, street sweeping, and covering loads of dirt. All clearing, earth moving, excavation, soil import, and/or soil export operations must cease during periods of high winds (greater than 15 miles per hour [mph] averaged over one hour) | During Project Construction | Contractor |
| **COA AQ-5** | Beginning in 2030, prior to issuance of a grading permit, the Project's Construction Manager shall demonstrate to the City's Community Development Department that construction documents require the construction contractors to implement the following measures:<br>a. All off-road diesel-powered construction equipment greater than 50 horsepower (hp) used during phases 3 and 4 shall, at a minimum, meet Tier 3 off-road emissions standards.<br>b. A copy of each unit's certified offroad engine Tier specification shall be provided to the City at the time of mobilization of each applicable unit of equipment. | Prior to Issuance of a grading permit | Project Construction Manager/ City's Community Development Department |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA AQ-6** | As applicable, during construction of the Project, the City and its' contractors shall be required to comply with Ventura County Air Pollution Control District (VCAPCD) Rule 62.7, Asbestos- Demolition and Renovation, which imposes notification, emission control, training and licensing, warning signage, containment area, and record keeping requirements on projects involving the demolition and renovation operations and the associated disturbance of asbestos-containing material (ACM). | Prior to Issuance of a grading permit | Project Construction Manager/ City's Community Development Department |
| Biological Resources | | | |
| **COA BIO-1** | Nesting Bird Survey. If construction and/or vegetation removal must be initiated during the peak nesting season (i.e., February 1 to August 31), a pre-construction nesting bird survey shall be conducted by a qualified Biologist within 14 days prior to the beginning of Project-related activities (including but not limited to clearing, grubbing, vegetation removal, grading, and building demolition). If project-related construction activities lapse for greater than 14 days during the peak nesting season, an additional nest survey shall be conducted before work can be reinitiated.<br><br>If the Biologist finds an active nest within or adjacent to the construction area (within 200 feet for all birds protected under California Fish and Game Code and the Migratory Bird Treaty Act and within 500 feet for raptors), the Biologist shall identify an appropriate protective buffer zone around the nest depending on the sensitivity of the species, the nature of the construction activity, and the amount of existing disturbance in the vicinity. In general, the Biologist should designate a buffer of 10 to 200 feet for common nesting birds and 200 to 500 feet for special status nesting birds and nesting raptors. Construction activities within the buffer shall only proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g., young have fledged, predation, or other non-human causes of nest failure) to maintain compliance with California Fish and Game Code and the Migratory Bird Treaty Act. | Prior to construction, during construction (if active nests are identified) | Applicant/Qualified Biologist |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA BIO-2** | Jurisdictional Drainage Avoidance and Regulatory Permitting. Impacts to jurisdictional waters within the Project Site will be avoided to the extent feasible. If such impacts are unavoidable, then permits/ certifications/ agreements from the United States Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) are required.<br><br>A pre-application meeting with these agencies is recommended prior to submittal of permit applications to discuss existing conditions; confirm the agencies' jurisdiction over water resources on the study area; discuss impacts to these resources that would result from the Project; discuss proposed avoidance, minimization, and mitigation measures to offset these impacts; and to discuss the regulatory permitting process. Following the pre-application meeting, the Project Applicant would prepare and process the appropriate permits (e.g., a Section 404 Permit from the USACE in the form of a Nationwide Permit or Individual Permit, a Section 401 Water Quality Certification from the RWQCB, and/or a CDFW Section 1602 Notification of Lake or Streambed Alteration). Additional permit conditions may be required by the resource agencies regarding impacts to areas under their respective jurisdictions.<br><br>Standard construction best management practices (BMPs) shall be implemented to prevent toxins, chemicals, or petroleum products from entering the culverts and degrading water quality. | Prior to construction | USACE, RWQCB, CDFW |
| **COA BIO-3** | Tree Survey and Landscaping Plan. Prior to the issuance of a grading permit for each Project phase, a tree survey must be prepared to determine the valuation of the mature trees to be removed. Thereafter, a landscaping plan shall be prepared which incorporates replacement tree plantings consistent with the City's Tree Ordinance, which would be submitted to the City's Community Development Director for review and approval. | Prior to the issuance of a grading permit. | City of Moorpark Community Development Director |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **MM BIO-1** | Prior to ground disturbance on the western portion of the Project Site associated with Phase 2 of the Project, the applicant shall retain a qualified Biologist (one with experience conducting botanical surveys) to conduct a focused survey for special status plant species. The survey shall be performed during the target species' peak blooming period in accordance with the most current protocols approved by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). If focused plant surveys determine that no special status plant species are present in the project impact area, then no future measures are necessary.<br><br>If any plant species listed as threatened or endangered by the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA) is determined to be present and take of individuals cannot be avoided, then the applicant shall obtain take authorization from the listing agencies before impacting the species (FESA Consultation with the United States Fish and Wildlife Service (USFWS) and CESA Section 2080 from the CDFW). Consultation with the listing agencies shall determine the appropriate conservation measure(s) to mitigate for impacts on the species. The mitigation may include collecting seed from individuals in the impact area and planting them within a mitigation site with the appropriate microhabitat for this species and/or paying a fee to a mitigation bank and/or a qualified Plant Science Program to conduct germination or other research studies on the species. The applicant shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Conservation Plan for approval by the USFWS and/or the CDFW. The conservation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan; (2) mitigation site selection criteria; (3) site preparation and planting implementation; (4) implementation schedule; (5) maintenance plan/guidelines; (6) monitoring plan; (7) long-term preservation. The applicant shall implement the Plan as approved.<br><br>If focused surveys determine that CNPS List 1 or List 2 species are present and the necessary take of individuals would be greater than ten percent of | Prior to ground disturbance. | Applicant/Qualified Biologist |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| | species' population within a one-mile radius of the Project Site, then compensatory mitigation shall be required. Mitigation may include collection of seed from individuals in the impact area and planting them within a mitigation site with the appropriate microhabitat for this species. If project timing requires that ground disturbance of potentially suitable habitat be performed prior to the species' peak blooming period and focused surveys cannot be performed, then the species shall be presumed present in the impact area. The applicant shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Conservation Plan for approval by CDFW. The conservation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation, (4) implementation schedule, (5) maintenance plan/guidelines, (6) monitoring plan, (7) long-term preservation. The applicant shall implement the Plan as approved. | | |
| **MM BIO-2** | Per the Staff Report on Burrowing Owl Mitigation (CDFW 2012), the applicant shall retain a qualified Biologist to conduct a pre-construction survey for the burrowing owl between 14 and 30 days prior to the initial ground disturbance on the western portion of the Project Site. The pre-construction survey shall include the area of proposed disturbance plus a 500-foot buffer (if access is available and habitat is present).<br><br>If an active burrow is observed outside the breeding season (September 1 to January 31) and it cannot be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in California Department of Fish and Wildlife (CDFW) 2012. Prior to any burrowing owl exclusion efforts, an exclusion plan will be prepared and submitted to CDFW for review and approval. The plan will include all details on passive relocation including that one-way doors shall be used to exclude owls from the burrows; doors shall be left in place for at least 48 hours. Once the burrow is determined to be unoccupied, the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools. Prior to excluding | Prior to initial ground disturbance/During Construction if Necessary | Applicant/Qualified Biologist |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| | an owl from an active burrow, a receptor burrow survey shall be conducted to confirm that at least two potentially suitable unoccupied burrows are within approximately 688 feet prior to installation of the one-way door. If two natural receptor burrows are not located, one artificial burrow shall be created for every burrow that would be closed.<br><br>If an active burrow is observed outside the breeding season (September 1 to January 31) and it can be avoided, the Biologist shall determine an appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 160 feet to 1,640 feet depending on the level of impact and the time of year. The designated buffer will be clearly marked in the field and will be mapped as an environmentally sensitive area (ESA) on construction plans.<br><br>If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended (i.e., all young have fledged from the burrow). The Biologist shall determine the appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 650 to 1,640 feet depending on the level of impact and the time of year. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. Construction shall be allowed to proceed when the qualified Biologist has determined that all fledglings have left the nest. | | |
| Cultural resources | | | |
| **COA CUL-1** | If any archaeological, paleontological, or historical finds are uncovered during grading or excavation operations, all grading or excavation shall immediately cease in the immediate area and the find must be left untouched. The applicant, in consultation with the project paleontologist or archeologist, shall assure the preservation of the site and immediately contact the Community Development Director by phone, in writing by email or hand delivered correspondence informing the Director of the find. In the absence of the Director, the applicant shall so inform the City Manager and Planning | During Grading/Excavation (if significant discovery is identified) | Applicant/Project Paleontologist or Archeologist/City of Moorpark Community Development Director |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| | Manager. The applicant shall be required to obtain the services of a qualified paleontologist or archeologist, whichever is appropriate to recommend disposition of the site. The paleontologist or archeologist selected must be approved in writing by the Community Development Director. The applicant shall pay for all costs associated with the investigation and disposition of the find. | | |
| **COA CUL-2** | In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 48 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative shall then determine, in consultation with the property owner, the disposition of the human remains. | During construction (if significant discovery is identified) | County Coroner |
| **COA CUL-3** | Prior to any ground disturbing activity, construction personnel associated with earth moving equipment, drilling, grading, and excavating, shall be provided with basic training conducted by a qualified archaeologist. Issues that shall be included in the basic training will be geared toward training the applicable construction crews in the identification of archaeological deposits, further described below. Training will include written notification of the restrictions regarding disturbance and/or removal of any portion of archaeological, paleontological, or historical deposits and the procedures to follow should a resource be identified. The construction contractor, or its designee, shall be responsible for implementation of this measure. A tribal | Prior to any ground disturbing activities. | Contractor |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| | monitor shall be provided an opportunity to attend the pre-construction briefing if requested. | | |
| **MM CUL-1** | Prior to the start of Project phases that involve work within 75 feet of the Tanner Building, protection measures shall be developed in a formal plan for the adjacent Tanner Corner Building at 601 Moorpark Avenue. Protection measures shall include at a minimum: (1) clear denotation in the project construction plans that the project is located directly adjacent to an historical resource, marking the location of the Tanner Corner Building; (2) a protocol for informing all construction workers of the presence of the historical resource and making them aware of the protocol to avoid and protect it; (3) a list of approved construction equipment/distances in consideration of any identified groundborne vibration impacts; (4) recommendations for specific protective fencing and signage to be implemented during construction; and (5) if determined appropriate based on the results of the groundborne vibration analysis, recommendations for construction monitoring (pre-, post-, and during construction). The protection plan shall be prepared by a qualified architectural historian/historic preservation professional, clearly identify all responsible parties with their contact information, and be appended to the final set of construction plans. (Also see MM NOI-2 in Section 4.11, Noise, which relates to vibration monitoring requirements). | Prior to the start of Project phases that involve work within 75 feet of the Tanner Building | Contractor |
| Geology and Soils | | | |
| **COA GEO-1** | Prior to the issuance of a grading permit for each Project phase, a geotechnical report will be prepared and submitted to the City for review and approval. The geotechnical report shall be prepared by a registered Civil Engineer or certified Engineering Geologist and shall contain site-specific evaluations of the seismic and geologic hazards affecting the project and shall identify recommendations for earthwork and construction. All recommendations from forthcoming site-specific geotechnical studies shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City as part of the plan approval process. | Prior to the Issuance of a grading permit. | City engineer. |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA CUL-1** | See COA CUL-1 above. | Prior to See COA CUL-1 above. | See COA CUL-1 above. |
| **COA CUL-3** | See COA CUL-3 above. | See COA CUL-3 above. | See COA CUL-3 above. |
| **MM GEO-1** | Prior to approval grading plans, the Applicant shall demonstrate, to the satisfaction of the City's Planning Division that the recommendations in the project's geotechnical reports and in any future geotechnical reports have been fully and appropriately incorporated (OGI 2017a and 2017b). | Prior to approval of grading plans. | Applicant/City of Moorpark Planning Division. |
| Greenhouse Gas Emissions | | | |
| **COA GHG-1** | The Project is required to comply with the requirements established under the Title 24 development standards. | During Project Construction and Operations | Project Applicant/Operator |
| Hazards and Hazardous Materials | | | |
| **COA HAZ-1** | Applicant/operator shall store, manifest, transport, and dispose of all on-site generated waste that meets hazardous waste criteria in accordance with California Code of Regulations Title 22 and in a manner to the satisfaction of the Manager, HCA/Hazardous Materials Program. Applicant shall keep storage, transportation, and disposal records on site and open for inspection to any government agency upon request. | During Project Construction and Operations | Project Applicant/Operator |
| **COA HAZ-2** | Transport of materials deemed as hazardous must comply with the requirements of Title 22, Division 4.5 of the California Code of Regulations, the U.S. Department of Transportation regulations in the Code of Federal Regulations (specifically, Title 49, Hazardous Materials Transportation Act and Title 40, Part 263, Subtitle C of Resource Conservation and Recovery Act), California Department of Transportation (Caltrans) standards, and Occupational Safety and Health Administration (OSHA) standards. | During Project construction and Operations | Project Applicant/Operator |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA HAZ-3** | Prior to issuance of a demolition permit for any buildings or facilities, building materials shall be assessed by a qualified Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 for the presence of lead-based paints (LBPs), asbestos-containing materials (ACM), and other common hazardous building materials (e.g., polychlorinated biphenyl [PCB]-containing lighting ballasts and mercury-containing light tubes and switches). If determined to be present, the Applicant shall prepare an abatement plan for their removal and safe transport in compliance with State and federal regulations, including Occupational Safety and Health Administration (OSHA) regulations in the Code of Federal Regulations (specifically Title 29, Part 1926) and South Coast Air Quality Management District (SCAQMD) Rule 1403. The abatement plan shall meet the satisfaction of the County Environmental Health Division.. | Prior to issuance of a demolition permit | City of MoorparkCommunity Development Department and County Environmental Health Division |
| **COA HAZ-4** | As applicable, future land uses involving any food facilities shall submit plans to the Ventura County Environmental Health Division, Community Services Section to obtain plan approval prior to beginning any construction of any food facility. A permit to Operate form the Division shall also be required prior to beginning any retail food operations. | Prior to issuance of a demolition permit | City of Moorpark Community Development Department |
| **COA HAZ-5** | Any future tenant that may handle store, or transport hazardous materials, or generate hazardous waste at or above the reportable thresholds shall be reported to the Ventura County Environmental Health Division's Certified Unified Program Agency (CUPA). | Prior to issuance of a demolition permit | City of Moorpark Community Development Department |
| Hydrology and Water Quality | | | |
| **COA HWQ-1** | Prior to the issuance of any grading or building permit for each project phase, the applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Community Development Department. Projects subject to this requirement shall prepare and | Prior to Issuance of any grading or building permit | City of Moorpark Community Development Department |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| | implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the Project Site and be available for County review on request. | | |
| **COA HWQ-2** | Prior to the issuance of any grading or building permits, the applicant shall submit for review and approval by the Community Development Department, a Water Quality Management Plan (WQMP) that must include the following minimum contents:<br>• Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, and conserving natural areas;<br>• Incorporate applicable Routine Source Control BMPs; and<br>• Include an Operation and Maintenance (O&M) Plan that identifies the mechanism(s) by which long-term O&M of all structural BMPs will be provided. | Prior to Issuance of any grading or building permits | City of Moorpark Community Development Department |
| **COA HWQ-3** | Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Community Development Department, including:<br>• Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;<br>• Demonstrate that the applicant has complied with all non-structural BMPs described in the project's WQMP;<br>• Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP; and<br>• Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants. | Prior to Issuance of a certificate of use and occupancy | City of Moorpark Community Development Department |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| Land Use | | | |
| **COA AES-1** | See COA AES-1 above. | See COA AES-1 above. | See COA AES-1 above. |
| Noise | | | |
| **COA NOI-1** | The Project shall comply with Section 15.26 of the City's Municipal Code, which requires contractors to not engage in or conduct any noise-generating outdoor construction work, except between the hours of 7:00 AM and 7:00 PM, Monday through Saturday, unless a permit for different hours has been issued. | During Construction | Contractor |
| **COA NOI-2** | The Project shall comply with Chapters 9.28, 10.04, 12.24 and 17.53 of the Moorpark Municipal Code and any provision amendatory or supplementary thereto, as a standard requirement for construction noise reduction. | During Construction | Contractor |
| **COA NOI-3** | The Project shall include the posting, in a conspicuous location, of the construction hour limitations and make each construction trade aware of the construction hour limitations. | During Construction | Project Applicant/Contractor |
| **MM NOI-1** | Prior to the start of grading of each Project phase, the Project applicant shall provide evidence acceptable to the City's Community Development Department, that:<br>a. All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.<br>b. Stationary equipment, such as generators and air compressors, would be located as far from local residences and Walnut Canyon Elementary School, as feasible.<br>c. Equipment maintenance and staging areas would be located as far away from local residences and Walnut Canyon Elementary School, as feasible.<br>d. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings and Walnut Canyon Elementary School. | Prior to grading activities | Applicant/City of Moorpark Community Development Department |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **MM NOI-2** | During construction activities, the Project applicant will ensure that ongoing vibration monitoring is conducted for Project activities within 75 feet of the Tanner Corner Building as specified below.<br>• Whenever vibratory replacement activities occur within 75 feet of the Tanner Corner Building.<br>• Whenever Deep Soil Mixing activities occur within 50 feet of the Tanner Corner Building.<br>• Whenever general construction equipment is utilized within 25 feet of the Tanner Corner Building.<br>If vibration levels at the Tanner Corner Building reach or exceed 0.25 ppv, there is a potential for building damage and an immediate stop work order will be issued. Alternative construction methods or vibration reduction measures will then be determined that keep vibration exposure levels below 0.25 ppv. (Also see **MM CUL-1** in Section 4.3, Cultural Resources, which includes requirements for the development of a construction monitoring plan for work in proximity to the Tanner Corner Building). | During Project Construction | Project Applicant/Contractor |
| Public Services | | | |
| **COA PUB-1** | The Developer shall comply with all applicable codes, ordinances, and regulations, including the most current edition of the California Fire Code and the City of Moorpark Municipal Code, regarding fire prevention and suppression measures; fire hydrants; fire access; water availability; and other, similar requirements. Prior to issuance of building permits, the City of Moorpark Community Development Department and the Ventura County Fire Department shall verify compliance with applicable codes and that appropriate fire safety measures are included in the Project design. All such codes and measures shall be implemented prior to occupancy. | Prior to Issue of Building Permits | Project Developer/City of Moorpark Community Development Department/Ventura County Fire Department |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA PUB-2** | The Developer shall pay all applicable Development Impact Fees (DIFs) prior to the issuance of building permits, for parkland dedication, parkland improvements, public safety facilities, other governmental facilities, and outside agency fees including school district fees. | Prior to the issuance of building permits. | Developer |
| Transportation | | | |
| **COA TRA-1** | Prior to the issuance of a grading permit for each project phase, the applicant shall demonstrate adequate sight distance at all street intersections, in a manner meeting the approval of the City's Public Works Department. | Prior to the issuance of a grading permit | Applicant/City of Moorpark Public Works Department |
| **COA TRA-2** | Prior to the issuance of any grading permits, the applicant shall demonstrate that applicable improvements for that phase from the Project's Traffic Study have been incorporated into Project design, in a manner meeting the approval of the City's Public Works Department. | Prior to the Issuance of any Grading Permits | Applicant/City of Moorpark Public Works Department |
| **COA TRA-3** | Prior to beginning each project phase, the applicant shall submit a construction traffic control plan for the review and approval of the City Engineer and Public Works Director. Traffic control plan shall include construction advisory speed limits, speed limit posting locations, and enforcement measures if needed. | Prior to the beginning of each Project phase | Applicant/City Engineer/Public Works Director |
| Tribal Cultural Resources | | | |
| **COA CUL-1** | See COA CUL-1 above. | See COA CUL-1 above. | See COA CUL-1 above. |
| **COA CUL-2** | See COA CUL-2 above. | See COA CUL-2 above. | See COA CUL-2 above. |
| **COA CUL-3** | See COA CUL-3 above. | See COA CUL-3 above. | See COA CUL-3 above. |
| Utilities | | | |
| **COA HWQ-2** | See COA HWQ-2 above. | See COA HWQ-2 above. | See COA HWQ-2 above. |

**TABLE 4-1**
**MITIGATION MONITORING AND REPORTING PROGRAM**

| Mitigation Measure or Condition of Approval Number | Mitigation Measure/Condition of Approval | Timing of Implementation | Monitoring or Reporting Agency |
|---|---|---|---|
| **COA HWQ-3** | See COA HWQ-3 above. | See COA HWQ-3 above. | See COA HWQ-3 above. |
| **COA UTL-1** | Prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from Ventura County Waterworks District No. 1 (VCWWD No. 1) demonstrating their capacity to serve the Project for water and wastewater services. The will-serve letter must be submitted to the Community Development Department for review prior to issuance of a building permit. | Prior to issuance of a building permit for each new building within the Project Site | Applicant/Ventura County Waterworks/ City of Moorpark Community Development Department |
| **COA UTL-2** | Prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from dry utility providers demonstrating their capacity to serve the Project for electricity, natural gas, and telecommunications if needed. The will-serve letters must be submitted to the Community Development Department for review prior to issuance of a building permit. | Prior to issuance of a building permit for each new building within the Project Site | Applicant/City of Moorpark Community Development Department |
| **COA UTL-3** | Prior to issuance of a building permit for each new building within the Project Site, the applicant shall submit a Construction and Demolition Materials Management Plan Estimate for the review and approval of the City's Solid Waste Management staff and Building and Safety Division for recycling of waste materials consistent with applicable City and State requirements. The Plan must include estimated quantities for each type of material to be diverted or landfilled. | Prior to issuance of a building permit for each new building within the Project Site | Applicant/ City's Solid Waste Management staff and Building and Safety Division |
| **COA UTL-4** | Prior to issuance of certificate of occupancy for new structures within the Project Site, the applicant must submit a Final Report Construction and Demolition Waste Letter of Documentation (including premium gate tickets) to the Building and Safety Division, demonstrating compliance with the Construction and Demolition Materials Management Plan Estimate and indicating the total amount of construction and demolition waste diverted. | Prior to issuance of certificate of occupancy for new structures within the Project Site | Applicant/ Building and Safety Division |

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# 5.0 REFERENCES

Moorpark, City of 2023d (May). Draft Environmental Impact Report for the Civic Center Master Plan Project. https://ceqanet.opr.ca.gov/2022050175/2

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# Appendix A

# Notice of Preparation

# NOTICE OF PREPARATION
# CIVIC CENTER MASTER PLAN PROJECT

**Date:** May 9, 2022
**To:** State Clearinghouse and Interested Parties
**From:** City of Moorpark Parks, Recreation, and Community Services Department
**Subject:** Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (EIR) for the Civic Center Master Plan Project

The City of Moorpark (City) is the lead agency and will prepare an Environmental Impact Report (EIR) for the Civic Center Master Plan Project (Project). The City is soliciting comments from reviewing agencies and the public regarding the scope and content of the EIR. For reviewing agencies, the City requests comments with respect to your agency's statutory responsibility as related to the Project in accordance with California Code of Regulations, Title 14, Section 15082(b). Your agency may need to use the EIR when considering relevant permits or other approvals for the Project. The City is also seeking the input of residents, property owners, and concerned citizens regarding environmental issues that should be addressed in the EIR. The project location, project description, and the potential environmental effects are described herein below.

**Comment Period:** Comments may be sent anytime during the 30-day Notice of Preparation (NOP) comment period. The NOP review and comment period begins on May 9, 2022 and ends on June 8, 2022. All comments must be received during the comment period and no later than 5:00 PM on June 8, 2022. Please include the name of a contact for your agency, if applicable.

All comments should be directed to:

City of Moorpark
Community Development Department
Attention: Shanna Farley, Principal Planner
799 Moorpark Avenue
Moorpark, California 93021

Comments may also be emailed to sfarley@moorparkca.gov.

**Scoping Meeting:** Oral comments may be provided at the Scoping Meeting to be held on Monday, May 23, 2022 from 5:00 PM to 6:30 PM in the Apricot Room / Council Chambers located at the Moorpark City Hall. Moorpark City Hall is located at 799 Moorpark Avenue, Moorpark, California 93021.

## PROJECT LOCATION

The Project site encompasses approximately 12.5 acres in the central, downtown area of the City of Moorpark in Ventura County, California. The Project site is located west of Moorpark Avenue/ Walnut Canyon Road (State Route [SR] 23). Portions of the Project site are located on the north and south sides of West High Street. The Project site currently contains a mix of land uses associated with the existing Civic Center, including city hall, a community center/active adult center, a city library, portable structures, parking areas, and vacant undeveloped areas within the western portion of the Project site. The location and limits of the Project site are depicted in Exhibit 1, Regional Location and Exhibit 2, Local Vicinity.

## PROJECT DESCRIPTION

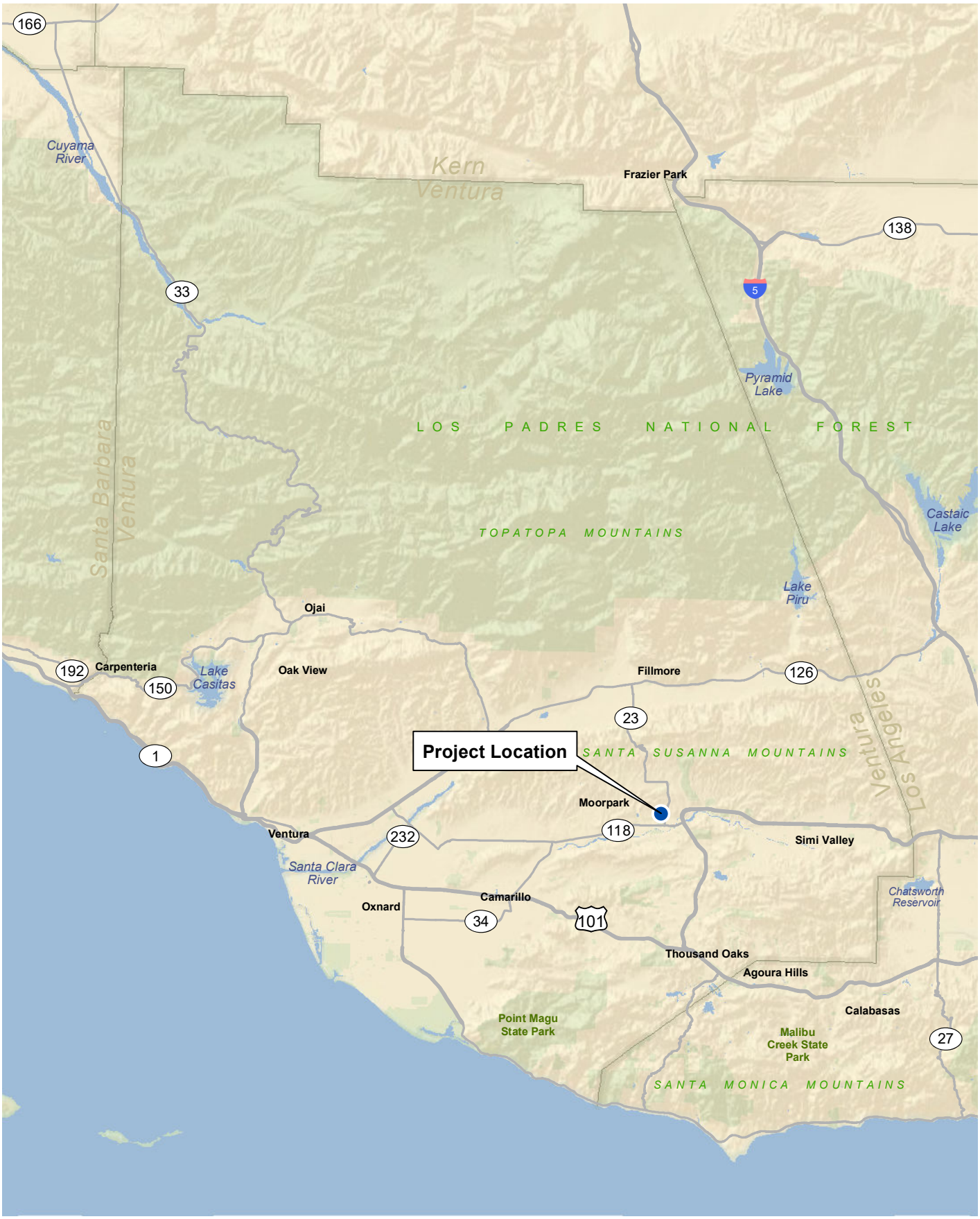
The Project would consist of the phased development of a new City Civic Center within the Project site. The Project would include the following phases:

- During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility.
- During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development.
- During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would include the removal of the existing city hall and community center/active adult center buildings.
- During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

## AREAS OF POTENTIAL IMPACT

The City has determined that an EIR is required for this Project. An Initial Study checklist is included as Appendix A, which provides the City's preliminary assessment of potential impacts associated with the Project. The EIR will provide detailed analysis of the following topical areas.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

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# Regional Location

**Exhibit 1**

*Civic Center Master Plan Project*

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Aerial Source: ESRI, Maxar 2018

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# Local Vicinity

## Exhibit 2

*Civic Center Master Plan Project*

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## APPENDIX A

## INITIAL STUDY

NOTE: The following is a sample form that may be tailored to satisfy individual agencies' needs and project circumstances. It may be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential impacts that are not listed on this form must also be considered. The sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

1. Project title: Civic Center Master Plan Project

2. Lead agency name and address:

City of Moorpark

799 Moorpark Avenue, Moorpark, California 93021

3. Contact person and phone number: Shanna Farley (805) 517-6236

4. Project location: Downtown area west of Moorpark Avenue and north of West High Street

5. Project sponsor's name and address:

City of Moorpark, 799 Moorpark Avenue, Moorpark, California 93021

6. General plan designation: Public/Institutional, Old Town Commercial (C-OT), Downtown Specific Plan, General Commercial (C-2), and Specific Plan 9 (SP-9)

7. Zoning: Institutional (I), Old Town Commercial (C-OT), Rural Exclusive (RE), Old Town Commercial (C-0T), Industrial Park (M-1), and Limited Industrial (M-2)

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

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-During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development.

-During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would include the removal of the existing city hall and community center/active adult center buildings.

-During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

-North: Moorpark Avenue/Walnut Canyon Road borders the Project site to the north.

-South: A United States Post Office and the Union Pacific and Metrolink railroad tracks are located south of the Project site. Also, a commercial building is located on the northwestern corner of Moorpark Avenue at West High Street adjacent to the Project site to the south.

-East: Land uses east of Moorpark Avenue include residential, commercial/office, and retail uses.

-West: Land uses to the west include undeveloped parcels, the Boys & Girls Club, and Walnut Canyon School.

10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement.)

None

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The City of Moorpark will conduct tribal consultation pursuant to Assembly Bill 52 (AB 52)

and Senate Bill 18 (SB 18).

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

# Appendix A

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture / Forestry Resources | ☑ Air Quality |
| ☑ Biological Resources | ☑ Cultural Resources | ☐ Energy |
| ☐ Geology/Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology/Water Quality | ☑ Land Use / Planning | ☐ Mineral Resources |
| ☑ Noise | ☐ Population / Housing | ☐ Public Services |
| ☐ Recreation | ☑ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities / Service Systems | ☐ Wildfire | ☑ Mandatory Findings of Significance |

## 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 revisions in the 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.

Shanna Farley — *Signature*

May 9, 2022 — *Date*

Shanna Farley, Principal Planner

## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analyses Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS.** Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| 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) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☑ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☑ | ☐ |
| **II. AGRICULTURE AND FORESTRY RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| 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 non-agricultural use? | ☐ | ☐ | ☑ | ☐ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☑ | ☐ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (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 forest land or conversion of forest land 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 non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☑ | ☐ |
| **III. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| 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 non-attainment under an applicable federal or state ambient air quality standard? | ☑ | ☐ | ☐ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☑ | ☐ | ☐ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☑ | ☐ | ☐ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES.** Would the project: | | | | |
| 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 Wildlife or U.S. 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 Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☑ | ☐ |
| c) Have a substantial adverse effect on state or federally protected wetlands (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? | ☐ | ☐ | ☑ | ☐ |
| **V. CULTURAL RESOURCES.** Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? | ☑ | ☐ | ☐ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | ☐ | ☐ | ☑ | ☐ |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☐ | ☑ | ☐ |
| **VI. ENERGY.** Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☑ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☑ | ☐ |
| **VII. GEOLOGY AND SOILS.** Would the project: | | | | |
| a) Directly or indirectly cause 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? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☑ | ☐ | ☐ |
| 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? | ☐ | ☐ | ☑ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 direct or indirect risks to life or property? | ☐ | ☑ | ☐ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☑ | ☐ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☑ | ☐ | ☐ |
| **VIII. GREENHOUSE GAS EMISSIONS.** Would the project: | | | | |
| 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? | ☐ | ☑ | ☐ | ☐ |
| **IX. HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| 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 reasonably 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 § 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 two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☑ | ☐ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☑ | ☐ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☑ | ☐ |
| **X. HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☑ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☑ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | ☐ | ☐ | ☑ | ☐ |

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| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| i) result in a substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☑ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | ☐ | ☐ | ☑ | ☐ |
| iii) 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; or | ☐ | ☐ | ☑ | ☐ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☑ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☑ | ☐ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☑ | ☐ |
| **XI. LAND USE AND PLANNING.** Would the project: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☑ | ☐ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☑ | ☐ | ☐ | ☐ |
| **XII. MINERAL RESOURCES.** Would the project: | | | | |
| 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? | ☐ | ☐ | ☑ | ☐ |
| **XIII. NOISE.** Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☑ | ☐ | ☐ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☑ | ☐ | ☐ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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? | ☐ | ☐ | ☑ | ☐ |
| **XIV. POPULATION AND HOUSING.** Would the project: | | | | |
| a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☑ | ☐ |
| **XV. PUBLIC SERVICES.** Would the project: | | | | |
| 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 any of the public services: | ☐ | ☐ | ☐ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Fire protection? | ☐ | ☐ | ☑ | ☐ |
| Police protection? | ☐ | ☐ | ☑ | ☐ |
| Schools? | ☐ | ☐ | ☑ | ☐ |
| Parks? | ☐ | ☐ | ☑ | ☐ |
| Other public facilities? | ☐ | ☐ | ☑ | ☐ |
| **XVI. RECREATION.** | | | | |
| a) Would the project 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) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☑ | ☐ |
| **XVII. TRANSPORTATION.** Would the project: | | | | |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☑ | ☐ | ☐ | ☐ |
| b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? | ☑ | ☐ | ☐ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☑ | ☐ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☑ | ☐ |
| **XVIII. TRIBAL CULTURAL RESOURCES.** | | | | |
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | ☐ | ☐ | ☐ | ☐ |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☑ | ☐ | ☐ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☑ | ☐ | ☐ |
| **XIX. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☑ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☑ | ☐ |
| c) Result in a determination by the waste water 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? | ☐ | ☐ | ☑ | ☐ |
| d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☑ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☑ | ☐ |
| **XX. WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☑ | ☐ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☑ | ☐ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☑ | ☐ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☑ | ☐ |
| **XXI. MANDATORY FINDINGS OF SIGNIFICANCE.** | | | | |
| a) Does the project have the potential to substantially 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, substantially 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) Does the project 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) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☑ | ☐ | ☐ | ☐ |

# Appendix B

# Notice of Availability

# CITY OF MOORPARK

799 Moorpark Avenue, Moorpark, California 93021
Main City Phone Number (805) 517-6200 | Fax (805) 532-2205 | moorpark@moorparkca.gov

| | |
|---|---|
| **Date:** | May 22, 2023 |
| **Subject:** | **Notice of Availability (NOA) for the Moorpark Civic Center Master Plan Project Draft Environmental Impact Report (DEIR)** (State Clearinghouse No. 2022050175) |
| **To:** | State Clearinghouse, Responsible Agencies, Trustee Agencies, Other Public Agencies, Interested Organizations, and the Public at-large |
| **Lead Agency:** | City of Moorpark |
| **Applicant:** | City of Moorpark |
| **Project Title:** | Civic Center Master Plan Project |
| **Public Comment Period:** | May 22, 2023 to July 6, 2023 |

**NOTICE IS HEREBY GIVEN** that the City of Moorpark has prepared a Draft Environmental Impact Report (DEIR) for the Moorpark Civic Center Master Plan Project (State Clearinghouse No. 2022050175) to address the potential environmental effects associated with implementation of the project. Pursuant to Public Resources Code Section 21165 and the California Environmental Quality Act Guidelines (CEQA Guidelines) Section 15050, the City of Moorpark is the lead agency for the project.

**Notice of Availability:** Pursuant to Public Resources Code Section 21083 and CEQA Guidelines Section 15087, the DEIR will be available for a 45-day public review from **May 22, 2023 to July 6, 2023.** Copies of the DEIR are available for review at the following locations:

City of Moorpark
Community Development Department
799 Moorpark Avenue
Moorpark, CA 93021

Moorpark City Library
699 Moorpark Ave,
Moorpark, CA 93021

The document can also be viewed electronically on the City's web page at: https://moorparkca.gov/568/Environmental-Documents.

**Project Location:** The Project site is approximately 12.5-acres in size and is located in the central, downtown area of the City of Moorpark in Ventura County, California. A portion of the Project site contains the existing civic center, which is located west of Moorpark Avenue/Walnut Canyon Road. Portions of the Project site are located on the north and south sides of West High Street.

CHRIS R. ENEGREN, Mayor | RENEE DELGADO, Councilmember | DANIEL GROFF, Councilmember | TOM MEANS, Councilmember | DR. ANTONIO CASTRO, Councilmember

The primary vehicular access into the existing Civic Center is provided from Moorpark Avenue/Walnut Canyon Road with secondary access provided from a driveway on West High Street. Moorpark Avenue/Walnut Canyon Road are co-signed as State Route 23 (SR-23) adjacent to the Project site. SR-23 is a regional transportation corridor that is classified as a local collector (two-lane roadway) on the City's General Plan Circulation Element Map. Adjacent to the Project site, Moorpark Avenue/Walnut Canyon Road has one travel lane in each direction.

**Project Description**: The Project would consist of the phased development of a new Civic Center within the Project site. The Project would be built in four phases, as detailed below.

During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility. The two existing parking areas adjacent to the civic center and library would be maintained and reconfigured in Phases 1 and 2. During Phase 1, sidewalks and parking stalls would be added adjacent to the proposed library's frontage on West High Street. During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development. During Phase 2, additional parking and an additional driveway would be added on the west end of the Project site associated with development of the west commercial site. Phase 2 would also include the addition of angled parking spaces along the north side of West High Street. During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would require the removal of the existing city hall and community center/active adult center buildings, as well as the park that is located within the Project site. The northernmost parking area, which is adjacent to the existing city hall, would be removed during Phase 3. Also, during Phase 3 the driveway from Moorpark Avenue/Walnut Canyon Road would be realigned to eliminate the existing curves. During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

**Written Comments:** The City, as lead agency, requests that responsible and trustee agencies respond in a manner consistent with Section 15082(b) of the CEQA Guidelines. All comments and responses to this Notice of Availability should be submitted in writing to City of Moorpark, Attn: Shanna Farley, Principal Planner, 799 Moorpark Avenue, Moorpark, CA 93021, or emailed to sfarley@moorparca.gov by the close of the 45-day review period at **5:00 p.m. on Thursday, July 6, 2023.**

**Project Applicant:** City of Moorpark
**Consulting Firm:** Psomas

**Date:** May 22, 2023

Signature:

Shanna Farley
Community Development Department
City of Moorpark

# Appendix C

# Draft Environmental Impact Report (Draft EIR)

# Draft Environmental Impact Report

## Civic Center Master Plan Project

| | |
|---|---|
| Prepared for | Community Development Department<br>City of Moorpark<br>799 Moorpark Ave,<br>Moorpark, California 93021 |
| Prepared by | Psomas<br>5 Hutton Centre Drive, Suite 300<br>Santa Ana, California 92707 |

May 2023

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## ACRONYMS LIST

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| **A** | |
| AB | Assembly Bill |
| ACHP | Advisory Council on Historic Preservation |
| ACM | asbestos-containing materials |
| AGR | Agricultural Supply |
| Alquist-Priolo Act | Alquist-Priolo Earthquake Fault Zoning Act |
| APN | Accessor's Parcel Number |
| AQMP | Air Quality Management Plan |
| **B** | |
| BMP | Best management practice |
| **C** | |
| CAAQS | California Ambient Air Quality Standards |
| CAFE | Corporate Average Fuel Economy |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CalEEMod | California Emission |
| CalEPA | California Environmental Protection Agency |
| CalOSHA | California Occupational Safety and Health Administration |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CBC | California Building Code |
| CBSC | California Building Standards Commission |
| CBSC | California Building Standards Code |
| CCR | California Code of Regulations |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CERCLA | Comprehensive Environmental Response Compensation and Liability Act |
| CESA | California Endangered Species Act |
| CFR | Code of Federal Regulations |
| CGS | California Geological Survey |
| CH4 | methane |
| CHBC | California State Historical Building Code |
| CHRIS | California Historical Resources Information System |
| City | City of Moorpark |
| CMA | Congestion Management Agency |
| CMP | Congestion Management Program |
| CMWD | Calleguas Municipal Water District |
| CNDBB | California Natural Diversity Database |
| CNEL | Community Noise Equivalent Level |

| | |
|---|---|
| CNPS | California Native Plant Society |
| CNRA | California Natural Resources Agency |
| CO | carbon monoxide |
| CO2 | carbon dioxide |
| $CO_2e$ | Carbon dioxide equivalent |
| COG | Council of Governments |
| COLD | Cold Freshwater Habitat |
| C-OT | Old Town Commercial |
| CPUC | California Public Utilities Commission |
| CRHR | California Register of Historical Resources |
| CRHR | California Register of Historical Resources |
| CRPR | California Rare Plant Rank |
| CUPA | Certified Unified Program Agencies |
| CWA | Clean Water Act |

**D**

| | |
|---|---|
| dBA | Decibels |
| DDT | dichlorodiphenyltrichloroethane |
| DIF | Development Impact Fees |
| DOC | Department of Conservation |
| DSM | deep soil mixing |
| DTSC | Department of Toxic Substances Control |
| DU | dwelling units |
| DWR | Department of Water Resources |

**E**

| | |
|---|---|
| E | Eligible |
| EDR | environmental database report |
| EERE | Energy Efficiency and Renewable Energy |
| EIR | Environmental impact report |
| EO | Executive Order |
| EOC | Emergency Operations Center |
| EOP | Emergency Operations Plan |
| EQ Zapp | Earthquake Hazards Zone Application |
| ESA | Environmentally sensitive areas |

**F**

| | |
|---|---|
| FEMA | Federal Emergency Management Agency |
| FESA | Federal Endangered Species Act |
| FHSZ | Fire Hazard Severity Zone |
| FIRM | Flood Insurance Rate Map |
| FRSH | Freshwater Replenishment |
| FTA | Federal Transit Administration |

**G**

| | |
|---|---|
| GHG | Greenhouse Gas |
| GWP | global warming potential |
| GWR | Groundwater Recharge |

**H**

| | |
|---|---|
| H2SO3 | aerosols of sulfurous acid |
| HCD | Housing and Community Development |
| HCP | Habitat Conservation Plan |
| HCS | Hazard Communication Standard |
| HFCs | hydrofluorocarbons |
| HQTA | High Quality Transit Area |
| HQTA | High Quality Transit Area |
| HRA | Historical Resource Assessment |
| HVAC | heating, ventilating, and air conditioning |
| HWCA | Hazardous Waste Control Act |
| Hz | Hertz |

**I**

| | |
|---|---|
| I | Institutional |
| IBC | International Building Code |
| IND | Industrial Service Supply |

**L**

| | |
|---|---|
| LACM | Natural History Museum of Los Angeles County |
| LBP | lead-based paints |
| $L_{eq}$ | equivalent noise level |
| LOS | Level of Service |

**M**

| | |
|---|---|
| M-1 | Industrial Park |
| M-2 | Limited Industrial |
| MBTA | Migratory Bird Treaty Act |
| MEI | maximally exposed individual |
| MM | Mitigation Measure |
| $MMTCO_2e$ | metric tons carbon dioxide equivalent |
| MND | Mitigated Negative Declaration |
| mpg | miles per gallon |
| mph | Miles per hour |
| MPO | Metropolitan Planning Organization |
| MS4 | municipal separate storm sewer system |
| MSDS | material safety data sheets |
| MUN | Municipal and Domestic Supply |
| MUSD | Moorpark Unified School District |
| MWD | Municipal Water District |

**N**

| | |
|---|---|
| $N_2O$ | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NCCP | Natural Community Conservation Plan |
| ND | Negative Declaration |
| $NF_3$ | nitrogen trifluoride |
| NHPA | National Historic Preservation Act |
| NHTSA | National Highway Traffic Safety Administration |
| NIMS | National Incident Management System |
| $NO_2$ | nitrogen dioxide |
| NO3 | nitrate |
| NOI | Notice of Intent |
| NOP | Notice of Preparation |
| NOx | nitrogen oxides |
| NPDES | National Pollutant Discharge Elimination System |
| NRHP | National Register of Historic Places |

**O**

| | |
|---|---|
| O&M | Operations and Maintenance |
| $O_3$ | Ozone |
| OCHCA | Orange County Health Care Agency |
| OD | Officially Designated |
| OGI | Oakridge Geoscience, Inc. |
| OPR | Office of Planning and Research |
| OSHA | Occupational Safety and Health Administration |

**P**

| | |
|---|---|
| PCB | polychlorinated biphenyl |
| PFCs | perfluorocarbons |
| pH | potential of hydrogen |
| PM10 | respirable particulate matter with a diameter of 10 microns or less |
| PM2.5 | fine particulate matter with a diameter of 2.5 microns or less |
| ppm | parts per million |
| ppv | peak particle velocity |
| PRC | Public Resources Code |
| PRMP | Parks and Recreation Master Plan |
| PROC | Industrial Process Supply |

**R**

| | |
|---|---|
| RCRA | Resource Conservation and Recovery Act |
| RE | Rural Exclusive |
| RHNA | regional housing needs allocations |
| RPS | Renewable Portfolio Standard |

| | |
|---|---|
| RTP | regional transportation plan |
| RTP/SCS | Regional Transportation Plan/Sustainable Communities Strategy |
| RWQCB | Regional Water Quality Control Board |

**S**

| | |
|---|---|
| SAFE | Safer, Affordable, Fuel-Efficient |
| SB | Senate Bill |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCCAB | South Central Coastal Air Basin |
| SCCIC | South Central Coastal Information Center |
| SCE | Southern California Edison |
| SCGC | Southern California Gas Company |
| SCS | Sustainable Communities Strategy |
| SEMS | Standardized Emergency Management System |
| $SF_6$ | sulfur hexafluoride |
| SHMA | Seismic Hazards Mapping Act |
| SIP | State Implementation Plan |
| $SO_2$ | sulfur dioxide |
| $SO_3$ | sulfur trioxide |
| SOI | Secretary of the Interior |
| SOx | sulfur oxides |
| SP | Specific Plan |
| SR | State Route |
| SSFL | Santa Susana Field Laboratory |
| STEM | science, technology, engineering, and math |
| SVLRC | Simi Valley Landfill and Recycling Center |
| SWPCP | Storm Water Pollution Control Plans |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resource Control Board |

**T**

| | |
|---|---|
| TAC | toxic air contaminants |
| TCR | Tribal Cultural Resource |
| TDM | Transportation Demand Management |
| TMDL | Total Maximum Daily Load |

**U**

| | |
|---|---|
| U.S. | United States |
| USACE | United States Army Corp of Engineers |
| USC | United States Code |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |

| | |
|---|---|
| UWMP | Urban Water Management Plans |

**V**

| | |
|---|---|
| VCAPCD | Ventura County Air Pollution Control District |
| VCFD | Ventura County Fire Department |
| VCSO | Ventura County Sheriff's Office |
| VCTC | Ventura County Transportation Commission |
| VCWPD | Ventura County Watershed Protection District |
| VCWWD | Ventura County Waterworks District |
| VdB | vibration decibels |
| VHFHSZ | Very High Fire Hazard Severity Zone |
| VMT | vehicle miles traveled |
| VOC | volatile organic compounds |
| VR | vibro-replacement |

**W**

| | |
|---|---|
| WARM | Warm Freshwater Habitat |
| WDID | Waste Discharge Identification |
| WDR | waste discharge requirements |
| WILD | Wildlife Habitat |
| WQMP | Water Quality Management Plan |

**Z**

| | |
|---|---|
| ZEV | Zero Emission Vehicle |
| ZNE | zero net energy |

**Symbols**

| | |
|---|---|
| °F | degrees Fahrenheit |

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# SECTION 1.0
# EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) (Section 21000 et. seq. of the California Public Resources Code) requires that lead agencies consider the potential environmental consequences of projects over which they have discretionary approval authority prior to taking approval action on such projects. An Environmental Impact Report (EIR) is a public document designed to provide the City, trustee and responsible agencies, the general public, and other interested parties with an analysis of potential environmental consequences of a project and to support informed decision making by the Lead Agency. The City of Moorpark (City) is the Lead Agency under CEQA and is responsible for preparing the EIR for the Civic Center Master Plan Project (Project). This determination is made in accordance with Sections 15051 and 15367 of the State CEQA Guidelines, which define the Lead Agency as the public agency that has the principal responsibility for carrying out or approving a project.

This EIR has been prepared to identify, analyze, and mitigate, to the extent feasible, the potential environmental effects associated with implementation of the Project. This EIR has been prepared pursuant to the requirements of CEQA and the Guidelines for the Implementation of CEQA (State CEQA Guidelines) (Title 14, Division 6, Chapter 3 of the California Code of Regulations).

This Executive Summary has been prepared in accordance with Section 15123(a)(b) of the State CEQA Guidelines, which states that an EIR should contain a brief summary of the proposed actions and its consequences and should identify (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) areas of controversy known to the Lead Agency; and (3) issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects.

## 1.2 PROJECT LOCATION AND SETTING

The Project Site is approximately 12.5 acres and is located in the central, downtown area of the City of Moorpark in Ventura County, California. The Project Site is located at the site of the existing civic center, west of Moorpark Avenue/Walnut Canyon Road (State Route [SR] 23). Portions of the Project Site are located on the north and south sides of West High Street. Assessor Parcel Numbers (APNs) within the Project Site and their respective street addresses are detailed below in Table 1-1, Existing Project Site.

**TABLE 1-1**
**EXISTING PROJECT SITE**

| APN | Street Address |
|---|---|
| 511-0-050-305 | None |
| 511-0-050-225 | None |
| 511-0-050-245 | None |
| 511-0-050-265 | None |
| 511-0-050-255 | None |
| 511-0-050-175 | 83 High St, Moorpark |
| 511-0-050-065 | 675 Moorpark Av, Moorpark |
| 511-0-050-140 | 661 Moorpark Av, Moorpark |
| 511-0-050-080 | 47 High St, Moorpark |
| 511-0-050-090 | High St, Moorpark |
| 512-0-090-050 | High St, Moorpark |
| 511-0-020-275 | None |
| 511-0-020-071 | High St, Moorpark |
| 511-0-020-072 | None |
| Source: Ventura County Assessor 2023 | |

The Project Site is generally comprised of three areas. The eastern portion of the Project Site contains the existing Civic Center Campus which is oriented towards Moorpark Avenue. The Campus contains a variety of existing uses, including the existing city hall, City Library, Community Center/Active Adult Center, and associated parking. The southern portion of the site contains a surface parking lot associated with the off-site United States (U.S.) Post Office building and is generally located between West High Street to the north and the Union Pacific Railroad and Metrolink tracks to the south. The western portion of the Project Site is undeveloped, generally rectangular-shaped vacant land oriented in an east/west direction along the north side of West High Street. Also, a Ventura County Public Work's flood control easement and box culvert traverse the Project Site from north to south. The Project Site is primarily surrounded by development including commercial, office, institutional, and residential uses. The Project Site is generally bordered by Walnut Canyon Road, the Walnut Canyon Elementary School, the Boys and Girls Club, and vacant land to the north and northwest; the railroad tracks to the south; Moorpark Avenue and commercial, office, and residential uses to the east; and vacant land to the west.

## 1.3 PROJECT DESCRIPTION

The Project proposes the phased development of a new City Civic Center within the Project Site. The Project includes the following phases:

- Phase 1 includes construction of a new 18,000 square foot (sf) library with outdoor plaza on the north side of High Street. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be demolished at the end of this phase once the library is moved to the new facility. City hall would be temporarily relocated to 323 Science Dr. until construction of the new city hall is complete, which would occur during Phase 4.

- Phase 2 includes development of the west commercial site with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development.
- Phase 3 involves development of the north site residential area with approximately 75 units at 25 du/acre. Phase 3 would include the demolition of the existing city hall and community center/active adult center buildings.
- Phase 4 involves construction of a new 22,000 sf city hall and a mercado/market.

A phased site plan detailing the proposed land uses is provided below as Exhibit 1-1, Phased Site Plan.

## 1.4 AREAS OF CONTROVERSY

There are no known areas of controversy related to the Project; however, the City acknowledges the following topics and stakeholders that were important in the development of this EIR.

### Tanner Corner Building

The Tanner Corner Building is a one-story commercial building located on the northwest corner of Moorpark Avenue and High Street. The Tanner Corner Building was evaluated and formally listed in the CRHR on November 3, 2000. The Tanner Corner Building is also eligible for the NRHP and as a City of Moorpark landmark (South Environmental 2022). The significance of the Tanner Corner Building as well as an impact evaluation is included in Section 4.4, Cultural Resources of this EIR. Vibration analyses related to the Tanner Corner Building and other nearby structures is provided in Section 4.11 of this EIR.

### California Department of Fish and Wildlife

A letter was received from California Department of Fish and Wildlife (CDFW) on June 8, 2022 in response to the Project's Notice of Preparation (NOP). In their letter, CDFW offered comments and recommendations to assist the City in adequately identifying, avoiding, and/or mitigating any potential impacts on fish and wildlife resources associated with the Project. Specifically, CDFW provided comments and recommendations regarding four topics: Sensitive Bird Species, Loss of Bird and Raptor Nesting Habitat, Tree Disease Management Plan, and Landscaping. Further discussion of biological resources as well as an impact evaluation of biological resources is included in Section 4.3, Biological Resources, of this EIR. The full CDFW NOP comment letter is included in Appendix B of this EIR.

## 1.5 SUMMARY OF ENVIRONMENTAL IMPACTS

This EIR has been prepared to assess the potentially significant effects on the environment that could result from implementation of the Project. For a detailed discussion regarding potential significant impacts, please refer to Chapter 4.0, Environmental Analysis, of this EIR.

For each environmental topic, Table 1-2, Summary of Project Impacts, Mitigation Measures and Level of Significance, includes applicable mitigation measures and conditions of approval that are identified for impacts determined to be potentially significant. As shown in Table 1-2, Summary of Project Impacts, Mitigation Measures and Level of Significance, the Project would result in less

than significant impacts with implementation of mitigation measures for the following topical areas evaluated in this EIR:

- Biological Resources;
- Cultural Resources,
- Geology and Soils, and
- Noise/Vibration.

No significant and unavoidable impacts were identified for the Project.

### 1.5.1 ALTERNATIVES TO THE PROJECT

CEQA Guidelines Section 15126.6 requires consideration and discussion of alternatives to the Project in an EIR. Three alternatives are discussed and evaluated in Chapter 5.0 of this EIR, which are each summarized below.

- **No Project Alternative:** Under the No Project Alternative, the Project Site would continue to operate as the existing City Civic Center with none of the improvements that are proposed under the Project.
- **Proposed Project:** The Project would consist of the phased development of a new Civic Center within the Project Site as described in more detail in Section 3.0.
- **No Commercial Alternative**: The No Commercial Alternative would consist of the phased development of a new City Civic Center within the Project Site, as described in Section 3.0 of this EIR, Project Description, with the exception that the Alternative Project would not include the 13,000 square feet of commercial uses and the public park that are proposed as part of the Project in Phase 2. The same conditions of approval and mitigation measures as identified for the Project would be applicable to the No Commercial Alternative.

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| **Aesthetics** | | | |
| Threshold 4.1-a: Except as provided in Public Resource Code Section 21099, would the project have a substantial adverse effect on a scenic vista? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.1-b: Except as provided in Public Resource Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. | No Impact | N/A | No Impact |
| Threshold 4.1-c: Except as provided in Public Resource Code Section 21099, in non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. | Less Than Significant Impact | **COA AES-1** As required by Section 12.12.070 of the City's Municipal Code, Tree Removal Permits – Requirements, no native oak tree, historic tree or other mature tree, where that tree is on public or private property, except as provided for in subsection B of this section, or is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the city. The director of community services shall establish the format and information required for a tree removal permit consistent with this chapter. In no event shall a permit be denied if to do so would cause interference with the economic use and enjoyment of the property. | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.1-d: Except as provided in Public Resource Code Section 21099, would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. | Less Than Significant Impact | N/A | Less Than Significant Impact |
| **Air Quality** | | | |
| Threshold 4.2-a: Would the project conflict with or obstruct implementation of the applicable air quality plan? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.2-b: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? | Less Than Significant Impact | **COA AQ-1** During construction of the Project, the City and its' contractors shall be required to comply with Ventura County Air Pollution Control District (VCAPCD) Rule 55, Fugitive Dust, which requires, among other provisions, that "No person shall cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road" (VCAPCD 2008). | Less Than Significant Impact |
| | | **COA AQ-2** A 15-mile per hour speed limit must be observed within all construction areas. | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | | Level of Significance After Mitigation |
|---|---|---|---|---|
| | | **COA AQ-3** | Reactive organic compounds, nitrogen oxides (ozone/smog precursor), and particulate matter (aerosols/dust) generated during construction operations must be minimized in accordance with City of Moorpark standards and the standards of the Ventura County Air Pollution Control District. When an air pollution Health Advisory has been issued, construction equipment operations (including but not limited to grading, excavating, earthmoving, trenching, material hauling, and roadway construction) and related activities must cease in order to minimize associated air pollutant emissions. | |
| | | **COA AQ-4** | During clearing, grading, earth moving, excavation, soil import and/or soil export operations, the applicant shall comply with the City of Moorpark standard requirements for dust control, including, but not limited to, minimization of ground disturbance, application of water/chemicals, temporary/permanent ground cover/seeding, street sweeping, and covering loads of dirt. All clearing, earth moving, excavation, soil import, and/or soil export operations must cease during periods of high winds (greater than 15 miles per hour [mph] averaged over one hour) | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | **COA AQ-5** Beginning in 2030, prior to issuance of a grading permit, the Project's Construction Manager shall demonstrate to the City's Community Development Department that construction documents require the construction contractors to implement the following measures:<br>a. All off-road diesel-powered construction equipment greater than 50 horsepower (hp) used during phases 3 and 4 shall, at a minimum, meet Tier 3 off-road emissions standards.<br>b. A copy of each unit's certified offroad engine Tier specification shall be provided to the City at the time of mobilization of each applicable unit of equipment. | |
| Threshold 4.2-: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | Less Than Significant Impact | See above for **COA AQ-5**, which is applicable to this threshold. | Less Than Significant Impact |
| Threshold 4.2-d : Would the project expose sensitive receptors to substantial pollutant concentrations? | Less Than Significant Impact | See above for **COA AQ-1** through **COA AQ-4**, which are applicable to this threshold. | Less Than Significant Impact |
| Threshold 4.2-e: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | Less Than Significant Impact | N/A | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | | Level of Significance After Mitigation |
|---|---|---|---|---|
| **Biological Resources** | | | | |
| Threshold 4.3-a: Would the project 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 Wildlife or U.S. Fish and Wildlife Service? | Potentially Significant Impact | **COA BIO-1** | Nesting Bird Survey. If construction and/or vegetation removal must be initiated during the peak nesting season (i.e., February 1 to August 31), a pre-construction nesting bird survey shall be conducted by a qualified Biologist within 14 days prior to the beginning of Project-related activities (including but not limited to clearing, grubbing, vegetation removal, grading, and building demolition). If Project-related construction activities lapse for greater than 14 days during the peak nesting season, an additional nest survey shall be conducted before work can be reinitiated.<br><br>If the Biologist finds an active nest within or adjacent to the construction area (within 200 feet for all birds protected under California Fish and Game Code and the Migratory Bird Treaty Act and within 500 feet for raptors), the Biologist shall identify an appropriate protective buffer zone around the nest depending on the sensitivity of the species, the nature of the construction activity, and the amount of existing disturbance in the vicinity. In general, the Biologist should designate a buffer of 10 to 200 feet for common nesting birds and 200 to 500 feet for special status nesting birds and nesting raptors. Construction activities within the buffer shall only proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g., young have fledged, predation, or other non-human causes of nest failure) to maintain compliance with California Fish and Game Code and the Migratory Bird Treaty Act. | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | **MM BIO-1** Prior to ground disturbance on the western portion of the Project Site associated with Phase 2 of the Project, the applicant shall retain a qualified Biologist (one with experience conducting botanical surveys) to conduct a focused survey for special status plant species. The survey shall be performed during the target species' peak blooming period in accordance with the most current protocols approved by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). If focused plant surveys determine that no special status plant species are present in the Project impact area, then no future measures are necessary.<br><br>If any plant species listed as threatened or endangered by the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA) is determined to be present and take of individuals cannot be avoided, then the applicant shall obtain take authorization from the listing agencies before impacting the species (FESA Consultation with the United States Fish and Wildlife Service (USFWS) and CESA Section 2080 from the CDFW). Consultation with the listing agencies shall determine the appropriate conservation measure(s) to mitigate for impacts on the species. The mitigation may include collecting seed from individuals in the impact area and planting them within a mitigation site with the appropriate microhabitat for this species and/or paying a fee to a mitigation bank and/or a qualified Plant Science Program to conduct germination or other research studies on the species. The applicant shall retain a qualified Biologist to prepare a detailed Special Status | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | Plant Species Conservation Plan for approval by the USFWS and/or the CDFW. The conservation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan; (2) mitigation site selection criteria; (3) site preparation and planting implementation; (4) implementation schedule; (5) maintenance plan/guidelines; (6) monitoring plan; (7) long-term preservation. The applicant shall implement the Plan as approved.<br><br>If focused surveys determine that CNPS List 1 or List 2 species are present and the necessary take of individuals would be greater than ten percent of species' population within a one-mile radius of the Project Site, then compensatory mitigation shall be required. Mitigation may include collection of seed from individuals in the impact area and planting them within a mitigation site with the appropriate microhabitat for this species. If Project timing requires that ground disturbance of potentially suitable habitat be performed prior to the species' peak blooming period and focused surveys cannot be performed, then the species shall be presumed present in the impact area. The applicant shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Conservation Plan for approval by CDFW. The conservation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation, (4) implementation schedule, (5) maintenance plan/guidelines, (6) monitoring plan, (7) long- | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | | Level of Significance After Mitigation |
|---|---|---|---|---|
| | | | term preservation. The applicant shall implement the Plan as approved. | |
| | | **MM BIO-2** | Per the Staff Report on Burrowing Owl Mitigation (CDFG 2012), the applicant shall retain a qualified Biologist to conduct a pre-construction survey for the burrowing owl between 14 and 30 days prior to the initial ground disturbance on the western portion of the Project Site. The pre-construction survey shall include the area of proposed disturbance plus a 500-foot buffer (if access is available and habitat is present).<br><br>If an active burrow is observed outside the breeding season (September 1 to January 31) and it cannot be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in CDFG 2012. Prior to any burrowing owl exclusion efforts, an exclusion plan will be prepared and submitted to CDFW for review and approval. The plan will include all details on passive relocation including that one-way doors shall be used to exclude owls from the burrows; doors shall be left in place for at least 48 hours. Once the burrow is determined to be unoccupied, the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools. Prior to excluding an owl from an active burrow, a receptor burrow survey shall be conducted to confirm that at least two potentially suitable unoccupied burrows are within approximately 688 feet prior to installation of the one-way door. If two natural receptor burrows are not located, one artificial burrow shall be created for every burrow that would be closed. | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | If an active burrow is observed outside the breeding season (September 1 to January 31) and it can be avoided, the Biologist shall determine an appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 160 feet to 1,640 feet depending on the level of impact and the time of year. The designated buffer will be clearly marked in the field and will be mapped as an environmentally sensitive area (ESA) on construction plans.<br><br>If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended (i.e., all young have fledged from the burrow). The Biologist shall determine the appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 650 to 1,640 feet depending on the level of impact and the time of year. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. Construction shall be allowed to proceed when the qualified Biologist has determined that all fledglings have left the nest. | |
| Threshold 4.3-b Would the project 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 Wildlife or US Fish and Wildlife Service? | No Impact | N/A | No Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.3-c Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | Less Than Significant Impact | **COA BIO-2** Jurisdictional Drainage Avoidance and Regulatory Permitting. Impacts to jurisdictional waters within the Project Site will be avoided to the extent feasible. If such impacts are unavoidable, then permits/ certifications/ agreements from the United States Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) are required.<br><br>A pre-application meeting with these agencies is recommended prior to submittal of permit applications to discuss existing conditions; confirm the agencies' jurisdiction over water resources on the study area; discuss impacts to these resources that would result from the Project; discuss proposed avoidance, minimization, and mitigation measures to offset these impacts; and to discuss the regulatory permitting process. Following the pre-application meeting, the Project Applicant would prepare and process the appropriate permits (e.g., a Section 404 Permit from the USACE in the form of a Nationwide Permit or Individual Permit, a Section 401 Water Quality Certification from the RWQCB, and/or a CDFW Section 1602 Notification of Lake or Streambed Alteration). Additional permit conditions may be required by the resource agencies regarding impacts to areas under their respective jurisdictions.<br><br>Standard construction best management practices (BMPs) shall be implemented to prevent toxins, chemicals, or petroleum products from entering the culverts and degrading water quality. | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.3-d Would the project 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 Impact | N/A | Less Than Significant Impact |
| Threshold 4.3-e Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | Potentially Significant Impact | See above for **COA BIO-2, MM BIO-1,** and **MM BIO-2**, which are applicable to this threshold. | Less Than Significant Impact |
| Threshold 4.3-f: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | No Impact | N/A | No Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | | Level of Significance After Mitigation |
|---|---|---|---|---|
| **Cultural Resources** | | | | |
| Threshold 4.4-a: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | Potentially Significant Impact | **COA CUL-1** | If any archaeological, paleontological, or historical finds are uncovered during grading or excavation operations, all grading or excavation shall immediately cease in the immediate area and the find must be left untouched. The applicant, in consultation with the Project paleontologist or archeologist, shall assure the preservation of the site and immediately contact the Community Development Director by phone, in writing by email or hand delivered correspondence informing the Director of the find. In the absence of the Director, the applicant shall so inform the City Manager and Planning Manager. The applicant shall be required to obtain the services of a qualified paleontologist or archeologist, whichever is appropriate to recommend disposition of the site. The paleontologist or archeologist selected must be approved in writing by the Community Development Director. The applicant shall pay for all costs associated with the investigation and disposition of the find. | Less Than Significant Impact |
| | | **COA CUL-2** | In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 48 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative shall then determine, in consultation with the property owner, the disposition of the human remains. | |
| | | **COA CUL-3** Prior to any ground disturbing activity, construction personnel associated with earth moving equipment, drilling, grading, and excavating, shall be provided with basic training conducted by a qualified archaeologist. Issues that shall be included in the basic training will be geared toward training the applicable construction crews in the identification of archaeological deposits, further described below. Training will include written notification of the restrictions regarding disturbance and/or removal of any portion of archaeological, paleontological, or historical deposits and the procedures to follow should a resource be identified. The construction contractor, or its designee, shall be responsible for implementation of this measure. A tribal monitor shall be provided an opportunity to attend the pre-construction briefing if requested. | |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | **MM CUL-1** Prior to the start of Project phases that involve work within 75 feet of the Tanner Corner Building, protection measures shall be developed in a formal plan for the adjacent Tanner Corner Building at 601 Moorpark Avenue. Protection measures shall include at a minimum: 1) clear denotation in the Project construction plans that the Project is located directly adjacent to an historical resource, marking the location of the Tanner Corner Building; 2) a protocol for informing all construction workers of the presence of the historical resource and making them aware of the protocol to avoid and protect it; 3) a list of approved construction equipment/distances in consideration of any identified groundborne vibration impacts; 4) recommendations for specific protective fencing and signage to be implemented during construction; and 5) if determined appropriate based on the results of the groundborne vibration analysis, recommendations for construction monitoring (pre-, post-, and during construction). The protection plan shall be prepared by a qualified architectural historian/historic preservation professional, clearly identify all responsible parties with their contact information, and be appended to the final set of construction plans. | |
| Threshold 4.4-b: Would the project would cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? | Less Than Significant Impact | See above for **COA CUL-1**, which is applicable to this threshold. | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.4-c: Would the project disturb any human remains, including those interred outside of formal cemeteries? | Less Than Significant Impact | See above for **COA CUL-2**, which is applicable to this threshold. | Less Than Significant Impact |
| **Energy** | | | |
| Threshold 4.5-a: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.5b: Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| **Geology and Soils** | | | |
| Threshold 4.6-a (i): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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. Refer to Division of Mines and Geology Special Publication 42. | Less Than Significant Impact | N/A | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.6-a (ii): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?<br>and<br>Threshold 4.6-a (iii): Would the project directly or indirectly cause potential substantial adverse effects including the risk of loss, injury, or death from seismic-related ground failure, including liquefaction? | Potentially Significant Impact | **COA GEO-1** Prior to the issuance of a grading permit for each Project phase, a geotechnical report will be prepared and submitted to the City for review and approval. The geotechnical report shall be prepared by a registered Civil Engineer or certified Engineering Geologist and shall contain site-specific evaluations of the seismic and geologic hazards affecting the Project and shall identify recommendations for earthwork and construction. All recommendations from forthcoming site-specific geotechnical studies shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City as part of the plan approval process.<br>**MM GEO-1** Prior to approval grading plans, the Applicant shall demonstrate, to the satisfaction of the City's Planning Division that the recommendations in the Project's geotechnical reports and in any future geotechnical reports have been fully and appropriately incorporated (OGI 2017a and 2017b). | Less Than Significant Impact |
| Threshold 4.6-a (iv): Would the project directly or indirectly cause potential substantial adverse effects including the risk of loss, injury, or death from seismic-related ground failure, including landslides? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.6-b: Would the project result in substantial soil erosion or the loss of topsoil? | Less Than Significant Impact | N/A | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.6-c: Would the project 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? | Potentially Significant Impact | See above for **MM GEO-1**, which is applicable to this threshold. | Less Than Significant Impact |
| Threshold 4.6-d: Would the project 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 | N/A | Less Than Significant Impact |
| Threshold 4.6-e: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water? | No Impact | N/A | No Impact |
| Threshold 4.6-f: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | Less Than Significant Impact | See above for **COA CUL 1** and **COA CUL-3**, which are applicable to this threshold. | Less Than Significant Impact |
| **Greenhouse Gas Emissions** | | | |
| Threshold 4.7-a: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | Less Than Significant Impact | N/A | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.7-b: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| **Hazards and Hazardous Materials** | | | |
| Threshold 4.8-a: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | Less Than Significant Impact | **COA HAZ-1** Applicant/operator shall store, manifest, transport, and dispose of all on-site generated waste that meets hazardous waste criteria in accordance with California Code of Regulations Title 22 and in a manner to the satisfaction of the Manager, HCA/Hazardous Materials Program. Applicant shall keep storage, transportation, and disposal records on site and open for inspection to any government agency upon request.<br>**COA HAZ-2** Transport of materials deemed as hazardous must comply with the requirements of Title 22, Division 4.5 of the California Code of Regulations, the U.S. Department of Transportation regulations in the Code of Federal Regulations (specifically, Title 49, Hazardous Materials Transportation Act and Title 40, Part 263, Subtitle C of Resource Conservation and Recovery Act), California Department of Transportation (Caltrans) standards, and Occupational Safety and Health Administration (OSHA) standards. | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.8-b: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | Less Than Significant Impact | See above for **COA HAZ 1** and **COA HAZ-2**, which are applicable to this threshold.<br>**COA HAZ-3** Prior to issuance of a demolition permit for any buildings or facilities, building materials shall be assessed by a qualified Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 for the presence of lead-based paints (LBPs), asbestos-containing materials (ACM), and other common hazardous building materials (e.g., polychlorinated biphenyl [PCB]-containing lighting ballasts and mercury-containing light tubes and switches). If determined to be present, the Applicant shall prepare an abatement plan for their removal and safe transport in compliance with State and federal regulations, including Occupational Safety and Health Administration (OSHA) regulations in the Code of Federal Regulations (specifically Title 29, Part 1926) and South Coast Air Quality Management District (SCAQMD) Rule 1403. The abatement plan shall meet the satisfaction of the Manager, Orange County Health Care Agency (OCHCA)/Hazardous Materials Program. | Less Than Significant Impact |
| Threshold 4.8-c: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | Less Than Significant Impact | N/A | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.8-d: Would the project 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 | N/A | No Impact |
| Threshold 4.8-e: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of 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 | N/A | No Impact |
| Threshold 4.8-f: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.8-g: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | Less Than Significant Impact | N/A | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | | Level of Significance After Mitigation |
|---|---|---|---|---|
| **Hydrology and Water Quality** | | | | |
| Threshold 4.9-a: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | Less Than Significant Impact | **COA HWQ-1** | Prior to the issuance of any grading or building permit for each Project phase, the applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Community Development Department. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the Project Site and be available for County review on request. | Less Than Significant Impact |
| Threshold 4.9-b: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | Less Than Significant Impact | **COA HWQ-2** | Prior to the issuance of any grading or building permits, the applicant shall submit for review and approval by the Community Development Department, a Water Quality Management Plan (WQMP) that must include the following minimum contents:<br>• Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, and conserving natural areas;<br>• Incorporate applicable Routine Source Control BMPs; and<br>• Include an Operation and Maintenance (O&M) Plan that | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | identifies the mechanism(s) by which long-term O&M of all structural BMPs will be provided. | |
| Threshold 4.9-c: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the additional of impervious surfaces, in a manner which would: | | | |
| (i) Result in a substantial erosion or siltation on- or off-site? | Less Than Significant Impact | See above for **COA HWQ-1**, which is applicable to this threshold. | Less Than Significant Impact |
| (ii) Substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site?<br>(iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | Less Than Significant Impact | See above for **COA HWQ-2**, which is applicable to this threshold.<br>**COA HWQ-3** Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Community Development Department, including:<br>• Demonstrate that all structural Best Management Practices (BMPs) described in the Project's WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;<br>• Demonstrate that the applicant has complied with all non-structural BMPs described in the Project's WQMP;<br>• Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | attachment to the WQMP; and<br>• Demonstrate that copies of the Project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants. | |
| (iv) Impede or redirect flood flows? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| **Noise** | | | |
| Threshold 4.11-a: Would the project result in a substantial temporary or permanent increase in ambient noise in the vicinity of the project levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | Potentially Significant Impact | **COA NOI-1** The Project shall comply with Section 15.26 of the City's Municipal Code, which requires contractors to not engage in or conduct any noise-generating outdoor construction work, except between the hours of 7:00 AM and 7:00 PM, Monday through Saturday, unless a permit for different hours has been issued.<br>**COA NOI -2** The Project shall comply with Chapters 9.28, 10.04, 12.24 and 17.53 of the Moorpark Municipal Code and any provision amendatory or supplementary thereto, as a standard requirement for construction noise reduction.<br>**COA NOI -3** The Project shall include the posting, in a conspicuous location, of the construction hour limitations and make each construction trade aware of the construction hour limitations.<br>**MM NOI -1** Prior to the start of grading of each Project phase, the Project applicant shall provide evidence acceptable to the City's Community Development Department, that:<br>a. All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. | Less Than Significant Impact |

**TABLE 1-2**
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|---|---|---|---|
| | | b. Stationary equipment, such as generators and air compressors, would be located as far from local residences and Walnut Canyon Elementary School, as feasible.<br>c. Equipment maintenance and staging areas would be located as far away from local residences and Walnut Canyon Elementary School, as feasible.<br>d. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings and Walnut Canyon Elementary School. | |
| Threshold 4.11-b: Would the project generate excessive groundborne vibration or groundborne noise levels? | Potentially Significant Impact | **MM NOI -2** During construction activities, the Project applicant will ensure that ongoing vibration monitoring is conducted for Project activities within 75 feet of the Tanner Corner Building as specified below.<br>• Whenever vibratory replacement activities occur within 75 feet of the Tanner Corner Building.<br>• Whenever Deep Soil Mixing activities occur within 50 feet of the Tanner Corner Building.<br>• Whenever general construction equipment is utilized within 25 feet of the Tanner Corner Building.<br>If vibration levels at the Tanner Corner Building reach or exceed 0.25 ppv, there is a potential for building damage and an immediate stop work order will be issued. Alternative construction methods or vibration reduction measures will then be determined that keep vibration exposure levels below 0.25 ppv. | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.11-c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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 | N/A | No Impact |
| **Population and Housing** | | | |
| Threshold 4.12-a: Would the project induce substantial unplanned 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)? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.12-b: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | No Impact | N/A | No Impact |
| **Recreation** | | | |
| Threshold 4.14-a: Would the project 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 | N/A | Less Than Significant Impact |

## TABLE 1-2
## SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE

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|---|---|---|---|
| Threshold 4.14-b: Would the project 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 | N/A | Less Than Significant Impact |
| **Transportation** | | | |
| Threshold 4.15-a: Would the project conflict with an program plan, ordinance or policy addressing the circulation system, including transit and roadways, bicycle lanes, and pedestrian facility paths? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.3-b: Would the project conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b).? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.15-c: Would the project 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 | **COA TRA-1** Prior to the issuance of a grading permit for each Project phase, the applicant shall demonstrate adequate sight distance at all street intersections, in a manner meeting the approval of the City's Public Works Department. | Less Than Significant Impact |
| Threshold 4.15-d: Would the project result in inadequate emergency access? | Less Than Significant Impact | **COA TRA-2** Prior to the issuance of any grading permits, the applicant shall demonstrate that applicable improvements for that phase from the Project's Traffic Study have been incorporated into Project design, in a manner meeting the approval of the City's Public Works Department.<br>**COA TRA-3** Prior to beginning each Project phase, the applicant shall submit a construction traffic control plan for the review and approval of the City Engineer and Public Works Director. Traffic control plan shall include construction advisory | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| | | speed limits, speed limit posting locations, and enforcement measures if needed. | |
| **Tribal Cultural Resources** | | | |
| Threshold 3.16-a: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? | No Impact | See above for **COA CUL 1** and **COA CUL-3**, which are applicable to this threshold. | No Impact |
| Threshold 3.16-b: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set | Less Than Significant Impact | See above for **COA CUL 1** and **COA CUL-3**, which are applicable to this threshold. | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? | | | |
| **Utilities and Service Systems** | | | |
| Threshold 4.17-a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?<br><br>Threshold 4.17-c: Would the Project 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 | See above for **COA HWQ-2** and **COA HWQ-3**, which are applicable to this threshold.<br><br>**COA UTL-1** Prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from VCWWD No. 1 demonstrating their capacity to serve the Project for water and wastewater services. The will serve letter must be submitted to the Community Development Department for review prior to issuance of a building permit.<br><br>**COA UTL-2** Prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from dry utility providers demonstrating their capacity to serve the Project for electricity, natural gas, and telecommunications if needed. The will serve letters must be submitted to the Community Development Department for review prior to issuance of a building permit. | Less Than Significant Impact |

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**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.17-b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | Less Than Significant Impact | See above for **COA UTL-1**, which is applicable to this threshold. | Less Than Significant Impact |
| Threshold 4.17-e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| **Wildfire** | | | |
| Threshold 4.18-a: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.18-b: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | Less Than Significant Impact | N/A | Less Than Significant Impact |

**TABLE 1-2**
**SUMMARY OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE**

| Threshold of Significance | Level of Significance Before Mitigation | Mitigation Measures and Conditions of Approvals | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 4.18-c: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | Less Than Significant Impact | N/A | Less Than Significant Impact |
| Threshold 4.18-d: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change? | Less Than Significant Impact | N/A | Less Than Significant Impact |

## 1.6 REFERENCES

California, State of. 2022a (September 28, access date). California Code of Regulations (CCR). Sacramento, CA. https://oal.ca.gov/publications/ccr/

———.2022b (September 28, access date). California Public Resources Code. Sacramento, CA. . https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=2.&title=&part=&chapter=9.&article=6.

Moorpark, City of. 2022 (May 9). Notice Of Preparation Civic Center Master Plan Project. Moorpark, CA. https://ceqanet.opr.ca.gov/2022050175. Provided as Appendix A.

South Environmental. 2022 (June). Historical Resource Assessment Report, Civic Center Master Plan Project, Moorpark, California. Pasadena, CA: South Environmental. Provided as Appendix D.

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# SECTION 2.0
# INTRODUCTION

This Draft Environmental Impact Report (EIR) has been prepared by the City of Moorpark (City) to evaluate the potential environmental effects that could result from development of the Civic Center Master Plan Project (Project). This Draft EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (Cal. Pub. Res. Code, Section 21000 et. seq., as amended) and implementing guidelines (Cal. Code Regs., Title 14, Section 15000 et. seq.).

## 2.1.1 CEQA REQUIREMENTS

The basic purposes of CEQA are to accomplish the following:

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that environmental damage can be avoided or be significantly reduced;
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved (Section 15002 of the CEQA Guidelines).

CEQA requires the preparation of an EIR for any Project that a lead agency determines may have a significant impact on the environment. According to Section 21002.1(a) of CEQA, “The purpose of an environmental impact report is to identify the significant effects on the environment of a Project, to identify alternatives to the Project, and to indicate the manner in which those significant effects can be mitigated or avoided.” CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the Project being proposed, and the extent and types of impacts that the Project and its alternatives would have on the environment if they were to be implemented.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the State CEQA Guidelines. EIRs are intended to provide an objective, factually supported analysis of the environmental consequences associated with a project that has the potential to result in significant, adverse environmental impacts, including after implementation of mitigation measures (MMs). In accordance with Section 15121(a) of the State CEQA Guidelines, this Draft EIR is an informational document that will inform public agency, decision makers, and the general public of (1) the significant environmental effects of the Project; (2) possible ways to minimize the significant effects; and (3) reasonable alternatives to the Project. The intent of this EIR is to provide “project-level” analysis of the environmental impacts associated with the phased construction of the Project.

## 2.1.2 LEAD AGENCY

Section 15051 of the State CEQA Guidelines identifies the Lead Agency as the public entity with the greatest responsibility for carrying out or approving the Project as a whole. The City has the primary authority to approve and adopt and subsequently implement the Project. As such, the City is serving as the Lead Agency under CEQA and is responsible for preparing this EIR.

### 2.1.3 SCOPING PROCESS

As part of the EIR process, a Notice of Preparation (NOP) was released on May 9, 2022 (Appendix A), beginning the 30-day public scoping period for the EIR. The City held a scoping meeting for the Project on May 23, 2022 from 5:00 PM to 6:30 PM. The purpose of the scoping meeting was to receive input on the environmental issues that should be addressed in the EIR. During the 30-day scoping period, the City received nine comment letters and email comments in response to the NOP. Copies of these NOP comment letters are provided in Appendix B of this EIR. This EIR has taken into consideration the comments received from the public and agencies in response to the NOP. Environmental issues that have been raised are summarized below and are addressed in each relevant issue area analyzed in Section 4.1 through Section 4.18 of this Draft EIR. The primary issues identified during the NOP process include the following:

- Encouraging tribal consultation pursuant to Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18).
- Safe use and storage of hazardous materials by futures uses proposed by the Project.
- Suggesting that Vehicle Miles Traveled (VMT) be utilized as the method of transportation analysis for the Project.
- Encouraging the incorporation of complete streets, pedestrian safety measures, and Transportation Demand Management (TDM) strategies into the Project, where possible.
- Encouraging the appropriate method of air quality analysis.
- The existence of a Ventura County Public Works flood control easement within the Project Site.
- Potential biological resources of the Project Site and appropriate methods for evaluating impacts to biological resources.

## 2.2 ISSUES ADDRESSED IN THE EIR

The scope of the EIR is based on the findings of the technical studies and input received from agencies and the public as part of the scoping process. Based on the City's determination, the EIR addresses all environmental topics with potential to result in significant effects. The environmental topics and issues within the topics with no potential for impact are identified in below in Section 4.1, Effects Not Found To Be Significant, of the EIR and focused out from further analysis.

Based on the City's determination, technical studies, and the comments received by the City on the NOP, this EIR analyzes the following environmental topics with their respective section numbers:

- Aesthetics (Section 4.1)
- Air Quality (Section 4.2)
- Biological Resources (Section 4.3)
- Cultural Resources (Section 4.4)
- Energy (Section 4.5)
- Geology and Soils (Section 4.6)
- Greenhouse Gas Emissions (Section 4.7)
- Hazards and Hazardous Materials (Section 4.8)
- Hydrology and Water Quality (Section 4.9)
- Land Use and Planning (Section 4.10)
- Noise (Section 4.11)
- Population and Housing (Section 4.12)
- Public Services (Section 4.13)
- Recreation (Section 4.14)
- Transportation (Section 4.15)
- Tribal Cultural Resources (Section 4.16)
- Utilities and Services Systems (Section 4.17)
- Wildfire (Section 4.18)

## 2.3 PUBLIC REVIEW OF THE DRAFT EIR

The Draft EIR for the Project has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, interested parties, and all parties who requested a copy of the EIR in accordance with CEQA. During the 45-day public review period, this Draft EIR, including the technical appendices, is available for review online at https://www.moorparkca.gov/1094/Civic-Center-Master-Plan. Hard copies are available at the City during regular business hours at:

City of Moorpark
Development Services Building, Planning Counter
799 Moorpark Avenue
Moorpark, California 93021

City Library
699 Moorpark Avenue
Moorpark, California 93021

During the public review period, comments from the general public, organizations, and agencies regarding environmental issues analyzed in the Draft EIR and the Draft EIR's accuracy and completeness may be submitted to the lead agency at the following address:

City of Moorpark
Community Development Department
Attention: Shanna Farley, Principal Planner
799 Moorpark Avenue
Moorpark, California 93021

Comments may also be emailed during the public review period to sfarley@moorparkca.gov.

Upon completion of the 45-day public review period, written responses will be prepared for all environmental issues raised in the comment letters, and the comments and responses will be included into the Final EIR. All responses to comments submitted on this Draft EIR by public agencies will also be provided to those agencies at least ten days prior to certification of the EIR, consistent with Section 15088(b) of the State CEQA Guidelines.

## 2.4 DECISION MAKING PROCESS

An EIR is one of the various decision-making tools used by a Lead Agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. For an EIR, in accordance with Section 21081 of CEQA and Section 15091 of the State CEQA Guidelines, public agencies are required to make written findings for each significant environmental impact identified in the EIR. If the Lead Agency and responsible agencies decide that the benefits of Project outweigh any identified unmitigated significant environmental effects, the Lead Agency is required to adopt a Statement of Overriding Considerations supporting their actions.

Prior to approving a Project, the Lead Agency must consider the information contained in the EIR; determine whether the EIR was properly prepared in accordance with CEQA and the State CEQA Guidelines; determine that the EIR reflects the independent judgment of the Lead Agency; adopt findings concerning the Project's significant environmental impacts and alternatives; and adopt a Statement of Overriding Considerations if the Project would result in significant impacts that cannot be reduced to a less than significant level.

## 2.5 REFERENCES

California, State of. 2022a (September 28, access date). California Code of Regulations (CCR). Sacramento, CA. https://oal.ca.gov/publications/ccr/

———.2022b (September 28, access date). California Public Resources Code. Sacramento, CA. . https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=2.&title=&part=&chapter=9.&article=6.

Moorpark, City of. 2022 (May 9). Notice Of Preparation Civic Center Master Plan Project. Moorpark, CA. https://ceqanet.opr.ca.gov/2022050175

# SECTION 3.0
# PROJECT DESCRIPTION

## 3.1 INTRODUCTION

The purpose of the project description is to describe the Project in a way that allows for meaningful review by the public, reviewing agencies, and decision makers. Section 15124 of the California Environmental Quality Act (CEQA) Guidelines requires that the project description for an environmental impact report (EIR) contain the following: (1) the precise location and boundaries of a proposed project; (2) a statement of objectives sought by the proposed project including the underlying purpose of the project; (3) a general description of the project's technical, economic, and environmental characteristics; and (4) a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making; (5) a list of the permits and other approvals required to implement the project; and (6) a list of related environmental review and consultation requirements required by federal, State, or local laws, regulations, or policies. An adequate project description need not be exhaustive but should supply the detail necessary for evaluation of the project.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines. The following project description provides the information needed to assess the environmental effects associated with the development, construction, and operation of the Project.

## 3.2 PROJECT LOCATION

The Project Site is approximately 12.5 acres in size and is located in the central, downtown area of the City of Moorpark in Ventura County, California. A portion of the Project Site contains the existing civic center, which is located west of Moorpark Avenue/Walnut Canyon Road. Portions of the Project Site are located on the north and south sides of West High Street. Exhibit 3-1, Regional Location, and Exhibit 3-2, Local Vicinity, depict the Project Site in a regional and local context, respectively.

The primary vehicular access into the existing Civic Center is provided from Moorpark Avenue with secondary access provided from a driveway on West High Street. Moorpark Avenue/Walnut Canyon Road are co-signed as State Route 23 (SR-23) adjacent to the Project Site. SR-23 is a regional transportation corridor that is classified as a local collector (two-lane roadway) on the City's General Plan Circulation Element Map. Adjacent to the Project Site, Moorpark Avenue/Walnut Canyon Road has one travel lane in each direction.

## 3.3 EXISTING SITE CONDITIONS AND LAND USES

The Project Site contains a variety of existing land uses. The eastern portion of the Project Site contains the existing Civic Center, which is oriented toward Moorpark Avenue. The existing Civic Center consists of a city hall, a community center/active adult center, a city library, portable structures, and parking areas. The southern portion of the Project Site is currently vacant and is generally located between West High Street to the north and the Union Pacific Railroad and Metrolink tracks to the south. The western portion of the Project Site is undeveloped, generally rectangular-shaped vacant land oriented in an east/west direction along the north side of West High Street. In conjunction with previous nearby residential development, the western portion of the Project Site has been subject to grading and is relatively flat with no distinguishing topographical features. The northern portion of the Project Site is developed with the existing city hall buildings.

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# Regional Location

Exhibit 3-1

*Civic Center Master Plan Project*

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Aerial Source: ESRI, Maxar 2018

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# Local Vicinity

## Exhibit 3-2

*Civic Center Master Plan Project*

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(Rev: 09/19/2022 JVR) R:\Projects\MOO_City of Moorpark\3MOO010100\Graphics\EIR\ex_LocalVicinity.pdf

The Project Site contains areas that are identified as being within the 500-year floodplain. Aditionally, the 100-year flows are conveyed through the Project Site within the concrete-lined Walnut Canyon drainage channel (FEMA 2022). The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site.

All parcels within the Project Site are owned by the City of Moorpark, with the exception of APN 511-0-020-275, which is owned by Essex Moorpark Owner LP. This portion of the Project Site would be dedicated to the City as part of the Development Agreement with Essex and would thereafter be owned by the City. This would occur at a later date.

### 3.3.1 SURROUNDING LAND USES

The Project Site is surrounded by development including commercial, office, institutional, and residential uses. Single-family residential uses are located to the north of the Project Site (east and west of Moorpark Avenue/Walnut Canyon Road). Walnut Canyon Elementary School, the Moorpark Boys and Girls Club, and vacant land are located to the northwest of the Project Site. This vacant land northwest of the Project Site (APN 511-0-020-265) is approved for the development of 200 apartment units as part of the Essex/Vendra Garden Apartments project. The Essex Apartment project would take vehicular access from Casey Road. Also, the southeastern boundary of the Hitch Ranch Specific Plan is located approximately 0.15 mile west of the Project Site, which was approved by City Council in June 2022. The Hitch Ranch Specific Plan consists of a 270-acre, 755-unit development that would construct a primarily residential community with park facilities, private recreational facilities, open spaces, and equestrian trails that are expected to be built out by 2029.

Land uses to the east of the Project Site (east of Moorpark Avenue/Walnut Canyon Road) include a mix of commercial, office, and residential uses. A commercial building, the Tanner Corner Building, is located off site at the northwestern corner of Moorpark Avenue at High Street (southeast of the Project Site). The Tanner Corner Building is listed on the California Register of Historical Resources (CRHR). The Project Site is bordered to the south by the Union Pacific railroad, Metrolink railroad tracks, and a U.S. Post Office. Land uses located south of the railroad tracks include Chaparral Middle School, Poindexter Park, commercial and light industrial uses, and residential uses. The Project Site is 0.2-mile northwest of the Moorpark Amtrak and Metrolink station. Existing land uses are shown in Exhibit 3-3, Existing Land Uses.

### 3.3.2 EXISTING GENERAL PLAN LAND USE AND ZONING DESIGNATIONS

#### General Plan Land Use Designations

As depicted on Exhibit 3-4, General Plan Land Use Designations, the current General Plan land use designation for the entire Project Site is Downtown Specific Plan (SP-D).

#### Zoning Designations

As depicted on Exhibit 3-5, Existing Zoning, the existing zoning for the Project Site includes Commercial Old Town (C-OT), Rural Exclusive (RE), and Institutional (I).

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# Existing Land Uses

Exhibit 3-3

*Civic Center Master Plan Project*

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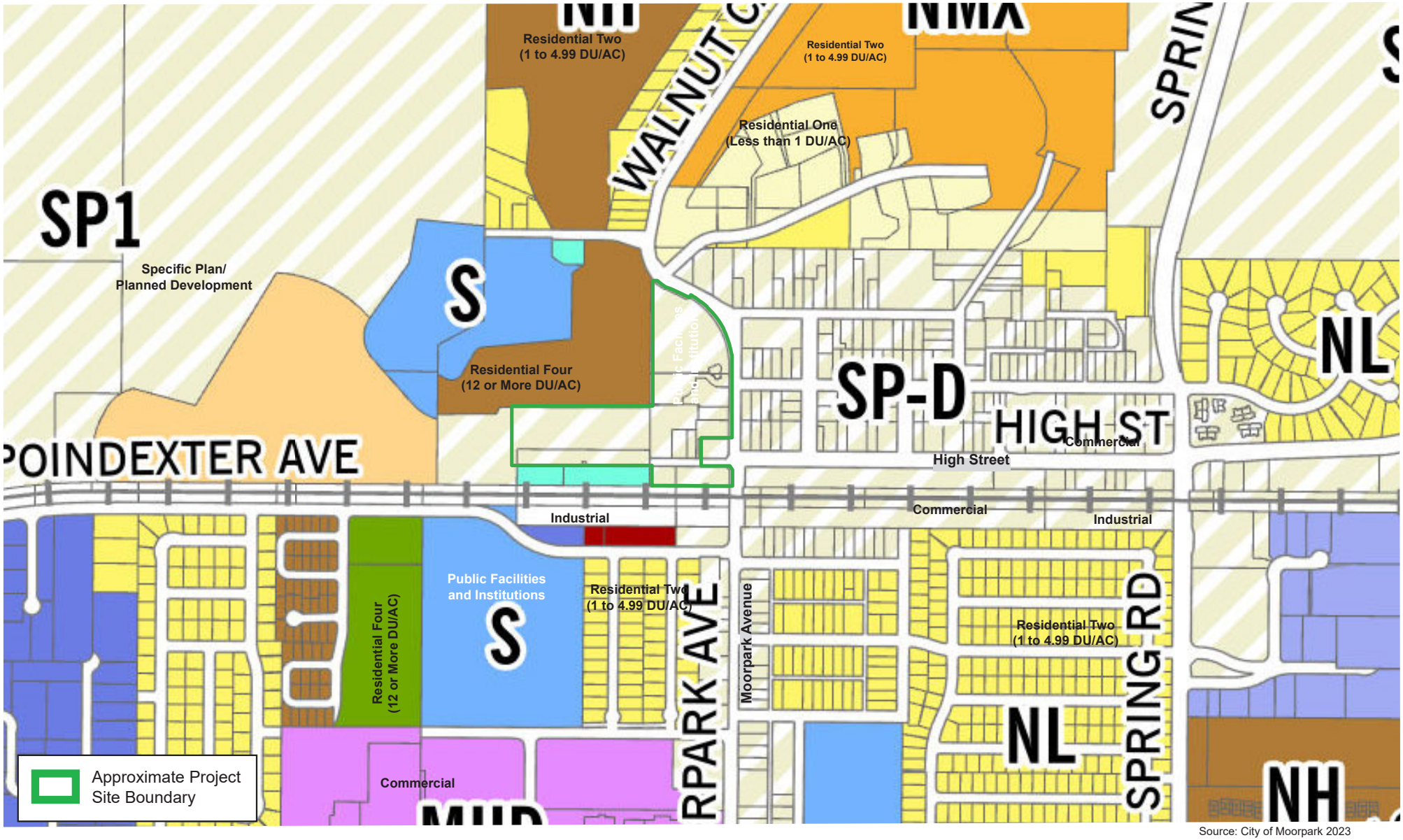


Source: City of Moorpark 2023

# Existing General Plan Land Use Designations

Exhibit 3-4

*Moorpark Civic Center Campus Project*

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Map Not to Scale

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The proposed zoning for the entire Project Site is Mixed-Use Medium (MUM). MUM allows for a mix of commercial, office, and housing development.

## 3.4 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires an EIR to include a statement of the project's objectives. The City has identified the following objectives for the Project:

1. To redevelop the Project Site to create a vibrant master-planned Civic Center Campus to serve current and future Moorpark residents;
2. To promote the revitalization of the downtown area of Moorpark with new civic buildings and a mix of other uses within the Project Site that would complement current uses and future planned development in the area; and
3. To develop the Project Site in a manner that avoids significant impacts to cultural and historic resources, including the Tanner Corner Building.

## 3.5 PROJECT DESCRIPTION

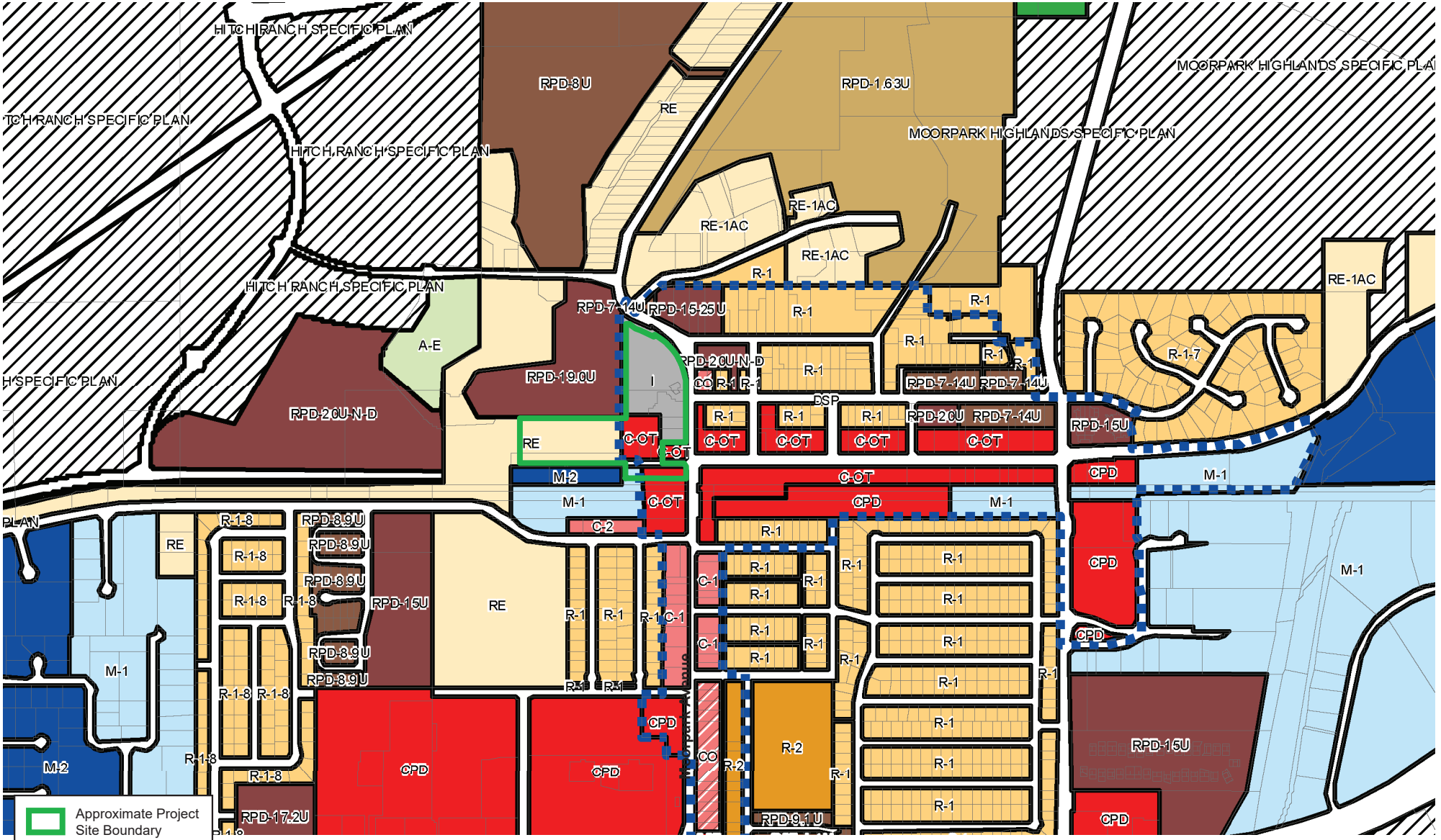
The Project consists of the phased development of a new Civic Center within the Project Site.

### 3.5.1 PROJECT PHASING AND LAND USES

The Project includes the following phases:

- Phase 1 includes construction of a new 18,000 square foot (sf) library with outdoor plaza on the north side of High Street. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be demolished at the end of this phase once the library is moved to the new facility. City hall would be temporarily relocated to 323 Science Dr. until construction of the new city hall is complete, which would occur during Phase 4. A map showing land uses for Phase 1 are provided in Exhibit 3-6.
- Phase 2 includes development of the west commercial site with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development. A map showing land uses for Phase 2 are provided in Exhibit 3-7.
- Phase 3 includes development of the north site residential area with approximately 75 units at 25 du/acre. Phase 3 would include the demolition of the existing city hall and community center/active adult center buildings. A map showing land uses for Phase 3 are provided in Exhibit 3-8.
- Phase 4 includes construction of a new 22,000 sf city hall and a mercado/market. A map showing land uses for Phase 4 are provided in Exhibit 3-9.

The land uses for Phases 2, 3, and 4 of the Project are based on preliminary site planning that has been developed by the City based on current information, and they may change. There is a potential that in the future, the City may identify alternative land uses or alternative configurations for those land uses within the Project Site that are different from what has been analyzed in this Draft EIR. In such an event, the City would evaluate the changes pursuant to CEQA, and would have the option of preparing either an Addendum to this EIR or a Supplemental EIR consistent with State CEQA Guidelines Sections 15162-15164, as amended. Alternatively, projects involving minor deviations from the land uses and configuration described in this EIR could instead be




Source: City of Moorpark 2023

# Existing Zoning

Exhibit 3-5

*Moorpark Civic Center Campus Project*

N W E S

Map Not to Scale

PSOMAS

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# Proposed Phase 1 Map

Exhibit 3-6

*Civic Center Master Plan Project*

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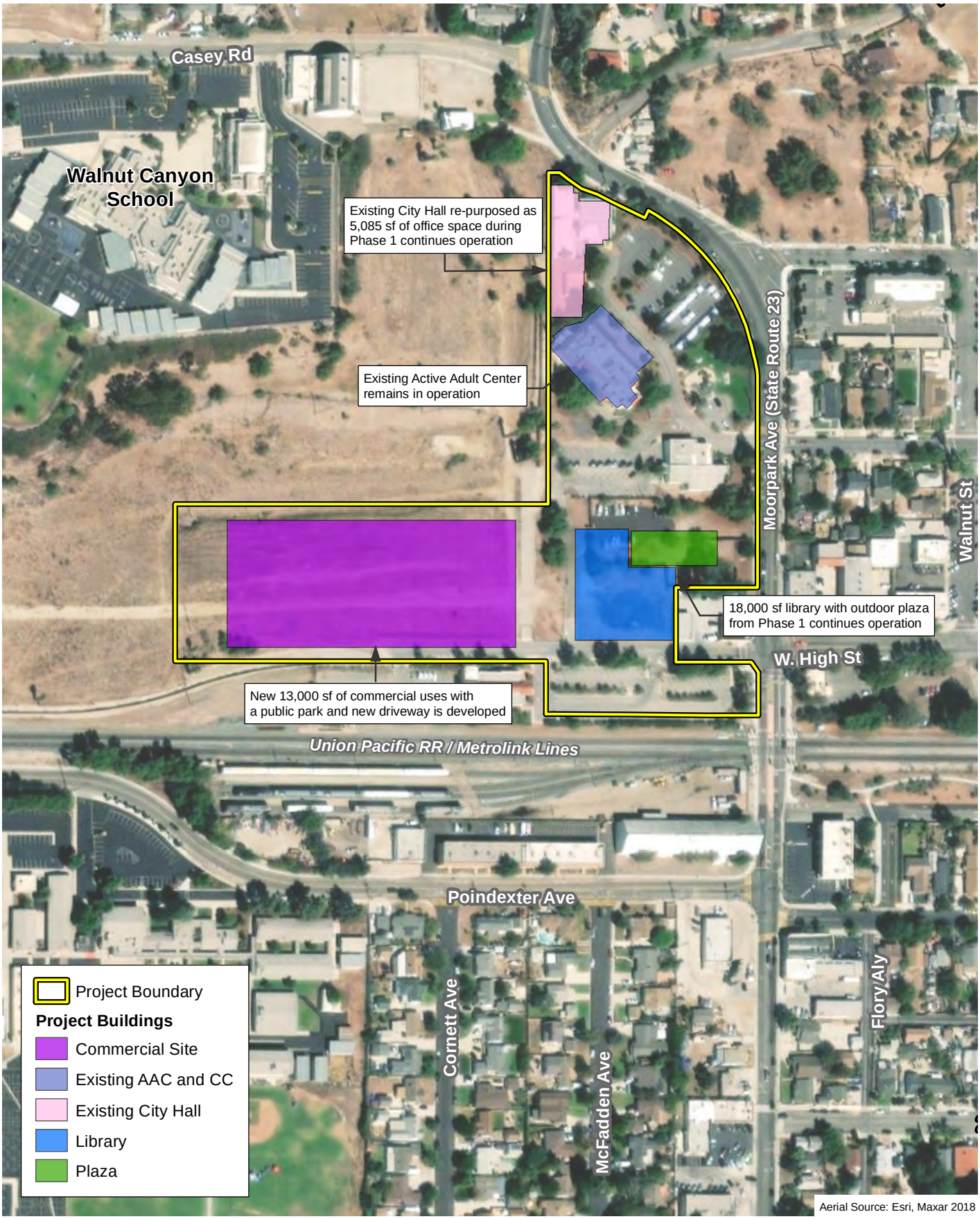


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# Proposed Phase 2 Map

Exhibit 3-7

*Civic Center Master Plan Project*

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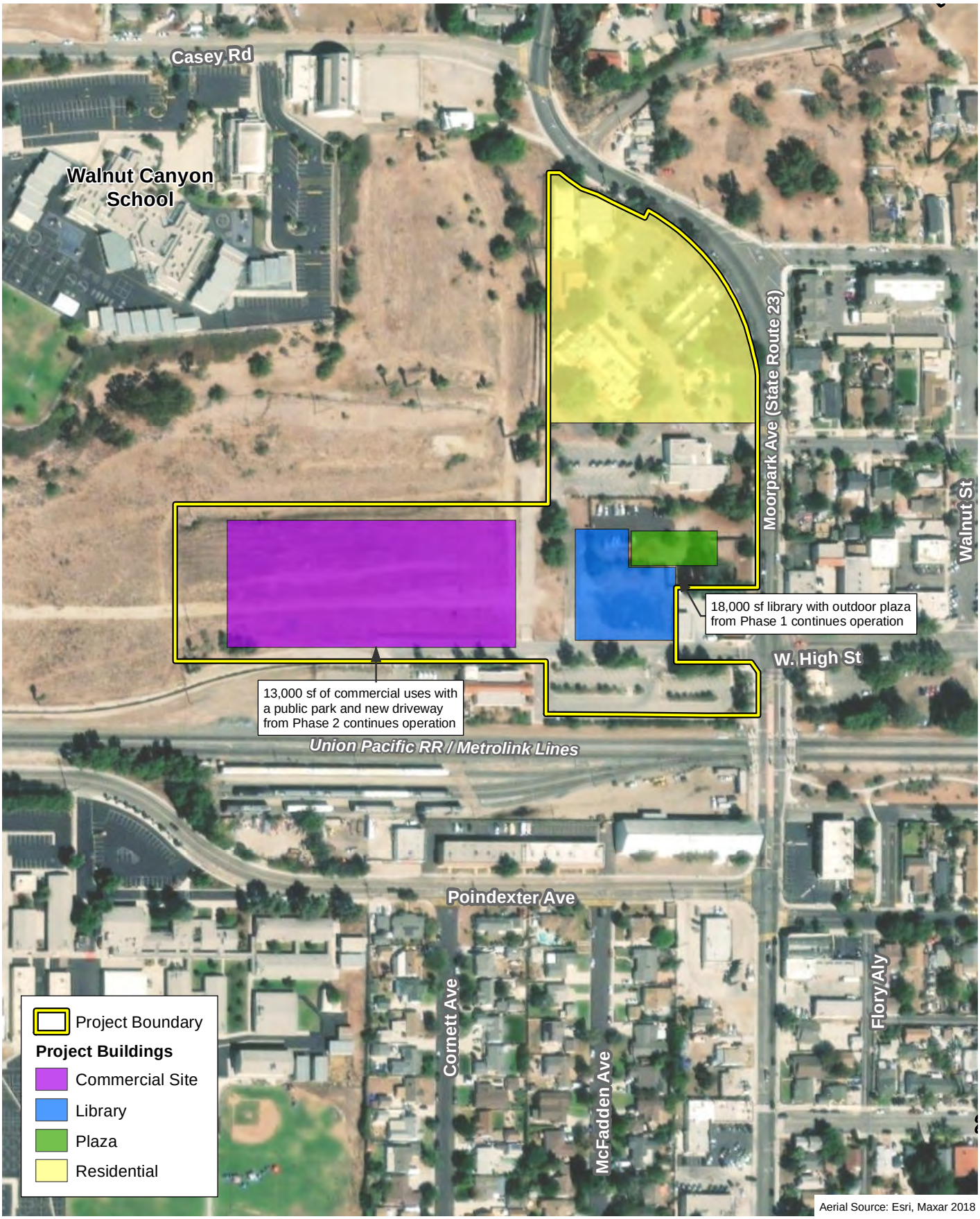


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# Proposed Phase 3 Map

Exhibit 3-8

*Civic Center Master Plan Project*

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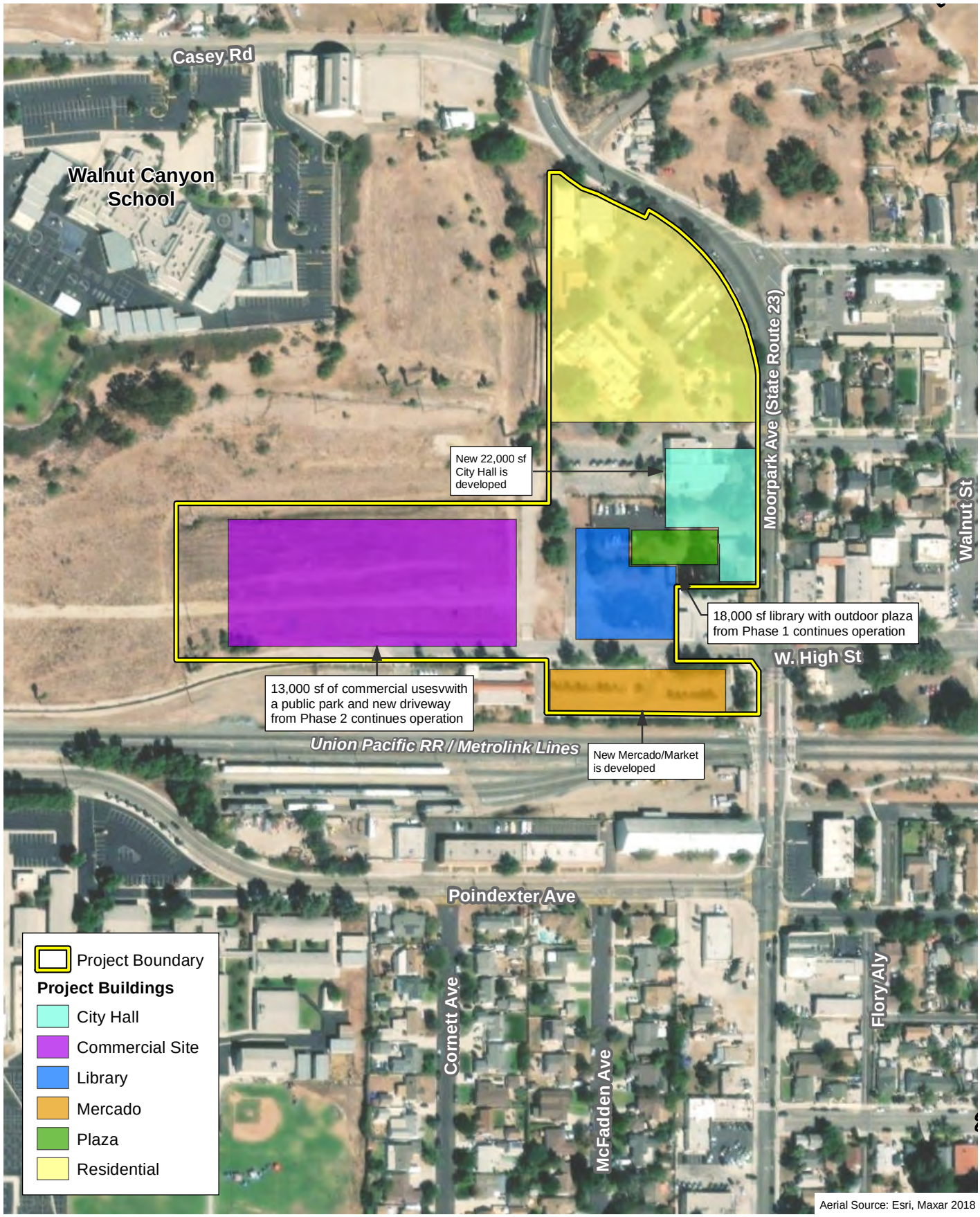


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# Proposed Phase 4 Map

Exhibit 3-9

*Civic Center Master Plan Project*

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processed by the City as Categorically Exempt from CEQA consistent with State CEQA Guidelines Sections 15300 through 15332, as amended.

### 3.5.2 ARCHITECTURAL DESIGN

The architecture of the Project's buildings would be designed consistent with the Design Guidelines set forth in the Downtown Specific Plan. A rendering showing the conceptual appearance of the proposed library is included as Exhibit 3-10.

### 3.5.3 LANDSCAPING/HARDSCAPE

Landscaping would be provided consistent with the Landscape Guidelines set forth in the Downtown Specific Plan. The use of California native trees is encouraged. Landscaping would be provided along West High Street and Moorpark Avenue, as well as internal to the Project Site. On the eastern portion of the Project Site, landscaping would primarily be located around the parking lots and buildings. In addition, shade trees would be located within the parking lots. The new city hall buildings would be sited around a central courtyard, which could include a water feature. The Landscape Guidelines also encourage the use of colorful annual or seasonal accent planting (via pots, planter boxes and hanging pots) to accent entries and add color and interest to buildings, or special locations as well as decorative vines along fences, property boundaries and perimeter walls, and on blank building elevations. Evergreen trees and shrubs would be used whenever a landscape screen or buffer is required.

The Project would require the removal of existing trees and other ornamental vegetation within the Project Site, as described in more detail in Section 4.3, Biological Resources.

### 3.5.4 LIGHTING

Lighting would be provided consistent with the Lighting Guidelines set forth in the Downtown Specific Plan for Institutional uses. Lighting would be provided throughout the Project Site for pedestrian and vehicular safety. Lighting fixtures would complement the architectural design of the buildings. In addition, security lighting would be located in the parking lots and around the perimeter of the buildings. Fixtures would be designed to minimize lighting and glare from spilling off site, as feasible.

### 3.5.5 CIRCULATION AND TRANSPORTATION

The Project would maintain the primary existing vehicular access into the Project Site from Moorpark Avenue/Walnut Canyon Road, as well as the existing secondary vehicular access provided from a driveway on the north side of West High Street.

The two existing driveways from West High Street that provide access to the southern portion of the Project Site would also be maintained as part of the Project.

The parking lot in the southern portion of the Project Site would be reconfigured and restriped with 96 spaces to accommodate the mercado. The off-site U.S. Post Office building and mercado would share parking; however, it is anticipated that the timing of events at the mercado would not overlap with the operating hours of the Post Office.

Sidewalks and street trees would be added along the north side of West High Street as part of the Project. During Phase 1, sidewalks and parking stalls along High Street would be added adjacent to the library's frontage with West High Street. During Phase 2, sidewalks would be

Source: City of Moorpark, 2022

# Conceptual Rendering of Proposed City Library

Exhibit 3-11

*Civic Center Master Plan Project*

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extended along the north side of West High Street along the frontage of the west commercial site and park that would be developed at that time.

### 3.5.6 INFRASTRUCTURE AND UTILITIES

The Project includes the installation and upgrade of infrastructure and utilities within the Project Site. Infrastructure improvements would include upgrades to storm drains and wastewater (sewer), water, and dry utilities that would connect to existing facilities within or adjacent to the Project Site. As noted below, the infrastructure improvements required for the Project would involve the installation of off-site utility lines within existing streets. Proposed infrastructure improvements include those described below.

#### Water

The Project Site is located within the service area of Ventura County Waterworks District (VCWWD) No. 1. The Project would connect to the existing water system, which consists of a 14-inch water distribution main located east of the Project Site in Moorpark Avenue between Charles Street and High Street; a 16-inch water distribution main east of the Project Site in Moorpark Avenue, between High Street and Wicks Road; and a 6-inch water distribution main south of the Project Site in High Street. A 4-inch water line also exists within the Project Site that serves the Library, city hall, and the modular buildings. The Project would connect to existing water distribution facilities within adjacent streets and would install water lines within the Project Site to accommodate the proposed uses.

#### Sewer

VCWWD No. 1 also provides wastewater treatment services to the City including the Project Site. The Project would be served by existing sewer lines, which consist of an 18-inch sewer main located south of the Project Site from Poindexter Avenue to High Street; an 8-inch sewer main east of the Project Site in Moorpark Avenue between High Street and Charles Street; and a 10-inch sewer main that is located within the existing Moorpark Civic Center Campus located near the intersection of Moorpark Avenue at Wicks Road. These facilities convey wastewater to the Moorpark Wastewater Treatment Plant. Wastewater from the Project Site would not require any special treatment requirements. The Project would connect to existing wastewater distribution facilities within adjacent streets and would install sewer lines within the Project Site to accommodate the proposed uses.

#### Storm Water Drainage

The Walnut Canyon drainage channel is an open concrete-lined channel that is located along the western boundary of the existing city hall and becomes an underground concrete box as it crosses the Project Site north of West High Street. It remains underground beneath West High Street but reverts back to an open concrete-lined channel at the western end of the Project Site. Surface water runoff from the parking areas at the eastern section of the Project Site drains toward Moorpark Avenue into existing storm water drain inlets and catch basins. Runoff then flows into a drainage pipe in a southerly direction toward West High Street and then in a westerly direction to the Walnut Canyon drainage channel. Runoff from the building areas and the undeveloped portions of the Project Site drain into the Walnut Canyon drainage channel. The Project would include stormwater capture, conveyance, and detention best practices, which would be specified in subsequent Water Quality Management Plans (WQMPs) to be developed for each phase of the Project, as described in more detail in Section 4.9, Hydrology and Water Quality.

**Dry Utilities**

There are existing electric, natural gas, telephone, and cable facilities within and adjacent to the Project Site that serve the existing on-site land uses. Connections to these facilities would be made to serve the Project. Also, off-site improvements within West High Street and SR-23 would be required to connect the Project Site to mainline utilities within these right-of-way areas.

### 3.5.7 CONSTRUCTION

Construction of the Project is anticipated to occur over four phases. The first phase of the Project would be completed by February 2025. The final phase of the Project would be completed by June 2037.

**Ground Improvement**

Due to the subsurface geologic conditions within the Project Site, including the very loose granular soil from the ground surface to a depth of about 40 feet, ground improvements would be required for proposed structures within the Project Site to minimize risks of liquefaction-related settlement, dry seismic settlement, and lateral spreading. Methods of ground improvement for future structures within the Project Site could include vibro replacement (VR), deep soil mixing (DSM), or another technique.

The VR procedure consists of advancing a 30-inch diameter steel mandrel to approximately 40 feet using a combination of the weight of the mandrel and vibration. Once the mandrel reaches the selected depth, ¾-inch crushed rock is used to backfill the hole. The gravel is vibrated and "rammed" into the soft, loose granular soils. The stone columns are placed on a grid pattern with a spacing typically in the range of six to nine feet on-center. The soil displaced by the mandrel is "pushed" laterally into the adjacent soil, densifying the soil mass at the Project Site to the point where it will resist liquefying and settlement in response to earthquake ground shaking.

DSM uses a large-diameter auger (three- to eight-feet in diameter) mounted to a large drill rig or crane to advance the auger to a depth of approximately 50 feet. Cement is mixed into the soil at a regulated rate of around 10 percent and mixed by the auger using several up and down passes of the auger. The amount of cement added to the soil is determined by laboratory testing to optimize the soil strength versus amount of cement utilized. Once the cement and soil are uniformly mixed, the auger is withdrawn and moved to the next location.

Regardless of the method for ground improvement, a supplemental support system such as a grade beam-type foundation will likely be required. A grade beam foundation system consists of a grid of deepened steel-reinforced concrete beams typically on a spacing of 8 to 10 feet.

## 3.6 INTENDED USE OF THE EIR

A summary of public agency approvals that are expected to be required for the Project is provided below.

**Certification of the Environmental Impact Report.** The City Council must certify that the information contained in the EIR was considered in the final decisions on the Project.

- **Lot Merger, Lot Line Adjustments, and/or Tentative Tract or Parcel Maps.** Approval would be required to merge or alter existing parcel lines and to create new parcels within the Project Site.

- **Conditional Use Permit (CUP)**. Approval would be required to allow for the library and related uses, and may be requi9red in the future for the proposed city hall building.
- **Planned Development Permits.** Approval of Planned Development Permits for future developments within the Project Site.
- **Building Permits.** City approval of building permits would be required for this Project.
- **Ventura County Watershed Protection District Approval.** Approval of improvements within their easement and of any modifications to Watershed Protection District facilities, as needed, to implement the Project.
- **Other.** If needed, encroachments into easements within the Project Site may require authorization by VC Watershed, VC Water and Sanitation, and Fire.

## 3.7 REFERENCES

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# SECTION 4.0 ENVIRONMENTAL ANALYSIS

In accordance with Sections 15125 and 15126(a) to (c) of the California Environmental Quality Act (CEQA) Guidelines, this section of the Draft Environmental Impact Report (EIR) analyzes those environmental topics where the Project could result in "potentially significant impacts", as identified in the Notice of Preparation (NOP) and Initial Study checklist included in Appendix A, and based on comments received during the scoping period. The City identified the following topics as requiring detailed EIR analysis:

- Aesthetics (Section 4.1)
- Air Quality (Section 4.2),
- Biological Resources (Section 4.3),
- Cultural Resources including Archaeology and Historic (Section 4.4),
- Energy (Section 4.5),
- Geology and Soils including Paleontology (Section 4.6),
- Greenhouse Gas Emissions (Section 4.7),
- Hazards and Hazardous Materials (Section 4.8),
- Hydrology and Water Quality (Section 4.9),
- Land Use and Planning (Section 4.10),
- Noise (Section 4.11),
- Population and Housing (Section 4.12),
- Public Services (Section 4.13),
- Recreation (Section 4.14),
- Transportation (Section 4.15),
- Tribal Cultural Resources (Section 4.16),
- Utilities and Service Systems (Section 4.17), and
- Wildfire (Section 4.18).

Each topical section includes the information presented in the format described in Section 4.0.2, Environmental Analysis Format, below.

## 4.0.1 EFFECTS NOT FOUND TO BE SIGNIFICANT

Consistent with Section 15128 of the State CEQA Guidelines, an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant, and which were therefore not discussed in detail in the EIR. As discussed below, the Project would have no impacts related to the topics of agricultural and forestry resources and mineral resources. Therefore, these topics are not discussed further in Section 4 of this EIR.

**Agricultural and Forestry Resources**

***a) Would the Project 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 non-agricultural use?***

***b) Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

***c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (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) Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

**No Impact.** The Project Site is located in a urban setting, surrounded by commercial, office, institutional (educational), residential uses, and open space land uses (City of Moorpark 2023a). According to a review of aerial imagery as well as of City land use and zoning mapping, the Project Site and adjacent parcels are not utilized or zoned for agricultural or forestry purposes (NETRonline 2022, City of Moorpark 2023a).

According to California Department of Conservation's (DOC) California Important Farmland Mapper, the Project Site and adjacent properties are designated as Urban and Built-Up Land (DOC 2022a). In addition, the Project Site and adjacent parcels are not subject to any existing Williamson Act contracts at this time (City of Moorpark 2023b, 2022a).

The Project Site does not contain forest land as defined in Public Resources Code Section 12220(g) since it does not naturally support a minimum of 10-percent native tree cover, as evidenced by vegetative cover within nearby undeveloped parcels (NETRonline 2022).

Therefore, the Project would result in no impacts related to agriculture and forestry resources, and no mitigation is required related to these thresholds. No further analysis in this EIR is required.

**Mineral Resources**

***a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

***b) Would the Project 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.** The Project Site is not located within an area designated by the City, County, or State as underlain by any significant mineral resource zones (City of Moorpark 1986, Ventura County 2020, DOC 2022b). Also, per a review of the California Department of Conservation, Division of Mine Reclamation's online mapper "Mines Online", it was confirmed that there are no active aggregate mining operations within the Project Site or in the nearby vicinity that would be impacted by the Project (DOC 2022c). Furthermore, the Project Site is not designated as a mineral resource recovery site in the Ventura County General Plan, nor are there any active oil wells within the Project vicinity pursuant to a review of the DOC's "WellFinder" web mapper (Ventura County 2020, DOC 2022d).

Therefore, the Project would result in no impacts related to mineral resources, and no mitigation is required related to these thresholds. No further analysis of this topic in this EIR is required.

## 4.0.2 ENVIRONMENTAL ANALYSIS FORMAT

To facilitate the analysis of each topic presented in Section 4.0, a standard format was developed. This format is presented below, with a brief discussion of the information included within each heading.

### *Existing Conditions*

This section describes the existing environmental conditions related to each topic analyzed. In accordance with Section 15125 of the State CEQA Guidelines, the existing local and regional setting is discussed as they existed when the NOP was circulated on May 9, 2022, unless otherwise noted. This section provides the baseline conditions with which environmental changes associated with the Project would be compared and analyzed.

### *Regulatory Setting*

This section includes a summary of the existing federal, state, regional, county, and/or local laws, regulations, and ordinances that relate to the environmental topic being analyzed. These are summarized to provide background information and to establish the regulatory setting under which the construction and operation of the Project would occur.

### *Thresholds of Significance*

Section 15126.2 of the State CEQA Guidelines requires an EIR to "identify and focus on the significant environmental effects of the proposed project." "Effects" and "impacts" mean the same under CEQA and are used interchangeably in this EIR. A "significant effect" or "significant impact" on the environment is "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (Section 15382 of the State CEQA Guidelines).

In determining whether an impact is "significant," Section 15064.7 of the State CEQA Guidelines encourages each public agency to develop and publish thresholds of significance to use in determining the significance of an environmental impact. These thresholds may consist of identifiable quantitative, qualitative, or performance-level criteria used to determine non-compliance or compliance. Non-compliance means the effect would be significant, and compliance with the thresholds means the effect normally would be less than significant.

Like most municipalities, the City of Moorpark has not adopted thresholds of significance for every resource area but has adopted local thresholds for areas such as traffic. Nonetheless, a majority of the significance criteria used in the analysis in Section 4.0 of this EIR are derived from Appendix G of the State CEQA Guidelines. In addition, City policies and standards (such as the City's noise ordinance), as well as thresholds adopted by other public agencies with jurisdiction over select issues, are used as thresholds of significance, where applicable. For example, the South Coast Air Quality Management District publishes numerical thresholds for criteria pollutant emissions. Also, accepted technical and scientific data are used in some instances to determine if an impact would be considered significant. These thresholds are identified under each environmental topic and have been used in analyzing the potential impacts of the Project.

### *Impact Analysis*

The analysis of environmental impacts presented in this Draft EIR identifies direct and indirect, as well as short-term and long-term, environmental impacts of the Project. The thresholds of significance (discussed above) provide the basis for distinguishing between impacts that are determined to be significant (i.e., impact exceeds the threshold of significance) and those that are considered less than significant. The analysis is structured to address each threshold, while considering any residual impact after compliance with any applicable regulations pertinent to that topic. If there would be a significant environmental impact after regulatory compliance, feasible mitigation measure(s) are developed to reduce or avoid the identified impact.

Where the impact analysis demonstrates that a potential environmental effect is too speculative or subjective for evaluation, or that the effect is beneficial, that conclusion is noted. Where the impact analysis demonstrates that a potential environmental effect could have a substantial or potentially substantial and adverse impact on existing physical conditions within the City, that conclusion is noted and followed by a discussion of how the proposed mitigation would address the potential impact.

### *Cumulative Impacts*

While the extent of environmental changes that would occur with individual projects that are proposed, planned, or under construction in the City or region may not be significant, the sum of the impacts of these cumulative projects and the Project may be cumulatively considerable, as defined in Section 15065(c) of the State CEQA Guidelines. Section 2.6, Approach to Cumulative Impact Analysis, of this EIR contains a discussion of the overall methodology to determine the scope of projects and/or regional growth considered in the cumulative impact analysis. A discussion of the anticipated environmental changes resulting from the cumulative projects and the proposed development on a cumulative level, are addressed in each topical analysis presented in Section 4.0 of this Draft EIR, which contains a more detailed discussion of the cumulative impact analysis methodology for each environmental topic.

### *Mitigation Program*

Conditions of Approval

The City's conditions of approval have been listed for each topic, when necessary, of relevant City regulations the Project must adhered during implementation of the Project.

Mitigation Measures

The mitigation measures (MMs) for each topic have been developed, when necessary, to reduce or avoid significant adverse environmental impacts after incorporation of relevant regulations.

### *Level of Significance After Mitigation*

This section identifies the level of significance of the identified impacts after implementation of the required mitigation measures, where applicable. Significant and unavoidable impacts are those adverse effects that either cannot be mitigated or that remain significant even after mitigation.

### *References*

Documents and other sources that have been used in the preparation of each topical analysis are identified in this section.

## 4.0.3 CUMULATIVE IMPACTS

Approved and pending projects within approximately two miles of the Project Site are listed in Table 4-1, Cumulative Projects List. It should be noted that, while the projects listed in Table 4-1, Cumulative Projects List, have been considered in the analysis, not all related projects would contribute to significant cumulative impacts for each topical area. The cumulative impact analyses in each topical area provides an evaluation of the cumulative projects that would contribute to that particular environmental topic's cumulative impacts. Some impacts are site-specific and would not compound the impacts associated with the Project. Additionally, in certain cases, short-term

impacts would not contribute to cumulative impacts because the construction of the cumulative projects and the development of the Project would not occur within the same period of time or in proximity to each other.

**TABLE 4-1**
**CUMULATIVE PROJECTS LIST**

| Project Name | Land Use | Size | ADT | A.M. Peak Hour | P.M. Peak Hour | Note |
|---|---|---|---|---|---|---|
| Triliad Development | Movie Studio | 37 Acres | 3,108 | 174 | 168 | Approved |
| Pacific Communities | Single Family Residential | 157 Single Units/300 Condo Units | 3,245 | 250 | 315 | Approved |
| Essex Moorpark, LLC | Multi-Family Residential | 200 Units | 1,330 | 102 | 124 | Approved |
| Spring Road, LLC | Condominiums | 95 Units | 552 | 42 | 49 | Approved |
| City Ventures | Single Family Residential | 110 Units | 1,047 | 83 | 110 | Approved |
| Oakmont Senior Living | Senior Residential | 84 units/beds | 219 | 16 | 22 | Construction Complete |
| Birdsall Group, LLC | Single Family Residential | 21 Units | 200 | 16 | 12 | Approved |
| Aldersgate Senior Housing | Senior Residential | 390 Units | 1,468 | 90 | 125 | Approved |
| High Street Depot/Daly Group | Downtown Mixed-Use | 13,656 sf retail and 95 apartments | 1,703 | 79 | 144 | Approved |
| Grand Moorpark/Kozar | Condominiums | 69 Units | 505 | 32 | 39 | Approved |
| John C. Chiu, FLP-N | Condominiums | 60 Units | 292 | 21 | 25 | Approved |
| Beltramo Ranch | Single Family Res | 47 units | 378 | 31 | 43 | Approved |
| AHA Scattered Sites | Multi-family | 107,196 sf | 410 | 26 | 31 | Proposed |
| Hitch Ranch | Single and Multi-Family | 755 units | 6,436 | 467 | 608 | Approved |
| Moorpark 67/Rasmussen | Single Family Residential | 139 Units | 1,359 | 107 | 143 | Proposed |
| Distribution Center | Industrial | Reuse of 189,364 sf industrial | 994 | -17 | 12 | Construction Complete |
| National Ready Mix | Batch Plant | 10 acres | 600 | 20 | 20 | Unknown |
| CEMEX | Quarry | N/A | 980 | 276 | 148 | Unknown |
| Wayne J. Sand & Gravel | Quarry | N/A | 504 | 92 | 34 | Unknown |
| Grimes Rock | Quarry | N/A | 480 | 35 | 14 | Unknown |
| **Total Trips** | | | | | | |

Source: Psomas 2022.

## 4.0.4 REFERENCES

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# 4.1 AESTHETICS

## 4.1.1 EXISTING CONDITIONS

### On-Site Land Uses

The Project Site contains a variety of existing land uses. The eastern portion of the Project Site contains the existing Civic Center, which is oriented toward Moorpark Avenue. The existing Civic Center consists of a city hall, a community center/active adult center, a city library, portable structures, and parking areas. The southern portion of the Project Site contains a surface parking lot associated with the off-site United States (U.S) Post Office and is generally located between West High Street to the north and the Union Pacific Railroad and Metrolink tracks to the south. The western portion of the Project Site is undeveloped, generally rectangular-shaped vacant land oriented in an east/west direction along the north side of West High Street. In conjunction with the Essex/Vendra Gardens Apartments, a previous nearby residential development, the western portion of the Project Site has been subject to grading and is relatively flat with no distinguishing topographical features. The northern portion of the Project Site is developed with the existing City Hall buildings.

The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site. All parcels within the Project Site are owned by the City of Moorpark, with the exception of Accessor's Parcel Number (APN) 511-0-020-275, which is owned by Essex Moorpark Owner LP and would be transferred to the City per a Development Agreement.

### Surrounding Land Uses

As shown in Exhibit 3-3, Existing Land Uses, the Project Site is surrounded by development including commercial, office, institutional, and residential uses (City of Moorpark 2023a). Single-family residential uses are located to the north of the Project Site (east and west of Moorpark Avenue/Walnut Canyon Road). Walnut Canyon Elementary School, the Moorpark Boys and Girls Club, and vacant land are located to the northwest of the Project Site. This vacant land northwest of the Project Site (APN 511-0-020-265) is approved for 200 apartment units, with 100 percent of the units affordable to very low and low-income large families. The Essex/Vendra Gardens Apartments project would take primary vehicular access from Casey Road and secondary access to the south from High Street. Also, the southeastern boundary of the Hitch Ranch Specific Plan, which was approved by City Council in June 2022, is located approximately 0.15 mile west of the Project Site. The Hitch Ranch Specific Plan consists of a planned 270-acre, 755-unit development that would construct a primarily residential community with park facilities, private recreational facilities, open spaces, and equestrian trails that are expected to be built out by 2029 (City of Moorpark 2022b).

Land uses to the east of the Project Site (east of Moorpark Avenue/Walnut Canyon Road) include a mix of commercial, office, and residential uses. A commercial building, the Tanner Corner Building, is located off site at the northwestern corner of Moorpark Avenue at High Street (southeast of the Project Site). The Tanner Corner Building is listed on the California Register of Historical Resources (CRHR) (South Environmental 2022). The Project Site is bordered to the south by the Union Pacific railroad, Metrolink railroad tracks, and a U.S. Post Office. Land uses located south of the railroad tracks include Chaparral Middle School; Poindexter Park; commercial

and light industrial uses; and residential uses. The Project Site is 0.2-mile northwest of the Moorpark Amtrak and Metrolink station.

The Project Site is visible from adjacent uses at higher elevations (i.e., Walnut Canyon Elementary School, Boys and Girls Club, and residences) to the north and northeast. Looking south from the Project Site across the railroad tracks, visible land uses along Poindexter Avenue include commercial uses, railroad storage, recreational facilities, and residential uses. Chaparral Middle School is not visible due to the presence of mature trees on the northern and southern sides of Poindexter Avenue adjacent to the school. Views to the west are of vacant land.

**Existing Light Sources**

The Project Site is mostly developed and is located in downtown Moorpark. There are existing street lights, parking lot lights, and exterior building lights that define lighting levels on and near the Project Site. Specifically, the Library and City Hall buildings have exterior wall lights; the City Hall modular buildings have exterior walkway lights; and decorative lamp posts line the sidewalk fronting the Active Adult Center/Community Center. All on-site parking areas are lit.

Additional light sources in the surrounding area include light standards along Moorpark Avenue and adjacent streets, decorative lamp posts on East High Street, traffic lights, railroad crossing lights, and exterior building lights, including exterior wall lights at the U.S. Post Office building adjacent to the Project Site.

## 4.1.2 REGULATORY SETTING

**State**

***California Department of Transportation State Scenic Highway Program***

The California Scenic Highway Program, created in 1963 by the California legislature, is managed by the California Department of Transportation (Caltrans). The goal of the program is to preserve and protect scenic highway corridors from changes that would negatively impact the aesthetic quality of lands that are adjacent to highways. The California Department of Transportation (Caltrans) defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Suitability for designation as a State Scenic Highway is based on vividness, intactness, and unity. There are no designated or eligible scenic highways in the City of Moorpark (City) (Caltrans 2021).

**Local**

***City of Moorpark General Plan Open Space, Parks and Recreation Element***

The Open Space, Parks and Recreation Element in the Moorpark General Plan provides goals and policies for the conservation, preservation and management of Moorpark's open space resources (including scenic views and vistas). The segments of Moorpark Avenue and High Street near the site are identified as scenic routes and bike paths. The Project Site is not located in an area identified as a scenic viewshed by the Open Space, Parks and Recreation Element (City of Moorpark 2023).

### *City of Moorpark Municipal Code*

The Moorpark Zoning Code includes development standards and regulations for all developments in the City. While no specific design guidelines are provided, the Zoning Code includes lighting regulations (Chapter 17.30) and sign regulations (Chapter 17.40) that address the visual characteristics of development (City of Moorpark 2022a). The lighting regulations seek to prevent impacts on astronomical resources within the City and avoid conflicts and nuisance impacts on abutting properties. The sign regulations are intended to protect the community aesthetic and to minimize visual clutter and visual blight.

Chapter 17.50 of the City's Municipal Code establishes an art in public places program to promote its cultural and artistic resources. New developments contribute to the program's fund or provide on-site art pieces subject to approval of the Moorpark Arts Commission.

### *Downtown Specific Plan*

The eastern and southern portions of the Project Site are located within the boundaries of the Downtown Specific Plan area (City of Moorpark 1998). The Downtown Specific Plan contains design standards, landscape standards, and public improvement criteria to create a downtown area with rural country charm and economic stability at the same time.

## 4.1.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential aesthetics impacts. Except as provided in Public Resource Code Section 21099, impacts to aesthetics would be significant if the Project would:

***Threshold 4.1-a*** ***Have a substantial adverse effect on a scenic vista.***

***Threshold 4.1-b*** ***Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.***

***Threshold 4.1-c*** ***In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.***

***Threshold 4.1-d*** ***Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.***

## 4.1.4 IMPACT ANALYSIS

***Threshold 4.1-a*** ***Except as provided in Public Resource Code Section 21099, would the project have a substantial adverse effect on a scenic vista?***

**Less Than Significant Impact.** A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. A substantial adverse effect to a scenic vista is one that degrades the view from a designated viewing location. The City's General Plan does identifies scenic vistas within the City as including views of the

valley floor from the Santa Susana Mountains and views of the mountains from the City. Given the existing developed context of the Project Site and its gradual topography, the Project would not substantially alter views of the mountains. The Open Space, Parks and Recreation element of the General Plan states that scenic areas of the City include open space corridors and viewsheds that provide visual enhancement and pleasure and are worthy of preservation for aesthetic, historical, topographic, cultural, or biological concerns (City of Moorpark 2023). While the City does not have designated scenic corridors, the Open Space, Parks and Recreation element of the General Plan identifies Walnut Canyon Road as a local scenic route, which ends adjacent and to the north of the Project Site (City of Moorpark 2023). Views of the Project Site from Walnut Canyon Road consist of views of the backsides of existing portable buildings, intermittent ornamental trees, and a surface parking lot. The Project would result in minor changes to views from Walnut Canyon Road, including the removal of existing vegetation and buildings and the redevelopment of the Project Site; however, these changes would not be substantially adverse. As noted below in response to Threshold 4.1-c, the Project would be developed consistent with zoning, the Downtown Specific Plan, and other requirements regarding scenic quality, which would ensure the Project is visually compatible with the existing setting and the City's vision for this area. Impacts would be less than significant related to this threshold, and no mitigation is required.

***Threshold 4.1-b*** ***Except as provided in Public Resource Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.***

**No Impact.** Based on a review of the California Department of Transportation, California Scenic Highway Mapping System, the Project Site is not near a designated or eligible State scenic highway (Caltrans 2021). The nearest designated State scenic highway is State Route 118 (SR-118), located approximately 1.08 miles east of the Project Site. Due to intervening topography and development, the Project Site is not visible from SR-118. Furthermore, the Project would not remove or substantially damage any rock outcroppings or historic buildings. Existing trees and other vegetation within the Project Site would be removed; however, these trees are not within or visible from a state scenic highway and the Project Site would be re-landscaped as it is redeveloped. Therefore, the Project would have no impact related to scenic resources within a state scenic highway, no significant impacts would occur, and no mitigation is required for this threshold.

***Threshold 4.1-c*** ***Except as provided in Public Resource Code Section 21099, in non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.***

**Less Than Significant Impact.** The Project Site is located in an urbanized area of the City, as defined by Section 21071 of the CEQA Guidelines. Therefore, the analysis for this threshold focuses on evaluating whether the Project would conflict with applicable zoning and other regulations governing scenic quality. As discussed in more detail in Section 4.10, Land Use and Planning, in response to threshold 4.10-b, as final design for each phase of the Project is completed, the City's design review process will ensure that all Project improvements are consistent with applicable plans, policies, and ordinances. Also, **COA AES-1** would be implemented as part of the Project, which requires tree removal and replacement to occur

consistent with the requirements in the City's Municipal Code. Therefore, the Project would have less than significant impacts related to this threshold and no mitigation is required.

***Threshold 4.1-d*** ***Except as provided in Public Resource Code Section 21099, would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.***

**Less Than Significant Impact.** Project lighting would be limited to exterior lighting associated with each unit and street lighting required for safety. Low level way-finding lighting for pedestrians would be provided in the common areas. Street and parking lot lighting would be provided as-needed, and as required by the City regulations and standards. This would be consistent with the urbanized character of the area. All exterior lighting would be designed to minimize glare and light spillage onto adjacent properties (i.e., shielding of street lights). A lighting plan would be submitted to the City and lighting requirements would be implemented consistent with Section 17.30, Lighting Regulations, of the City's Municipal Code (City of Moorpark 2022a).

The Project would be constructed consistent with Section 17.53.070, Prohibited Acts, of the City's Municipal Code, which requires that all construction activities would occur between 7 a.m. and 8 p.m. Therefore, it is not likely that construction lighting would be needed except for limited evening construction. Any construction lighting needed for evening work would be hooded and oriented towards active work areas within the Project Site and would only occur for a limited time. Therefore, construction lighting would result in less than significant impacts.

Some operational glare may result from the Project, such as from sun reflecting off of windows of the proposed buildings. However, the Project design is not anticipated to include any highly-reflective building materials or paints that would result in significant glare that would be atypical of other land uses in the Project vicinity.

As discussed above, lighting and glare resulting from Project construction and operation would not substantially adversely affect day or nighttime views in the area. Impacts would be less than significant related to this threshold, and no mitigation is required.

### 4.1.5 CUMULATIVE IMPACTS

Future growth and development in Moorpark and the Project Site would change the visual quality of the City through the introduction of new structures and infrastructure. Developments proposed near the site include a 200-unit apartment use to the northwest of the site on Casey Road; a 60-unit apartment use to the north on Everett Street; and multi-family and single-family residential uses within the Hitch Ranch Specific Plan area to the west. These projects represent changes to the visual environment that would reflect continued urbanization in the City as vacant and underutilized lands are developed and redeveloped to accommodate demands for residential, commercial, industrial, institutional, and public uses.

Views of the Project Site and the adjacent areas would change through the introduction of new buildings, parking lots, landscaped areas, signs, and other site improvements, creating an overall increase in development intensity and an urbanized setting for Moorpark when combined with visual changes caused by other cumulative projects.

The City's development and design review of individual development projects is intended to prevent adverse view impacts or negative aesthetic impacts. Compliance with applicable development standards and design guidelines by individual development projects would avoid or mitigate visual impacts so that aesthetic impacts are not cumulatively significant.

New sources of light would also be created as new cumulative projects occur in the City. These sources would include exterior building lighting; street and parking lot light standards; and interior lighting at buildings that are in use during the nighttime hours. An overall increase in lighting levels throughout the City would occur. The City's lighting standards and conditions of approval are intended to prevent light spillover and impacts on adjacent light-sensitive uses. Setbacks, landscaping, and development standards related to light are expected to prevent substantial light intrusion and spillover. Therefore, the Project and other cumulative projects would not result in a cumulatively considerable impact related to aesthetics.

### 4.1.6 MITIGATION PROGRAM

**Condition of Approval**

**COA AES-1** As required by Section 12.12.070 of the City's Municipal Code, Tree Removal Permits – Requirements, no native oak tree, historic tree or other mature tree, where that tree is on public or private property, except as provided for in subsection B of this section, or is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the city. The Director of Community Services shall establish the format and information required for a tree removal permit consistent with this chapter. In no event shall a permit be denied if to do so would cause interference with the economic use and enjoyment of the property.

**Mitigation Measures**

No significant impacts pertaining to aesthetics were identified; therefore, no mitigation measures are required.

### 4.1.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.1.8 REFERENCES

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———. 1998 (as amended through July 2020). Downtown Specific Plan. Moorpark, CA: Moorpark. https://www.moorparkca.gov/DocumentCenter/View/10902/Downtown-Specific-Plan

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# 4.2 AIR QUALITY

## 4.2.1 EXISTING CONDITIONS

### Air Pollutants

#### *Criteria Pollutants*

Air quality is defined by ambient air concentrations of seven "criteria air pollutants", which are a group of common air pollutants identified by the U.S. Environmental Protection Agency (USEPA) to be of concern with respect to the health and welfare of the general public. Federal and State governments regulate criteria air pollutants by using ambient standards based on criteria regarding the health and/or environmental effects of each pollutant. These pollutants include nitrogen dioxide ($NO_2$), ozone ($O_3$), particulate matter (including both respirable particulate matter with a diameter of 10 microns or less [PM10] and fine particulate matter with a diameter of 2.5 microns or less [PM2.5]), carbon monoxide (CO), sulfur dioxide ($SO_2$), and lead. A description of each criteria air pollutant, including source types and health effects, is provided below.

#### *Nitrogen Dioxide*

Nitrogen gas, normally relatively inert (nonreactive), comprises about 80 percent of the air. At high temperatures (e.g., in a combustion process) and under certain other conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitrogen oxides (NOx). Nitric oxide (NO), $NO_2$, and nitrous oxide ($N_2O$) are important constituents of NOx. NO is converted to $NO_2$ in the atmosphere. Motor vehicle emissions are the main source of NOx in urban areas.

$NO_2$ is a red-brown pungent gas and is toxic to various animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membranes, and skin. In animals, long-term exposure to NOx increases susceptibility to respiratory infections, lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations of $NO_2$ can suffer lung irritation and, potentially, lung damage. Epidemiological studies have also shown associations between $NO_2$ concentrations and daily mortality from respiratory and cardiovascular causes, and with hospital admissions for respiratory conditions.

While the National Ambient Air Quality Standards (NAAQS) only address $NO_2$, NO and $NO_2$ are both precursors in the formation of $O_3$ and PM2.5, as discussed below. Because of this and the fact that NO emissions largely convert to $NO_2$, NOx emissions are typically examined when assessing potential air quality impacts.

#### *Ozone*

Ozone is a secondary pollutant, meaning that it is not directly emitted. It is a gas that is formed when volatile organic compounds (VOCs) (also referred to as reactive organic gases or reactive organic compounds) and NOx undergo photochemical reactions that occur only in the presence of sunlight. The primary source of VOC emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NOx forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level $O_3$ to form; as a result, ozone is known as a summertime air pollutant. Ground-level $O_3$ is not to be confused with atmospheric $O_3$ or the "ozone layer", which occurs very high in the atmosphere and shields the planet from some ultraviolet rays. Ground-level $O_3$ is the primary constituent of smog.

Because $O_3$ formation occurs over extended periods of time, both $O_3$ and its precursors are transported by wind, and high $O_3$ concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when ozone levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level ozone exposure to a variety of problems, including:

- Lung irritation that can cause inflammation much like a sunburn;
- Wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities;
- Permanent lung damage to those with repeated exposure to ozone pollution; and
- Aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis.

### *Particulate Matter*

Particulate matter includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles smaller than 10 microns in size (PM10) and smaller than or equal to 2.5 microns (PM2.5). Particulate matter size refers to the aerodynamic diameter of the particle. Smaller particles are of greater concern because they can penetrate deeper into the lungs than large particles.

PM10 is generally emitted directly as a result of mechanical processes that crush or grind larger particles or from the re-suspension of dusts, most typically through construction activities and vehicular travels. PM10 generally settles out of the atmosphere rapidly and is not readily transported over large distances.

PM2.5 is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants including NOx, sulfur oxides (SOx), and VOCs. PM2.5 can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne particulate matter are on the respiratory system. Short-term exposures to high PM2.5 and PM10 levels are associated with premature mortality and increased hospital admissions and emergency room visits; increased respiratory symptoms are also associated with short-term exposures to high PM10 levels. Long-term exposures to high PM2.5 levels are associated with premature mortality and development of chronic respiratory disease. According to the USEPA, some people are much more sensitive than others to breathing PM10 and PM2.5. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

Particulate matter tends to occur primarily in the form of fugitive dust. This dust appears to be generated by both local sources and by region-wide dust during moderate to high wind episodes. These regional episodes tend to be multi-district and sometimes interstate in scope. The principal sources of dust in urban areas are from grading, construction, disturbed areas of soil, and dust entrained by vehicles on roadways.

### *Carbon Monoxide*

Carbon monoxide is a colorless and odorless gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease, and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections; along heavily used roadways carrying slow-moving traffic; and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (i.e., up to 600 feet or 185 meters) of heavily traveled roadways. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the South Central Coastal Air Basin (SCCAB or Basin) are in compliance with the State and federal one-hour and eight-hour standards.

### *Sulfur Dioxide*

Sulfur oxides (SOx) constitute a class of compounds of which $SO_2$ and sulfur trioxide ($SO_3$) are of greatest importance. Ninety-five percent of pollution-related SOx emissions are in the form of $SO_2$. SOx emissions are typically examined when assessing potential air quality impacts of $SO_2$. The primary contributor of SOx emissions is fossil fuel combustion for generating electric power. Industrial processes, such as nonferrous metal smelting, also contribute to SOx emissions. SOx is also formed during combustion of motor fuels; however, most of the sulfur has been removed from fuels, greatly reducing SOx emissions from vehicles.

$SO_2$ combines easily with water vapor, forming aerosols of sulfurous acid ($H_2SO_3$), a colorless, mildly corrosive liquid. This liquid may then combine with oxygen in the air, forming the even more irritating and corrosive sulfuric acid ($H_2SO_4$). Peak levels of $SO_2$ in the air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of $SO_2$ gas and particles cause respiratory illness and aggravate existing heart disease. $SO_2$ reacts with other chemicals in the air to form tiny sulfate particles which are measured as PM2.5.

### *Lead*

Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the body's blood-forming (or hematopoietic), nervous, and renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due in part to the introduction of catalyst-equipped vehicles, and also due to the decline in the production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e., lead smelters) and are not applied to transportation projects.

## Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to

human health.[1] TACs may be emitted from a variety of common sources, including motor vehicles, gasoline stations, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the "criteria" pollutants previously discussed in that ambient air quality standards have not been established for them. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. The California Air Resources Board (CARB) identified particulate matter (diesel PM) as a TAC in 1998. Diesel PM is responsible for the majority of California's known cancer risk from outdoor air pollutants.

**San Joaquin Valley Fever**

San Joaquin Valley Fever is not a pollutant, but an infectious disease caused by the fungus *Coccidioides immitis*. San Joaquin Valley Fever is also known as Valley Fever, Desert Fever, or Cocci. Infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The Valley Fever fungus tends to be found at the base of hillsides, in virgin, undisturbed soil. It usually grows in the top few inches of soil, but can grow down to 12 inches (VCAPCD 2003).

In Ventura County, the Valley Fever fungus is most prevalent in the County's dry, inland regions. Individuals most vulnerable to Valley Fever are agricultural workers, construction and road workers, and archeologists and paleontologists, because they are exposed to the soil where the fungus might be just below the surface. In 2020, the number of reported cases in Ventura County was 265; the number of statewide was 7,217 (CDPH 2022). However, the actual number of cases may be higher because Valley Fever is often misdiagnosed as the flu and not reported by physicians (VCAPCD 2003).

**Climate and Meteorology**

The Project Site is located in the SCCAB, which includes Ventura, Santa Barbara, and San Luis Obispo Counties. Ventura County is located along the southern portion of the central California coast between Santa Barbara and Los Angeles Counties. Its diverse topography is characterized by mountain ranges to the north, two major river valleys (the Santa Clara, which trends east-west, and the Ventura, which trends roughly north-south), and the Oxnard Plain to the south and west. As pollutants are carried into the inland valleys by prevailing winds, they are frequently trapped against the mountain slopes by a temperature inversion layer, generally occurring between 1,500 and 2,500 feet above mean sea level (msl). Above the temperature inversion layer, pollutants are allowed to disperse freely (VCAPCD 2016).

The Project Site is located in the Simi Valley area of the Basin, an inland area, which includes the Cities of Simi Valley and Moorpark. The area is surrounded by foothills and low-lying mountains. The area is impacted primarily by mobile sources.

The Mediterranean-type climate of Ventura County, as with all of Southern California, is governed by the strength and location of the semi-permanent high pressure center over the Pacific Ocean and the moderating effect of the nearby oceanic heat reservoir. Local climate conditions are characterized by dry, warm summers; mild, wet winters; infrequent rainfall; moderate daytime onshore breezes; and relatively low humidity.

[1] The USEPA uses the terminology "hazardous air pollutant" (HAP), which has a similar definition.

The air above Ventura County often exhibits weak vertical and horizontal dispersion characteristics, which limit the dispersion of emissions and cause increased ambient air pollutant levels. Persistent temperature inversions prevent vertical dispersion. The inversions act as a "ceiling" that prevents pollutants from rising and dispersing. Mountain ranges act as "walls" that inhibit horizontal dispersion of air pollutants.

The diurnal land/sea breeze pattern common in Ventura County recirculates air contaminants. Air pollutants are pushed toward the Pacific Ocean during the early morning by the land breeze, and toward the east during the afternoon, by the sea breeze. This creates a "sloshing" effect, causing pollutants to remain in the area for several days. Residual missions from previous days accumulate and chemically react with new emissions in the presence of sunlight, thereby increasing ambient air pollutant levels. This pollutant "sloshing" effect happens most predominantly from May through October ("smog" season). Air temperatures are usually higher and sunlight is more intense during the "smog" season. This explains why Ventura County experiences the most exceedances of the State and federal ozone standards during this six-month period.

## Criteria Pollutants

### *Attainment Designations*

Based on monitored air pollutant concentrations, the USEPA and CARB designate an area's status in attaining the NAAQS and CAAQS, respectively, for criteria pollutants. When a region is designated as a nonattainment area, the State is required to prepare a State Implementation Plan (SIP) and the air district is required to prepare a regional attainment plan. When an area has been reclassified from nonattainment to attainment status for a federal standard, the status is identified as "maintenance", and there must be a plan and measures that will keep the region in attainment for the following ten years. Table 4.2-1 summarizes the attainment status in the SCCAB for the criteria pollutants.

**TABLE 4.2-1**
**ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN VENTURA COUNTY**

| Pollutant | State | Federal |
|---|---|---|
| $O_3$ (1 hour) | Nonattainment | No standard |
| $O_3$ (8 hour) | Nonattainment | Serious Nonattainment[a] |
| PM10 | Nonattainment | Attainment |
| PM2.5 | Attainment | Attainment |
| CO | Attainment | Attainment |
| $NO_2$ | Attainment | Attainment |
| $SO_2$ | Attainment | Attainment |
| Lead | Attainment | Attainment |
| All others | Attainment/Unclassified | No standards |

$O_3$: ozone; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; $NO_2$: nitrogen dioxide; $SO_2$: sulfur dioxide.

Source: USEPA 2022, CARB 2022, VCAPCD 2022.

### *Monitored Criteria Pollutants*

Criteria air pollutant concentrations are measured at several monitoring stations in the SCCAB. The area of the SCCAB where the Project Site area is located is served by the VCAPCD's Monitoring Station at Simi Valley High School on Cochran Street in the City of Simi Valley, approximately 11 miles east of the Project Site. Equipment at the station measures $O_3$, PM10, PM2.5, and $NO_2$ levels. Data from 2019 to 2021 from the Simi Valley High School station, on Cochran Street is summarized in Table 4.2-2.

**TABLE 4.2-2**
**AMBIENT AIR QUALITY AT SIMI VALLEY-COCHRAN STREET MONITORING STATION**

| Pollutant | Averaging Time | Federal Primary Standards | California Standards | Maximum Concentrations[a] | | | Number of Days Exceeding Federal Standard[b] | | | Number of Days Exceeding State Standard[b] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2019 | 2020 | 2022 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 |
| $O_3$ | 1 hour | none | 0.09 ppm | 0.08 | 0.1.0 | 0.09 | 0 | 0 | 0 | 0 | 5 | 0 |
| | 8 hour[c] | 0.075 ppm | 0.07 ppm | 0.078 | 0.095 | 0.075 | 7 | 22 | 8 | 9 | 25 | 8 |
| $NO_2$ | 1 hour | none | 0.18 ppm | 0.045 | 0.042 | 0.035 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Annual | 0.053 ppm | 0.030 ppm | .007 | .007 | .007 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM10[c] | 24 hours | 150 $\mu g/m^3$ | 50 $\mu g/m^3$ | 127.9 | 90.5 | 103.7 | 0.0 | 0.0 | 0.0 | 4 | 6 | 3 |
| | Annual | None | 20 $\mu g/m^3$ | 20.1 | 20.8 | 22.7 | N/A | N/A | N/A | N/A | N/A | N/A |
| PM2.5[c] | 24 hours | 35 $\mu g/m^3$ | none | 20.0 | 34.9 | 32.9 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Annual | 15 $\mu g/m^3$ | 12 $\mu g/m^3$ | 7.6 | 7.5 | 8.7 | 0 | 0 | 0 | 0 | 0 | 0 |

$O_3$: ozone; ppm: parts per million; N/A: not applicable; $NO_2$: nitrogen dioxide; PM10: respirable particulate matter; $\mu g/m^3$: micrograms per cubic meter; ***:** there was insufficient data to determine the value; PM2.5: fine particulate matter; —: data not available.

[a] Concentration units for $O_3$ and $NO_2$ are in ppm. Concentration units for PM10 and PM2.5 are in $\mu g/m^3$.

[b] For annual standards, a value of 1 for the number of days indicates that the standard has been exceeded.

[c] Data are recorded separately for federal and State purposes because the USEPA and California methods are slightly different. Federal values are shown. PM10 and PM2.5 are measured every 6 days. The number of days exceeding standards shown is measured days/estimated days; the latter are projected to a 365-day base from the measurements.

Source: CARB 2022.

## 4.2.2 REGULATORY SETTING

### Federal

The USEPA is responsible for setting and enforcing the NAAQS for criteria pollutants. The standards are shown below in Table 4.2-3. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The USEPA's air quality mandates are drawn primarily from the Federal Clean Air Act (CAA), which was enacted in 1970, and most recently amended by Congress in 1990. As part of its enforcement responsibilities, the USEPA requires each State with federal nonattainment areas to prepare and submit a SIP that demonstrates the means to attain and maintain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution by using a combination of performance standards and market-based programs within the SIP-identified timeframe.

**TABLE 4.2-3**
**CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS**

| Pollutant | Averaging Time | California Standards | Federal Standards | |
|---|---|---|---|---|
| | | | Primary[a] | Secondary[b] |
| $O_3$ | 1 Hour | 0.09 ppm (180 µg/m$^3$) | – | – |
| | 8 Hour | 0.070 ppm (137 µg/m$^3$) | 0.075 ppm (147 µg/m$^3$) | Same as Primary |
| PM10 | 24 Hour | 50 µg/m$^3$ | 150 µg/m$^3$ | Same as Primary |
| | AAM | 20 µg/m$^3$ | – | Same as Primary |
| PM2.5 | 24 Hour | – | 35 µg/m$^3$ | Same as Primary |
| | AAM | 12 µg/m$^3$ | 12.0 µg/m$^3$ | Same as Primary |
| CO | 1 Hour | 20 ppm (23 mg/m$^3$) | 35 ppm (40 mg/m$^3$) | – |
| | 8 Hour | 9.0 ppm (10 mg/m$^3$) | 9 ppm (10 mg/m$^3$) | – |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/m$^3$) | – | – |
| $NO_2$ | AAM | 0.030 ppm (57 µg/m$^3$) | 0.053 ppm (100 µg/m$^3$) | Same as Primary |
| | 1 Hour | 0.18 ppm (339 µg/m$^3$) | 0.100 ppm (188 µg/m$^3$) | – |
| $SO_2$ | 24 Hour | 0.04 ppm (105 µg/m$^3$) | – | – |
| | 3 Hour | – | – | 0.5 ppm (1,300 µg/m$^3$) |
| | 1 Hour | 0.25 ppm (655 µg/m$^3$) | 0.075 ppm (196 µg/m$^3$) | – |
| Lead | 30-day Avg. | 1.5 µg/m$^3$ | – | – |
| | Calendar Quarter | – | 1.5 µg/m$^3$ | Same as Primary |
| | Rolling 3-month Avg. | – | 0.15 µg/m$^3$ | |
| Visibility Reducing Particles | 8 hour | Extinction coefficient of 0.23 per km – visibility ≥ 10 miles ( 0.07 per km – ≥30 miles for Lake Tahoe) | **No Federal Standards** | |
| Sulfates | 24 Hour | 25 µg/m$^3$ | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m$^3$) | | |
| Vinyl Chloride | 24 Hour | 0.01 ppm (26 µg/m$^3$) | | |

$O_3$: ozone; ppm: parts per million; µg/m$^3$: micrograms per cubic meter; PM10: large particulate matter; AAM: Annual Arithmetic Mean; PM2.5: fine particulate matter; CO: carbon monoxide; mg/m$^3$: milligrams per cubic meter; $NO_2$: nitrogen dioxide; $SO_2$: sulfur dioxide; km: kilometer; –: No Standard.

[a] National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[b] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: CARB 2022.

## State

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS) shown in Table 4.2-3, compiles emission inventories, develops suggested

control measures, provides oversight of local programs, and prepares the SIP. For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the State SIP. CARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

## County

The Ventura County Air Pollution Control District (VCAPCD) is the agency responsible for comprehensive air pollution control in Ventura County. As a regional agency, the VCAPCD develops rules and regulations; establishes permitting requirements; inspects emissions sources; and enforces such measures though educational programs or fines, when necessary. The VCAPCD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. The 2022 Ventura County Air Quality Management Plan (2022 AQMP), adopted by the Ventura County Air Pollution Control Board on December 13, 2022, presents 1) strategy to attain the 2015 federal 8-hour ozone standard; 2) attainment demonstration for the federal 8-hour ozone standard; and, 3) reasonable further progress demonstration for the federal 8-hour ozone standard (VCAPCD 2022). The 2022 AQMP contains an attainment demonstration showing that Ventura County must attain the 2015 federal 8-hour ozone standard by 2026, the attainment date for serious ozone nonattainment areas (VCAPCD 2022).

The Ventura County Air Quality Assessment Guidelines (Guidelines) is an advisory document prepared by the District that provides lead agencies, consultants, and project applicants with a framework and uniform methods for preparing air quality impact assessments and the air quality section of environmental documents for projects that require discretionary entitlements. The Guidelines recommend specific criteria and threshold levels for determining whether a proposed project may have a significant adverse air quality impact. The Guidelines also provide mitigation measures that may be useful for mitigating the air quality impacts of proposed projects (VCAPCD 2003).

## Local

### *City of Moorpark General Plan*

The City of Moorpark General Plan 2050 includes several goals and policies that would result in reduced air pollutant emissions for the Project. For example, Goal LU 8 from the Land Use Element relates to sustainable land use development practices to protect environmental resources, reduce greenhouse gas emissions, remove carbon from the atmosphere, etc. There are also goals and policies related to the circulation system and transportation demand management in the Circulation Element of the General Plan.

### *City of Moorpark Municipal Code*

Chapter 17.48 of the Moorpark Municipal Code is titled Transportation Demand Management (TDM) and establishes TDM requirement for entitlement permits for all employers, with increasing requirements for employers of 50, 100, and 150 persons. The Traffic System Management (TSM) Fund is the City's designated TDM program fund. The TSM fund collects fees from projects that exceed federal, State, and local air quality regulations. The funds are then used for Citywide offset mitigation programs that improve air quality.

### 4.2.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significances of potential air quality impacts. The Project would result in a significant impact related to air quality if it would:

***Threshold 4.2-a*** ***Conflict with or obstruct implementation of the applicable air quality plan.***

***Threshold 4.2-b*** ***Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.***

***Threshold 4.2-c*** ***Expose sensitive receptors to substantial pollutant concentrations.***

***Threshold 4.2-e*** ***Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.***

Appendix G of the State CEQA Guidelines states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. The VCAPCD has established significance thresholds to assess the impacts of project-related air pollutant emissions in its Ventura County Air Quality Assessment Guidelines (VCAPCD 2003) which are used in this EIR.

#### *Consistency with the AQMP*

For general land use development projects, the VCAPCD specifies that consistency with the AQMP be determined (1) by determining if the project conforms to the applicable General Plan and (2) for the specific Ventura County growth area, by comparing the current population with the population projection for the subsequent year. Alternatively, the VCAPCD states “any General Plan Amendment that will result in population growth above that forecasted in the most recently adopted AQMP is inconsistent with the AQMP” (VCAPCD 2003).

#### *Operational Emissions*

For evaluating long-term operational emission increases during the operation of a project, the VCAPCD recommends that lead agencies use a threshold of significance of 25 pounds per day for project operational emissions of VOC/ROG or NOx.

For other criteria pollutants (including CO, PM10, and PM2.5), a project that may cause an exceedance of any ambient air quality standard (State or federal) or that may make a substantial contribution to an existing exceedance of an air quality standard will have a significant adverse air quality impact. “Substantial” is defined as making measurably worse an existing exceedance of a State or federal ambient air quality standard.

#### *Construction Emissions*

The VCAPCD does not recommend any thresholds of significance for temporary construction emissions. However, based on guidance established in the VCAPD’s Air Quality Guidelines, construction-related emissions should be mitigated if estimates of VOC/ROG or NOx emissions

from the heavy-duty construction equipment anticipated to be used for a particular project exceed the 25 pounds per day threshold.

***Cumulative Impacts***

A project with emissions of two pounds per day or greater of VOC/ROG or two pounds per day or greater of $NO_x$ that is found to be inconsistent with the AQMP will have a significant cumulative adverse air quality impact (VCAPCD 2003).

Any operational emissions from individual projects that may exceed the project-specific thresholds presented above would be considered cumulatively considerable.

## 4.2.4 IMPACT ANALYSIS

***Threshold 4.2-a Would the project conflict with or obstruct implementation of the applicable air quality plan?***

**Less Than Significant Impact.** The VCAPCD specifies that consistency with the AQMP be determined (1) by determining if the project conforms to the applicable General Plan and (2) for the specific Ventura County growth area, by comparing the current population with the population projection for the subsequent year. Alternatively, the VCAPCD states that any General Plan Amendment that will result in population growth above that forecasted in the most recently adopted AQMP is inconsistent with the AQMP (VCAPCD 2003).

With respect to the first criterion, the Project would be consistent with the zoning that was assumed in the City's General Plan.

With respect to the second criterion, the Project Site is in the Moorpark Growth Area. Using an estimate of 3.09 persons per dwelling unit for residential development in the City of Moorpark, the 75 dwelling units proposed for Phase 3 of the Project would generate approximately 232 new residents (U.S. Census Bureau 2021). When compared to the 2022 population of Moorpark, which is 35,399 people and SCAG's projected population of 42,200 in 2045, 232 new residents is not a substantial increase in the number of people (DOF 2022b, SCAG 2020).

***Threshold 4.2-b Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***

**Less Than Significant Impact.**

**<u>Construction Emissions</u>**

During the construction period, air pollutants would be emitted by off-road construction equipment, on-road trucks, and workers' vehicles. Fugitive dust would be generated during earth moving, grading, and vehicle travel on paved and unpaved surfaces. Construction emissions for the expected activities in Phase 1, Phase 2, Phase 3, and Phase 4 were calculated with CalEEMod.

Phase 1 construction activities would begin with site preparation and grading for the new Moorpark City Library and outdoor plaza, followed by the construction of the Library building and outdoor plaza. Following construction of the new City Library and outdoor plaza, the former City Library would be demolished. Phase 1 would also involve the reconfiguration and maintenance of the existing parking areas adjacent to the civic center and former library. Additionally, Phase 1

would include the addition of sidewalks and parking stalls adjacent to the new City Library's frontage on West High Street.

Phase 2 of the Project would begin with grading for and construction of the west commercial site. Building activities would include installation of utilities, paving of parking areas, and painting of the buildings.

Phase 3 of the Project would begin with the removal of the existing city hall, community center/active adult center buildings, northernmost parking area, and the existing park. Following this would be site preparation and grading of the north portion of the Project Site for construction of the Project's residential area. Building activities would include installation of utilities, paving of parking areas, and painting of the buildings. Additionally, Phase 3 would involve the realignment of the driveway from Moorpark Avenue/Walnut Canyon Road to eliminate existing curves.

Phase 4 of the Project would begin with site preparation and grading for the new city hall and mercado. Building activities would include installation of utilities, paving of parking areas, and painting of the buildings.

The building activities include installation of utilities, paving of parking areas, and painting of buildings. The details of phasing, selection of construction equipment, areas to be paved, and other input parameters are included in Appendix C. The calculations include estimated fugitive dust emissions reductions that would result from compliance with **COA AQ-1** through **COA AQ-4**. **COA AQ-1** requires that fugitive dust best practices be implemented during construction. **COA AQ-2** requires that a speed limit be implemented within construction zones. **COA AQ-3** requires that best practices promulgated by the VCAPCD be implemented during construction related to reactive organic compounds, nitrogen oxides, and particulate matter. **COA AQ-4** requires standard City dust control requirements be implemented during construction.

The results of the CalEEMod calculations for Project construction for each phase are shown in Tables 4.2-4, 4.2-5, 4.2-6, and 4.2-7. As noted above, the VCAPCD does not recommend any thresholds of significance for temporary construction emissions. However, construction-related emissions should be mitigated if estimates of VOC/ROG or $NO_x$ emissions from the heavy-duty construction equipment anticipated to be used for a particular project exceed the 25 pounds per day threshold. With implementation of **COA AQ-5** estimated $NO_x$ and VOC/ROG emissions would not exceed 25 pounds per day for all project related construction phases. **COA AQ-5** requires that, by 2030, all off-road diesel construction equipment greater than 50 horsepower (hp) be certified to Tier 3 emissions standards or better.

**TABLE 4.2-4**
**PHASE 1 ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS-UNMITIGATED (POUNDS/DAY)**

| Year | Pollutant and Emissions[a] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_x$ | CO | $SO_x$ | PM10[b] | PM2.5[b] |
| 2023 | 2 | 18 | 18 | <1 | 8 | 4 |
| 2024 | 9 | 10 | 11 | <1 | <1 | <1 |
| **Maximum Daily Emissions** | **9** | **18** | **18** | **<1** | **8** | **4** |

VOC: volatile organic compounds; $NO_x$: nitrogen oxides; CO: carbon monoxide: $SO_x$: sulfur oxides; PM10: respirable particulate matter; PM2.5: fine particulate matter.

a Data shown are for winter emissions; summer emissions are generally slightly less and the differences are negligible.

b. PM10 and PM2.5 data include **COA AQ-1**, which is a mitigation in the CalEEMod data.

See Appendix C for CalEEMod data sheets

**TABLE 4.2-5**
**PHASE 2 ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS-UNMITIGATED (POUNDS/DAY)**

| Year | Pollutant and Emissions[a] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_x$ | CO | $SO_x$ | PM10[b] | PM2.5[b] |
| 2027 | <1 | <1 | 1 | <1 | 7 | 3 |
| 2028 | 8 | <1 | 1 | <1 | <1 | <1 |
| **Maximum Daily Emissions** | **8** | **<1** | **1** | **<1** | **7** | **3** |

VOC: volatile organic compounds; $NO_x$: nitrogen oxides; CO: carbon monoxide: $SO_x$: sulfur oxides; PM10: respirable particulate matter; PM2.5: fine particulate matter.

[a] Data shown are for winter emissions; summer emissions are generally slightly less and the differences are negligible.
[b.] PM10 and PM2.5 data include **COA AQ-1**, which is a mitigation in the CalEEMod data.

See Appendix C for CalEEMod data sheets

**TABLE 4.2-6**
**PHASE 3 ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS-UNMITIGATED (POUNDS/DAY)**

| Year | Pollutant and Emissions[a] | | | | | |
|---|---|---|---|---|---|---|
| | VOC* | NOx | CO | SOx | PM10[b] | PM2.5[b] |
| 2030 | 2 | 24 | 29 | <1 | 9 | 5 |
| 2031 | 22 | 9 | 15 | <1 | 1 | <1 |
| **Maximum Daily Emissions** | **22** | **24** | **29** | **<1** | **9** | **5** |

VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide: SOx: sulfur oxides; PM10: respirable particulate matter; PM2.5: fine particulate matter.

[a] Data shown are for winter emissions; summer emissions are generally slightly less and the differences are negligible.
[b.] PM10 andPM2.5 data include **COA AQ-1**, which is a mitigation in the CalEEMod data.

See Appendix C for CalEEMod data sheets

*Assumes architectural coating will occur over a minimum of 25 days.

**TABLE 4.2-7**
**PHASE 4 ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS-UNMITIGATED (POUNDS/DAY)**

| Year | Pollutant and Emissions[a] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | PM10[b] | PM2.5[b] |
| 2035 | 1 | 9 | 13 | <1 | 3 | 2 |
| 2036 | 15 | 5 | 9 | <1 | <1 | <1 |
| **Maximum Daily Emissions** | **15** | **9** | **13** | **<1** | **3** | **2** |

VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide: SOx: sulfur oxides; PM10: respirable particulate matter; PM2.5: fine particulate matter.

[a] Data shown are for winter emissions; summer emissions are generally slightly less and the differences are negligible.
[b.] PM10 and PM2.5 data include **COA AQ-1**, which is a mitigation in the CalEEMod data.

See Appendix C for CalEEMod data sheets

## Operational Emissions

Area, energy, and mobile source emissions for the Project were calculated for complete buildout of the Project in 2037. The results of the calculations from this scenario are shown in Table 4.2-8. As shown in Table 4.2-8, maximum daily VOC/ROG and $NO_x$ operational emissions from the

Project would be less than the VCAPCD's CEQA thresholds. The impact would be less than significant and no mitigation is required.

**TABLE 4.2-8**
**ESTIMATED MAXIMUM DAILY OPERATIONAL EMISSIONS AT PROJECT BUILDOUT (2037) (POUNDS/DAY)**

| Source | Pollutant and Emissions[a] | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **$SO_x$** | **PM10** | **PM2.5** |
| Area | 4 | <1 | 7 | <1 | <1 | <1 |
| Energy | <1 | <1 | <1 | <1 | <1 | <1 |
| Mobile | 9 | 7 | 82 | <1 | 11 | 2 |
| *Subtotal* | *13* | *7* | *89* | <1 | *11* | 2 |
| ***VCAPCD Thresholds*** | *25* | *25* | *None* | *None* | *None* | *None* |
| **Exceed Threshold?** | **No** | **No** | **N/A** | **N/A** | **N/A** | **N/A** |

VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide: SOx: sulfur oxides; PM10: respirable particulate matter; PM2.5: fine particulate matter; N/A: not applicable.

Note: Totals may not add due to rounding.

[a.] Data shown are winter emissions; estimated summer emissions are less.

See Appendix C for CalEEMod data.

***Threshold 4.2-c*** ***Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

**Less Than Significant Impact.** While the Project would have VOC/ROG and $NO_x$ operational emissions greater than two pounds per day, it would not be inconsistent with the AQMP with the implementation of **COA AQ-5** as discussed previously under the response to Threshold 4.2-a The operational VOC/ROG and $NO_x$ emissions would not exceed the Project-specific thresholds as shown in response to threshold 4.2-b. Therefore, cumulative impacts would be less than significant.

***Threshold 4.2-d*** ***Would the project expose sensitive receptors to substantial pollutant concentrations?***

**Less Than Significant Impact.** Project construction and operational activities can result in several air pollutants whose effects are often localized near the area of their origin. These effects include carbon monoxide hotpots, fugitive dust during construction, TACs, and entrained fungal spores that cause San Joaquin Valley Fever.

**Carbon Monoxide Hotspot**

In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. CO concentrations typically are analyzed at congested intersection locations. Ventura County is in attainment for CO. Because of the low levels recorded, CO monitoring in the County was discontinued in March and July 2004 (VCAPCD 2016). Therefore, it is concluded that existing background CO concentrations are currently very low.

Per the Traffic Analysis prepared for the Project, full buildout of the Project would generate a net total of 1,329 new external daily trips, including 42 trips in the AM peak hour and 120 trips in the PM peak hour (Psomas 2022). This magnitude of vehicle trips would be distributed along local roadways and would not be sufficient to create a CO hotspot. As such, the Project would result in less than significant impacts related to CO hotspots, and no mitigation measures are either required or recommended.

**Toxic Air Contaminants**

The Project would not include any sources of long-term operational TAC emissions. Construction activities would result in short-term emissions of diesel PM from the exhaust of heavy-duty diesel equipment used for grading; paving; building construction; and other miscellaneous activities. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Therefore, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to TAC emissions) should be based on a 40-year exposure period for cancer causing diesel exhaust. However, such assessments should be limited to the period/duration of activities associated with a Project. Because the use of heavy-duty diesel equipment for the Project would be short in duration when compared to 40 years, and combined with the highly dispersive properties of diesel PM and further reductions in exhaust emissions from improved equipment, Project-generated construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant. Operations of the Project would not be a source of substantial TACs.

**San Joaquin Valley Fever**

There is no recommended significance threshold for San Joaquin Valley Fever. The control of fugitive dust is the key to preventing exposure to Valley Fever spores during ground-disturbing construction activities. Even if Valley Fever spores are present on site and are disturbed during grading, if they do not become airborne they do not have the potential to be inhaled and result in illness. **COA AQ-1** through **COA AQ-4** require the implementation of dust-control measures. Based on the implementation of these conditions of approval, the potential for exposure to Valley Fever is considered less than significant.

***Threshold 4.2-e Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

**Less than Significant Impact.** Project construction would involve use of equipment and activities that could result in other emissions (such as those leading to odors). However, these odors would be typical during construction and not extraordinarily objectionable. Potential construction odors include onsite construction equipment's diesel exhaust emissions as well as roofing, painting, and paving operations. There may be situations where construction activity odors could be noticed. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. These odors would not be of such magnitude to cause a public nuisance. This is due to the relatively small number of equipment operating in proximity to each other for each construction phase, the short distance and area for which diesel exhaust occurs before it dissipates, and the transient nature of exposure at any one location due to most equipment being mobile. The VCAPCD has also not identified construction areas to be a significant source of odors in the list of sources that generate significant sources of odors. Therefore, the impacts would be short-term; would not affect a substantial number of people; and would be less than significant.

According to the VCAPCD Assessment Guidelines, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (VCAPCD 2003). The Project does not include any uses identified by the VCAPCD as being associated with odors, and therefore, would not likely produce objectionable odors.

In addition, the Project uses are regulated from nuisance odors or other objectionable emissions by VCAPCD Rule 51, Nuisance (VCAPCD 2004). Rule 51 prohibits discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. Overall, there would be a less than significant impact, and no mitigation measures are either required or recommended.

### 4.2.5 CUMULATIVE IMPACTS

As described above, in Threshold 4.2-c, cumulative impacts would be less than significant.

### 4.2.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA AQ-1** During construction of the Project, the City and its' contractors shall be required to comply with Ventura County Air Pollution Control District (VCAPCD) Rule 55, Fugitive Dust, which requires, among other provisions, that "No person shall cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road" (VCAPCD 2008).

**COA AQ-2** A 15-mile per hour speed limit must be observed within all construction areas

**COA AQ-3** Reactive organic compounds, nitrogen oxides (ozone/smog precursor), and particulate matter (aerosols/dust) generated during construction operations must be minimized in accordance with City of Moorpark standards and the standards of the Ventura County Air Pollution Control District. When an air pollution Health Advisory has been issued, construction equipment operations (including but not limited to grading, excavating, earthmoving, trenching, material hauling, and roadway construction) and related activities must cease in order to minimize associated air pollutant emissions.

**COA AQ-4** During clearing, grading, earth moving, excavation, soil import and/or soil export operations, the applicant shall comply with the City of Moorpark standard requirements for dust control, including, but not limited to, minimization of ground disturbance, application of water/chemicals, temporary/permanent ground cover/seeding, street sweeping, and covering loads of dirt. All clearing, earth moving, excavation, soil import, and/or soil export operations must cease during periods of high winds (greater than 15 miles per hour [mph] averaged over one hour)

**COA AQ-5** Beginning in 2030, prior to issuance of a grading permit, the Project's Construction Manager shall demonstrate to the City's Community Development Department that

construction documents require the construction contractors to implement the following measures:

a. All off-road diesel-powered construction equipment greater than 50 horsepower (hp) used during phases 3 and 4 shall, at a minimum, meet Tier 3 off-road emissions standards.

b. A copy of each unit's certified offroad engine Tier specification shall be provided to the City at the time of mobilization of each applicable unit of equipment.

**Mitigation Measures**

No significant impacts pertaining to air quality were identified; therefore, no mitigation measures are required.

### 4.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.2.8 REFERENCES

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# 4.3 BIOLOGICAL RESOURCES

## 4.3.1 EXISTING CONDITIONS

The analysis in this section is informed by a literature review and a reconnaissance-level field survey of the Project Site. The following biological resource databases were reviewed to identify special status plants, wildlife, and habitats known to occur in the vicinity of the Project Site: California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants of California (CNPS 2022) and California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (CDFW 2022). Database searches included the United States Geological Survey's (USGS) Moorpark, Newbury Park, Thousand Oaks, Simi, Santa Paula, Camarillo, Santa Paula Peak, Fillmore, and Piru 7.5-minute quadrangles. The literature search also included a detailed review of previous survey findings from the focused plant survey conducted by Senior Botanist Robert Allen on April 17 and June 4, 2012. A general walkover survey of the Project Site was conducted by Psomas Biologist Trevor Bristle on August 8, 2022, to document the current vegetation types, wildlife present, and changes in existing conditions and habitat since the previous survey that was conducted in 2012.

The Project Site contains a variety of existing land uses. The eastern portion of the Project Site contains the existing Civic Center, which is oriented toward Moorpark Avenue. The existing Civic Center consists of a city hall, a community center/active adult center, a city library, portable structures, and parking areas. The southern portion contains a surface parking lot associated with the off-site United States Post Office and is generally located between West High Street to the north and the Union Pacific Railroad and Metrolink tracks to the south. The western portion of the Project Site is undeveloped, generally rectangular-shaped vacant land oriented in an east/west direction along the north side of West High Street. In conjunction with previous nearby residential development, the western portion of the Project Site has been subject to grading and is relatively flat with no distinguishing topographical features. The northern portion of the Project Site is developed with the existing City Hall buildings.

The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site. All parcels within the Project Site are owned by the City of Moorpark, with the exception of Assessor's parcel number (APN) 511-0-020-275, which is owned by Essex Moorpark Owner LP.

### Vegetation Types

The eastern portion of the Project Site is developed with buildings, parking lots, and associated facilities, such as paved walkways and playground equipment. Planted, ornamental vegetation occurs throughout the development adjacent to the walkways and buildings and in medians, planters, and park-areas. All the vegetation present is subject to regular landscaping activities, including mowing and trimming. The plant species in these areas include gum tree (*Eucalyptus sideroxylon*), oak trees (*Quercus ilex* and *Q. agrifolia*), sycamore (*Platanus x hispanica*), pine (*Pinus halepensis*), Peruvian pepper (*Schinus mole*), honey locust (*Gleditsia triacanthos*), carrotwood (*Cupaniopsis anacardiodies*), Mexican fan palm (*Washingtonia robusta*), acacia (*Acacia* sp.), bougainvillea (*Bougainvillea* sp.), and turf grass.

The western portion of the Project Site does not contain any developed structures beyond a concrete box culvert that crosses the Project Site from north-to-south. The remainder of this area

is comprised of a heavily disturbed, Mediterranean grass grassland (*Schismus* sp. herbaceous semi-natural alliance). The vegetation appears to have been recently mowed and the dominant plant species are short-podded mustard (*Hirschfeldia incana*), Mediterranean grass (*Schismus* sp.), and red brome (*Bromus madritensis*). Other plant species present included deervetch (*Acmispon americanus*) and stephanomeria (*Stephanomeria* sp.), which are sparsely scattered across this area.

Neither the developed area nor the Mediterranean grass grassland are native and neither are considered special status vegetation types.

**Wildlife**

Wildlife species or evidence of these species observed on the Project Site consist of Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), California towhee (*Melozone crissalis*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), black phoebe (*Sayornis nigricans*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), oak titmouse (*Baeolophus inornatus*), and European rabbit (*Oryctolagus cuniculus*). No reptiles or amphibians were observed during the survey and no fish habitat (i.e., perennial surface water) occurs onsite.

### 4.3.2 REGULATORY SETTING

Special status biological resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution resulting in most cases from habitat loss.

**Federal and State Definitions for Special Status Biological Resources**

A federally listed Endangered species is one facing extinction throughout all or a significant portion of its geographic range. A federally listed Threatened species is one likely to become Endangered in the foreseeable future throughout all or a significant portion of its range. Proposed species or Candidate species are those officially proposed by the United States Fish and Wildlife Service (USFWS) for addition to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed project.

The State of California considers an Endangered species as one whose prospects of survival and reproduction are in immediate jeopardy; a Threatened species is one present in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management; and a Rare species is one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. Rare species applies only to California native plants.

California Species of Special Concern is an informal designation used by the CDFW for some declining wildlife species that are not State Candidates. This designation does not provide legal protection, but signifies that these species are recognized as special status by the CDFW.

The California Rare Plant Rank (CRPR), formerly known as CNPS List, is a ranking system by the Rare Plant Status Review group[1] and managed by the CNPS and the CDFW. A ranking is given based on information regarding the distribution, rarity, and endangerment of California's vascular plants. The CRPR lists California's rare plants into four lists: Rank 1A (plant species extinct in California); Rank 1B (Rare, Threatened, or Endangered throughout their range); Rank 2 (considered Rare, Threatened, or Endangered in California but more common in other states); Rank 3 (more information is needed); and Rank 4 (plants that have limited distribution). The CRPR also assigns a threat code extension: .1 ("seriously endangered" in California); .2 ("fairly endangered" in California); and .3 ("not very endangered" in California). The absence of a threat code extension indicates plants lacking any threat information.

### 4.3.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential biological impacts. The Project would result in a significant impact related to bioligical resources if it would:

***Threshold 4.3-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 Wildlife or U.S. Fish and Wildlife Service.***

***Threshold 4.3-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 Wildlife or US Fish and Wildlife Service.***

***Threshold 4.3-c*** ***Substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.***

***Threshold 4.3-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.***

***Threshold 4.3-e*** ***Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.***

***Threshold 4.3-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.***

[1] This group consists of over 300 botanical experts from the government, academia, non-governmental organizations, and the private sector.

## 4.3.4 IMPACT ANALYSIS

***Threshold 4.3-a*** ***Would the project 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 Wildlife or U.S. Fish and Wildlife Service?***

**Less Than Significant With Mitigation Incorporated.** Although heavily disturbed from previous grading and stockpiling activities, the western portion of the Project Site remains undeveloped and supports a Mediterranean grass grassland vegetation type. Various special status plant species have been recorded off-site in the greater vicinity of the Project Site, including Plummer's mariposa lily (*Calochortus plummerae*), southern tarplant (*Centromadia parryi* ssp. *australis)*, California Orcutt grass (*Orcuttia californica*), and Lyon's pentachaeta (*Pentachaeta lyonii*). A focused plant survey for these species was conducted by Psomas in 2012 and all were determined to be absent at that time. Table 4.3-1 provides a summary of the special status plant species (State or Federally listed or proposed for listing as Threatened or Endangered, or CRPR List 1 or 2 species) initially determined to have potential occurring onsite and includes information on the species' status, the previous survey results, and determinations of the presence or absence of onsite suitable habitat following the survey. The habitat conditions present onsite have not changed since the 2012 survey. Subsequently, only southern tarplant has any potential (albeit a low potential) to occur onsite, and specifically only the western portion of the Project Site. If present, impacts to southern tarplant would be considered significant. Implementation of Mitigation Measure (MM) **MM BIO-1**, which requires that a focused plant survey be conducted within the western portion of the Project Site and consultation with resource agencies if impacts cannot be avoided, would reduce potential impacts to the species to less than significant levels.

**TABLE 4.3-1**
**SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE PROJECT VICINITY**

| Species | Status | | | Potential to Occur |
|---|---|---|---|---|
| | USFWS | CDFW | CRPR | |
| *Orcuttia* californica<br>California Orcutt grass | FE | SE | 1B.1 | No potential to occur on the Project Site; lack of suitable habitat; not observed during focused surveys. |
| *Pentachaeta lyonii*<br>Lyon's pentachaeta | FE | SE | 1B.1 | No potential to occur on the Project Site; lack of suitable habitat; not observed during focused surveys. |
| *Centromadia parryi* ssp. *australis*<br>southern tarplant | – | – | 1B.1 | Low potential to occur on the Project Site; marginal suitable habitat; not observed during previous focused surveys. |

**LEGEND:**

**Federal (USFWS)** — **State (CDFW)**
FE Endangered — SE Endangered

**California Rare Plant Rank (CRPR) List Categories**
List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere

**California Rare Plant Rank (CRPR) Threat Code Extensions**
None Plants lacking any threat information
.1 Seriously Endangered in California (over 80% of occurrences threatened; high degree and immediacy of threat)

Burrowing owl (*Athene cunicularia*) is a special status wildlife species that may occur on the western portion of the Project Site. Burrowing owl is a California Species of Special Concern and can occupy burrows or similar structures in open, disturbed habitats such as the Mediterranean grass grassland that occurs on the western portion of the Project Site. If present, Project impacts have potential to be significant. Implementation of **MM BIO-2**, which requires that a preconstruction burrowing owl survey be conducted and passive relocation be implemented in consultation with the resource agencies if burrowing owl are encountered, would reduce potential impacts to less than significant levels.

White tailed kite (*Elanus leucurus*) is a California Fully Protected species and has potential to nest in the trees adjacent to the western portion of the Project Site. Indirect impacts associated with construction activities, such as noise and vibration, have potential to impact nesting activities of this species, if nesting is occurring in the immediate vicinity. Implementation of **COA BIO-1**, which requires that a preconstruction nesting bird survey be conducted and avoidance of active nests, would ensure that Project impacts are less than significant related to this species.

The eastern portion of the Project Site is fully developed and no native vegetation types or associated habitats for any special status plant or wildlife species is present. Therefore, development of the eastern portion of the Project Site is not anticipated to directly impact any special status plant or wildlife species. Indirect impacts, such as impacts resulting from noise and vibration, may occur during construction or demolition activities, if special status species are present on the western portion of the Project Site. Impacts would be reduced to less than significant levels with the implementation of **COA BIO-1,** which requires that a preconstruction nesting bird survey be conducted.

Although not considered special status, nesting activities of most bird species are protected by State and federal regulations. Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) and are identified by the List of Migratory Birds (50 CFR 10.13). State regulations prohibit activities that “take, possess, or destroy” any migratory bird or raptor nest or egg (California Fish and Game Code §3503, §3503.5, and §3513). Vegetation on both the eastern and western portions of the Project Site have potential to support bird nesting activity. The Project would likely remove vegetation as part of Project construction which has potential to impact nesting birds. The loss of any active nest would be considered significant. Therefore, if vegetation or tree removal occurs during the peak avian nesting season (February 1 to August 31), the Project may impact nesting activities of birds or raptors covered under the regulations noted above. Potential project effects on bird nesting would be reduced to less than significant levels with the implementation of **COA BIO-1** which requires that a preconstruction nesting bird survey be conducted.

With implementation of **MM BIO-1** and **BIO-2,** and compliance with **COA BIO-1**, the Project would have a less than significant impact related to this threshold.

***Threshold 4.3-b*** ***Would the project 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 Wildlife or US Fish and Wildlife Service?***

**No Impact.** No riparian habitat or other vegetation type considered sensitive is present within or adjacent to the Project Site; therefore, the Project would have no impact related to this threshold and no mitigation is required.

***Threshold 4.3-c*** ***Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

**Less Than Significant Impact.** The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site. This drainage is likely subject to the jurisdiction of the Regional Water Quality Board, CDFW, and United States (U.S.) Army Corps of Engineers. Any impact to this drainage feature would likely require a permit from one or more of these agencies. Therefore, with implementation of **COA BIO-2**, which recommends avoidance of the drainage feature and requires regulatory permitting with resource agencies if avoidance is not possible, impacts would be reduced to less than significant levels related to this threshold, and no mitigation is required.

***Threshold 4.3-d*** ***Would the project 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 Impact.*** While portions of the Project Site are adjacent to undeveloped, naturally vegetated areas to the west and north, it is also bordered by extensive development to the south, east, and north, including roadways and structures that impede wildlife movement. Furthermore, the eastern portion of the Project Site is already developed. The Project Site does not contain any open space or habitat areas that connect two or more other habitat areas. The concrete box culverts along the southwestern and northwestern boundaries have potential to support movement of urban-tolerant wildlife, such as coyotes, but the Project would not restrict the use of these culverts by wildlife. Therefore, any potential impact wildlife movement resulting from the Project would be less than significant and no mitigation is necessary related to this threshold.

***Threshold 4.3-e*** ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

**Less Than Significant Impact With Mitigation Incorporated.**

***City of Moorpark Municipal Code Tree Ordinances***

The City of Moorpark Municipal Code Chapter 12.08, Trees, Shrubs and Plants and Chapter 12.12, Historic Trees, Native Oak Trees and Mature Trees address the City's procedures for the evaluation and preservation or replacement of trees and native vegetation. In accordance with Chapter 12.12 of the City's Municipal Code, the City has determined that, to the extent possible, mature trees, native oak trees, and historic trees should be protected and preserved. Particularly with respect to urban developments, such trees are considered to be a "significant, historical, aesthetic and valuable ecological resource" (City of Moorpark 2022).

The City's Municipal Code defines a historic tree as: A living tree designated by resolution of the city council as an historic tree because of an association with some event or person of historical significance to the community or because of special recognition due to size, condition or aesthetic qualities.

The City's Municipal Code defines a mature tree is defined as: A living tree with a cross-sectional area of all major stems, as measured four and one-half (4 1/2) feet above the root crown, of seventy-two (72) or more square inches.

A native oak tree is defined in the City's Municipal Code as: A living tree of the genus *Quercus* and species *lobata*, *agrifolia*, *dumosa* or hybrids thereof.

When one or more native oak trees, historic trees, or mature trees are to be removed for urban development, the City requires that a report be prepared by an arborist, horticulturist, or registered landscape architect that includes the following information: (1) tree type by common name and genus and species; (2) diameter of trunks or main stems as measured 4.5 feet above the root crown; (3) average spread of each tree; (4) letter grade for the health of each tree; (5) letter grade for the aesthetic quality of each tree; (6) any significant disease or insect infestations, heart rot, fire, mechanical, or wind damage; (7) recommended tree surgery, chemical treatment, or other remedial measures intended to improve the health, safety, or life expectancy of the tree; and (8) appraisal value of each tree. This report is required as a part of the tree removal permit request to the City.

With respect to the preservation of trees, as noted in Chapter 12.08 of the City's Municipal Code, it is the City's policy to "utilize whatever techniques, methods and procedures are required to preserve, whenever feasible, all trees in the city including, but not limited to, trees which are creating damage to surface improvements or underground facilities or which are diseased, or located where construction is being considered or will occur".

According to a tree survey conducted by the City of Moorpark in 2013, the Project Site contains approximately 80 trees including trees within the Moorpark Avenue right-of-way. As defined in Municipal Code Section 12.12.030, "Mature tree" means a living tree with a cross-sectional area of all major stems, as measured 4½ feet above the root crown of 72 or more square inches (City of Moorpark 2022). The Project would likely remove multiple mature trees. To the degree feasible, the majority of healthy Mature trees would be retained as long as there would be no hindrance to Project access, public safety, and Project construction. Consistent with the provisions of the Municipal Code and the City's standard conditions, a tree survey will be prepared to determine the valuation of the mature trees to be removed and enhanced replacement landscaping of equal or greater value would be provided as a part of the Project. With implementation of **COA BIO-2**, which requires that a tree survey be conducted and that a landscape plan be developed including replacement trees consistent with the City's Municipal Code requirements, the Project would result in less than significant impacts related to the City's Tree Ordinance.

### *City of Moorpark General Plan Conservation Element and Land Use Element*

The Conservation Element of the City's General Plan describes Moorpark's natural resources and the benefits that these resources provide to the community. The conservation element establishes goals and policies for their retention, enhancement, and development. This element works in coordination with General Plan's Land Use Element.

The Land Use Element reflects Moorpark's vision; promotes thoughtful, equitable, and accessible distribution of different land uses, including residential, commercial, industrial, agricultural, and open space; and aligns well with other general plan elements. The Land Use Element is also used as a tool to improve public health, reduce infrastructure costs, enhance local economies, and address long-term environmental issues such as climate change and water resources.

Table 4.3-2 addresses the consistency of the Project with the relevant biological resources goals and policies of the City's General Plan. As identified in Table 4.3-2, the Project would be consistent goals and policies intended to protect biological resources with implementation of **MM BIO-1** and **MM BIO-2** .In summary, the Project would result in less than significant impacts related to this threshold with mitigation.

**TABLE 4.3-2**
**CITY OF MOORPARK GENERAL PLAN CONSISTENCY ANALYSIS**
**RELATED TO BIOLOGICAL RESOURCES**

| Goals and Policies[a] | Consistency Analysis |
|---|---|
| **Conservation Element** | |
| COS 1.16<br>Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in these areas to compatible low- intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas. | **Consistent.** No ecologically significant resource areas have been identified on the Project Site. |
| COS 1.17<br>Native habitat protection: Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations. | **Consistent.** No native vegetation types, including riparian and oak woodlands would be impacted by the Project. Furthermore, the Project would protect on-site trees and/or provide for the replacement of trees. |
| COS 1.18<br>Wildlife corridors: Adopt land use regulations that consider, complement and support state, regional, and county-adopted wildlife corridors, including the Ventura County Wildlife Corridor Overlay Zone and evaluate the appropriateness of designating additional corridors. | **Consistent.** Project impacts to potential wildlife corridors would be less than significant. |
| COS 7.1<br>Tree plantings: Protect and expand the urban forest through new tree plantings and effective and timely care of existing trees, emphasizing consistent tree canopies along corridors in areas such as along Moorpark Avenue and Los Angeles Avenue and within the Downtown area. | **Consistent.** The City would require landscaping for each phase of the Project's development that would include trees, consistent with this policy. |
| COS 7.2<br>Consider removal and replacement of invasive and prohibited plants located on public lands, as identified in the city's Landscape Design Standards and Guidelines. | **Consistent.** The Project would result in the removal of non-native invasive herbaceous species within the western portion of the Project Site. |
| **Land Use Element** | |
| GOAL LU 7<br>Compatibility with the natural environment: land uses and development intensities that are compatible with scenic and natural resources and that encourage environmental preservation. | **Consistent.** The Project consists of the redevelopment of a previously developed Project Site. The Project would be consistent with the development intensities identified for the Project Site within the City's General Plan 2050. |

**TABLE 4.3-2**
**CITY OF MOORPARK GENERAL PLAN CONSISTENCY ANALYSIS**
**RELATED TO BIOLOGICAL RESOURCES**

| Goals and Policies[a] | Consistency Analysis |
|---|---|
| **Conservation Element** | |
| **LU 7.2**<br>Design development to respect natural setting: Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of visual horizon lines and significant hillsides as prominent visual features. | **Consistent.** The Project consists of the redevelopment of a previously developed Project Site. Consistency with existing visual characteristics of the Project Site and vicinity are further evaluated in Section 4.1, Aesthetics. |
| **LU 8.7**<br>Habitat protection: Encourage public & private projects to be located and designed to preserve significant habitats, vegetation, and other significant educational, scientific, scenic, resources of social value, protect air quality, and reduce greenhouse gas emissions as specified by the Conservation, Open Space and Recreation Element. | **Consistent.** The Project consists of the redevelopment of a previously developed Project Site. The Project would be consistent with the development intensities |
| **LU 19.5**<br>Tree canopy: Maintain and expand the tree canopy in the downtown area to provide shade, improve air and water quality, reduce the heat island effect, and create habitat for birds and pollinators. | **Consistent.** The City would require landscaping for each phase of the Project's development that would include trees, consistent with this policy. |

***Threshold 4.3-f*** ***Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

**No Impact.** The Project Site is not located within a designated or proposed Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) area. Additionally, development of the Project would not conflict with the provisions of any local, regional, or State habitat conservation plan. The Project would have no impacts related to this threshold and no mitigation is required.

## 4.3.5 MITIGATION PROGRAM

**Conditions of Approval**

**COA BIO-1** Nesting Bird Survey. If construction and/or vegetation removal must be initiated during the peak nesting season (i.e., February 1 to August 31), a pre-construction nesting bird survey shall be conducted by a qualified Biologist within 14 days prior to the beginning of Project-related activities (including but not limited to clearing, grubbing, vegetation removal, grading, and building demolition). If project-related construction activities lapse for greater than 14 days during the peak nesting season, an additional nest survey shall be conducted before work can be reinitiated.

If the Biologist finds an active nest within or adjacent to the construction area (within 200 feet for all birds protected under California Fish and Game Code and the Migratory Bird Treaty Act and within 500 feet for raptors), the Biologist shall identify an appropriate protective buffer zone around the nest depending on the

sensitivity of the species, the nature of the construction activity, and the amount of existing disturbance in the vicinity. In general, the Biologist should designate a buffer of 10 to 200 feet for common nesting birds and 200 to 500 feet for special status nesting birds and nesting raptors. Construction activities within the buffer shall only proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g., young have fledged, predation, or other non-human causes of nest failure) to maintain compliance with California Fish and Game Code and the Migratory Bird Treaty Act.

**COA BIO-2** Jurisdictional Drainage Avoidance and Regulatory Permitting. Impacts to jurisdictional waters within the Project Site will be avoided to the extent feasible. If such impacts are unavoidable, then permits/ certifications/ agreements from the United States Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) are required.

A pre-application meeting with these agencies is recommended prior to submittal of permit applications to discuss existing conditions; confirm the agencies' jurisdiction over water resources on the study area; discuss impacts to these resources that would result from the Project; discuss proposed avoidance, minimization, and mitigation measures to offset these impacts; and to discuss the regulatory permitting process. Following the pre-application meeting, the Project Applicant would prepare and process the appropriate permits (e.g., a Section 404 Permit from the USACE in the form of a Nationwide Permit or Individual Permit, a Section 401 Water Quality Certification from the RWQCB, and/or a CDFW Section 1602 Notification of Lake or Streambed Alteration). Additional permit conditions may be required by the resource agencies regarding impacts to areas under their respective jurisdictions.

Standard construction best management practices (BMPs) shall be implemented to prevent toxins, chemicals, or petroleum products from entering the culverts and degrading water quality.

**COA BIO-3** Tree Survey and Landscaping Plan. Prior to the issuance of a grading permit for each Project phase, a tree survey must be prepared to determine the valuation of the mature trees to be removed. Thereafter, a landscaping plan shall be prepared which incorporates replacement tree plantings consistent with the City's Tree Ordinance, which would be submitted to the City's Community Development Director for review and approval.

**Mitigation Measures**

**MM BIO-1** Prior to ground disturbance on the western portion of the Project Site associated with Phase 2 of the Project, the applicant shall retain a qualified Biologist (one with experience conducting botanical surveys) to conduct a focused survey for special status plant species. The survey shall be performed during the target species' peak blooming period in accordance with the most current protocols approved by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). If focused plant surveys determine that no special status plant species are present in the project impact area, then no future measures are necessary.

If any plant species listed as threatened or endangered by the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA) is determined to be present and take of individuals cannot be avoided, then the applicant shall obtain take authorization from the listing agencies before impacting the species (FESA Consultation with the United States Fish and Wildlife Service (USFWS) and CESA Section 2080 from the CDFW). Consultation with the listing agencies shall determine the appropriate conservation measure(s) to mitigate for impacts on the species. The mitigation may include collecting seed from individuals in the impact area and planting them within a mitigation site with the appropriate microhabitat for this species and/or paying a fee to a mitigation bank and/or a qualified Plant Science Program to conduct germination or other research studies on the species. The applicant shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Conservation Plan for approval by the USFWS and/or the CDFW. The conservation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan; (2) mitigation site selection criteria; (3) site preparation and planting implementation; (4) implementation schedule; (5) maintenance plan/guidelines; (6) monitoring plan; (7) long-term preservation. The applicant shall implement the Plan as approved.

If focused surveys determine that CNPS List 1 or List 2 species are present and the necessary take of individuals would be greater than ten percent of species' population within a one-mile radius of the Project Site, then compensatory mitigation shall be required. Mitigation may include collection of seed from individuals in the impact area and planting them within a mitigation site with the appropriate microhabitat for this species. If project timing requires that ground disturbance of potentially suitable habitat be performed prior to the species' peak blooming period and focused surveys cannot be performed, then the species shall be presumed present in the impact area. The applicant shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Conservation Plan for approval by CDFW. The conservation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation, (4) implementation schedule, (5) maintenance plan/guidelines, (6) monitoring plan, (7) long-term preservation. The applicant shall implement the Plan as approved.

**MM BIO-2** Per the Staff Report on Burrowing Owl Mitigation (CDFW 2012), the applicant shall retain a qualified Biologist to conduct a pre-construction survey for the burrowing owl between 14 and 30 days prior to the initial ground disturbance on the western portion of the Project Site. The pre-construction survey shall include the area of proposed disturbance plus a 500-foot buffer (if access is available and habitat is present).

If an active burrow is observed outside the breeding season (September 1 to January 31) and it cannot be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in California Department of Fish and Wildlife (CDFW) 2012. Prior to any burrowing owl exclusion efforts, an exclusion plan will be prepared and submitted to CDFW for review and approval. The plan will include all details on passive relocation including that one-way doors shall be used to exclude owls from the burrows; doors shall be left in place for at least 48 hours. Once the burrow is determined to be unoccupied, the burrow shall

be closed by a qualified Biologist who shall excavate the burrow using hand tools. Prior to excluding an owl from an active burrow, a receptor burrow survey shall be conducted to confirm that at least two potentially suitable unoccupied burrows are within approximately 688 feet prior to installation of the one-way door. If two natural receptor burrows are not located, one artificial burrow shall be created for every burrow that would be closed.

If an active burrow is observed outside the breeding season (September 1 to January 31) and it can be avoided, the Biologist shall determine an appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 160 feet to 1,640 feet depending on the level of impact and the time of year. The designated buffer will be clearly marked in the field and will be mapped as an environmentally sensitive area (ESA) on construction plans.

If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended (i.e., all young have fledged from the burrow). The Biologist shall determine the appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 650 to 1,640 feet depending on the level of impact and the time of year. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. Construction shall be allowed to proceed when the qualified Biologist has determined that all fledglings have left the nest.

### 4.3.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.3.7 REFERENCES

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# 4.4 CULTURAL RESOURCES

## 4.4.1 EXISTING CONDITIONS

### Background Information

This section addresses the potential impacts to cultural resources that could result from implementation of the Project. Information in this section is derived from a Historical Resource Assessment Report (Historical Resource Assessment) prepared for the Project Site by South Environmental, which is provided as Appendix D to this environmental impact report (EIR) (South Environmental 2022); an archaeological records search conducted by the South Central Coastal Information Center (SCCIC) on May 11, 2022; and the Sacred Lands File search conducted by the Native American Heritage Commission (NAHC) received on May 16, 2022. Section 4.16 of this environmental impact report (EIR), Tribal Cultural Resources, provides further information regarding the Native American consultation conducted pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18.

### *Historical Overview of Moorpark*

During the 1860s, many of the California ranchos were subdivided following the collapse of the cattle industry due to prolonged drought. Rancho land was therefore cheap to purchase, and settlers throughout the country headed west to acquire land. Thomas A. Scott, of the Pennsylvania Railroad, purchased large portions of Ventura County in the 1870s for oil exploration. Scott placed Thomas R. Bard in charge of his holdings, who in turn rented the land to local residents for sheep grazing. One of these early residents was Charles Hoar, who rented the eastern half of Simi Valley. Hoar later went into business with A. W. (Pete) Brown and Mr. Bates (first name unknown), retaining the eastern half of the valley. Hoar and his partners sublet portions of their land to local ranchers and farmers to raise barley and paid Bard one-fifth of their earnings. In turn, they collected one-fifth of the earnings from their renters. Scott died in 1888, and Bard was responsible for closing his estate. In the process of liquidating Scott's holdings, Bard formed the Simi Land and Water Company and subsequently made Charles B. McCoy manager of all 96,000 acres held by the company.

In 1887, Robert W. Poindexter, secretary of the Simi Land and Water Company, was granted the title to what is now the City of Moorpark. It is believed that the town of Moorpark got its name from the Moorpark apricot, which was grown throughout the area. Robert's wife, Madeline Poindexter, plotted and laid out the town. In 1900, one of the first civic improvements was beautification of the town, which included the planting of numerous pepper trees in the downtown area. In the early 1900s, a railroad depot was built on High Street after completion of the Southern Pacific Railroad track between Los Angeles and Santa Barbara in 1904, bringing the railroad through Moorpark for the first time. The original depot was destroyed by a fire in 1909 and rebuilt the following year. The railroad played a significant role in the growth and development of the town. That same year, the community built a telephone office/public library on High Street. Shortly after completion of the railroad, Poindexter sold the townsite to M. L. Wicks, Sr. Wicks continued Poindexter's beautification initiative by planting 1,300 spineless cactus plants in 1914. The railroad depot was demolished in 1964. In 1979, S&K Ranch constructed a grain storage facility near the former depot. To help the structure blend in with the surrounding commercial properties, the façade was constructed to mimic the former depot.

Jake Smith purchased a parcel of land on the northwest corner of High Street and Moorpark Avenue in 1900. The parcel was in a prime location, with the railroad located just south of it in 1904. The original building was a wood-framed, gabled building that measured approximately

60 feet by 40 feet. It is believed that Robert J. Batty, the following owner of the property, added the exterior brick walls and additional buildings in 1913. Ira Gilpin Tanner and his wife Lucy were the next owners of the property and they worked out of that location until his retirement in 1953. Upon arrival from Kentucky in 1913, Tanner organized and supervised a volunteer corps of firemen, joined the school board, and helped found the first church. Tanner also served as the head of the county water works.

In 1905, Mrs. John E. Smith and her daughter Hope formed the Women's Fortnightly Club, a social club for women in and around the Moorpark area. Mr. Wicks sold the group a lot for 75 dollars for construction of a formal clubhouse. When the club opened in 1912, the women became the first club in Ventura County to own their own house. The club made many important contributions to the community, including establishment of the Moorpark branch library, renting out the clubhouse as a school for disabled children, naming streets and having street signs installed throughout the town, and even assisting the U.S.O. during both World Wars.

By the 1910s, High Street became the main central commercial center of Moorpark with the construction of the Southern Pacific Milling Company and the Moorpark Hotel. In 1927, the El Rancho was constructed to replace the former silent movie theater. El Rancho was the only "talking movie" theater in the east end of Ventura County. The name later changed to the Moorpark Theater and later ceased operations in the 1950s. It was reincarnated as the Moorpark Melodrama & Vaudeville Company, but eventually closed in 1999. It currently operates as the High Street Arts Center.

Apricots were the first crops to be raised in the Moorpark area, with approximately 1,000 acres of land devoted to their cultivation in 1915. Apricot cultivation reached its prime in the 1920s and 1930s. Moorpark's warm, dry inland climate with limited coastal fog made for an ideal apricot growing climate. Moorpark would eventually become known as the apricot center of Ventura County. While the City's name is thought to have come from the Moorpark variety of apricot, the Royal variety of apricot actually fared much better and was more common throughout ranches in the area.

Early industrialization in Moorpark is reflected by the establishment of agricultural support businesses like fruit packing plants. After World War II, agricultural industrialization came in the form of large-scale poultry farms. One such example was Julius Goldman's Egg City in 1961, which contained millions of chickens spread out across 36 houses.

Like much of California, Moorpark experienced a boost in industrialization following World War II. One of the most notable industrial presences in the area was the Santa Susana Field Laboratory (SSFL). The large site, which today totals 2,850 acres, was used largely for rocket engine testing for many decades during the twentieth century under a variety of corporations starting with Rocketdyne, who later became part of Rockwell International Corporation. Sections of the property were also used as a Liquid Oxygen plant and by the United States Air Force. Today the property is owned by Boeing. According to the California Energy Commission, the laboratory was also used as the location of the first commercial nuclear power plant, and it provided electricity to the area from 1957 to 1964.

Although there were some significant examples of industrialization with Egg City and the SSFL following World War II, Moorpark did not see large scale commercial, residential, and industrial development until the 1970s and 1980s. This period of growth and development eventually led to a population increase, which resulted in the city moving forward with the incorporation process in the 1980s.

Unknown to many, Moorpark has been the site of many "firsts," including being one of the first towns in California to be openly planned by a woman; hosting the first event in the 1932 Los Angeles Olympic games with the cross-country bicycle run, which started at Blacom Canyon on Highway 118 and ended in Santa Monica; and being the first community in the United States to be lighted by nuclear electricity in 1957.

In March of 1983, Moorpark residents voted to become a city, and on July 7, 1983, Moorpark became the tenth city to be incorporated in Ventura County. A celebration was held at the Moorpark Community Center.

News was announced on March 29, 2005, when an earthmover operator working in the Meridian Hills, approximately one mile north of the subject property, uncovered a one-million-year-old mammoth skeleton. Approximately 3,000 pounds of dirt surrounding the bones was removed. The Santa Barbara Museum and the City worked together on preservation of the skeleton.

### *History of the Project Site*

The first available historic aerial photograph of the Project Site and vicinity is from 1938. At this time, the Project Site was farmland with buildings present on the west side of Moorpark Avenue and south of Charles Street. The City blocks bound by Charles Street to the north, Magnolia Street to the east, High Street to the south and Moorpark Avenue to the west were developed with several buildings. The area remained largely unchanged until 1961 when the farmland was razed, leaving behind an empty field. More buildings were constructed north of Charles Street east of Moorpark Avenue.

An open field is located west of the Tanner Corner Building, north of the railroad tracks, and south of Walnut Canyon School. Between 1938 and 1947 this land was used as farmland and later cleared. The field became part of Moorpark Union High School, presently Walnut Canyon School. Between 1969 and 1994 the field featured a running track and two baseball fields but were removed by 2002. The land remains vacant and undeveloped to the present day.

Aerial photographs confirm that construction within the Project Site began in 1980 with grading for the present Community Center evident in the photograph. By 1985, the Community Center and the Library were constructed. The Administration Building is first visible in 1994. The Development and Community Services trailer was placed north of the Administration Building by 2009. Available information indicates that the library opened in the early 1980s and expanded in 1995; City Hall opened in 1988; and the Active Adult Center opened in 1989.

## Historic and Prehistoric Archaeological Resources

### *Historical Resources Assessment Report*

On May 27, 2022, a pedestrian survey of the Project Site was conducted as part of the Historical Resource Assessment prepared by South Environmental. The survey entailed walking the Project Site and documenting existing buildings, structures, and viewsheds with detailed notes and digital photographs, specifically along Moorpark Avenue and High Street.

No historic built environment resources over 45 years old were identified within the Project Site as a result of the background research and pedestrian field survey. One historical resource was identified directly adjacent to the Project Site: the California Register of Historical Resources (CRHR)-listed Tanner Corner Building located at 601 Moorpark Avenue, as depicted in Exhibit 4.4-1, Location of Tanner Corner Building. The Historical Resource Assessment from South Environmental is provided as Appendix D of this EIR.

### *South Central Coastal Information Center Records Search*

A cultural resources records search and literature review for the Project was conducted at the SCCIC in May 2022. The records search included a ½-mile radius around each of the Project Site and was conducted by SCCIC staff. The purpose of the search was to identify prehistoric or historic archaeological sites or historic buildings and structures previously recorded within and around the Project Site. The results revealed that 40 cultural resource studies have been conducted and 8 cultural resources have been identified within the ½-mile radius of the Project Site. Table 4.4-1 provides further details for each of these eight cultural resources. Of the eight cultural resources, two historic-period cultural resources (P-56-152817, P-56-153133) were identified within the boundaries of the Project Site. Of the eight resources, three resources are prehistoric in origin, and the remaining five resources have been identified as historic period resources.

The cultural resources identified within the search radii offer a glimpse into the past lifeways of California. A variety of resources were identified, including prehistoric habitation sites and lithic scatters, historic structures, wells/cisterns, foundation/structure pads, water conveyance systems, and historic roads.

None of the identified prehistoric cultural resources are within the boundaries of the Project Site; therefore, none would be disturbed or impacted by Project-related activities. There were 3 prehistoric resources that were identified within proximity of the Project Site and are briefly discussed below.

- P-56-000791 (CA-VEN-000791) is a prehistoric site recorded in 1984 and updated in 2014. The site attributes consist of a lithic scatter with habitation debris. Resources were collected.
- P-56-001503 (CA-VEN-001503) is a prehistoric lithic scatter recorded in 2014. No resources were collected.
- P-56-001574 (CA-VEN-001574) is a prehistoric lithic scatter recorded in 1998 and updated in 2014. Resources were collected.

The archaeological field survey conducted by Psomas in May 2022 did not identify archaeological resources within the Project Site.

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# Location of Tanner Corner Building

Exhibit 4.4-1

*Civic Center Master Plan Project*

N W E S

250 125 0 250 Feet

PSOMAS

(Rev: 041923 JVR) R:\Projects\MOO_City of Moorpark\3MOO010100\Graphics\EIR\ex_TannerCorner_Location.pdf

**TABLE 4.4-1**
**CULTURAL RESOURCES WITHIN 1/2-MILE**
**OF THE PROJECT SITE**

| Primary No. | Trinomial No. | Resource Description | Year Recorded/ Updated | Recorded by Author/Affiliation | Type/Age |
|---|---|---|---|---|---|
| P-56-000791 | CA-VEN-000791 | Moorpark1 | 1984<br>2014 | M. W. Kuhn<br>Ken Victorino, Dudek | Site/Prehistoric |
| P-56-001268 | CA-VEN-001268H | MP-S5H | 1995 | Edward J. Knell, RMW Paleo Associates | Site/Historic |
| P-56-001269 | CA-VEN-001269H | MP-S6H | 1995<br>2004 | Edward J. Knell, RMW Paleo Associates<br>D. Whitley, W&S Consultants | Site/Historic |
| P-56-001270 | CA-VEN-001270H | MP-S7H | 1995 | Edward J. Knell, RMW Paleo Associates | Site/Historic |
| P-56-001503 | CA-VEN-001503 | VAM-1 | 2014 | Brian Holguin and Lucas Nichols, Dudek | Site/Prehistoric |
| P-56-001574 | CA-VEN-001574 | SunCal 1 | 1998<br>2014 | P. Maxon, RMW Paleo Associates<br>Ken Victorino, Dudek | Site/Prehistoric |
| P-56-152817 | | Tanner Corner | 2000 | Colin and Victoria Velazquez | Building/Historic |
| P-56-153133 | | Fire Station No. 42 | 2015 | Shannon Carmack, Rincon | Building/Historic |
| Source: SCCIC 2022. | | | | | |

### *Native American Heritage Commission*

Psomas submitted a request to the NAHC for a Sacred Lands File search on April 14, 2022. Results were received on May 16, 2022. The result of the Sacred Lands File check conducted through the NAHC was negative. The Sacred Lands File results summary from the NAHC is presented in Appendix E. The results of Native American consultation pursuant to AB 52 and SB 18 is presented in Section 4.16, Tribal Cultural Resources.

## 4.4.2 REGULATORY SETTING

### Federal

### *National Historic Preservation Act*

The National Historic Preservation Act (NHPA) of 1966, as amended, promotes the preservation, enhancement, and productive use of historic resources. The NHPA established the Advisory Council on Historic Preservation (ACHP) and provided procedures for the ACHP and federal agencies in promoting historic preservation. Properties of traditional religious and cultural importance to Native Americans are protected under Section 101(d)(6)(A) of the NHPA.

Section 106 of the NHPA requires that federal actions and the use of federal funds take into account their potential effects on historic properties or those listed in or eligible for listing in the National Register of Historic Places (NRHP). Under Section 106, the significance of any adversely

affected cultural resource is assessed and mitigation measures are proposed to reduce the impacts to an acceptable level.

### *National Register of Historic Places*

Authorized by the NHPA, the United States (U.S.) Department of the Interior National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. Listing on the NRHP places no obligations on private property owners. It places no restrictions on the use, treatment, transfer, or disposition of private property. Listing on the NRHP does, however, incentivize preservation. Property owners can become eligible to receive federal preservation grants and federal tax credits; they may utilize alternative methods of preservation in compliance with building code provisions. For a resource to qualify for listing on the NRHP, the quality of significance in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity and:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or

B. are associated with the lives of persons significant in our past; or

C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. have yielded or may be likely to yield information important in prehistory or history.

**Integrity**

To be eligible for listing in the NRHP, a property must retain sufficient integrity to convey its significance. The NRHP publication How to Apply the National Register Criteria for Evaluation (National Register Bulletin 15) establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance". The evaluation of integrity must be grounded in an understanding of a property's physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. **Location** is the place where the historic property was constructed or the place where the historic event occurred.

2. **Design** is the combination of elements that create the form, plan, space, structure, and style of a property.

3. **Setting** is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or man-made, including vegetation, paths, fences, and relationships between other features or open space.

4. **Materials** are the physical elements that were combined or deposited during a particular period or time and in a particular pattern or configuration to form a historic property.
5. **Workmanship** is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property as a whole or to individual components.
6. **Feeling** is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.
7. **Association** is the direct link between the important historic event or person and a historic property.

### *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*

The Secretary of the Interior's (SOI's) Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995) (SOI's Standards) The Secretary of the Interior's Standards were codified in 1995 (36 Code of Federal Regulations [CFR] Part 68) to establish professional standards that apply to all proposed development grant-in-aid projects assisted through the National Historic Preservation Fund and to serve as general guidance for work on any other historic building. The SOI Standards apply to historic properties of all periods, styles, types, materials, and sizes. The ten Standards for Rehabilitation are:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

## State

### *California Environmental Quality Act*

The Project is subject to compliance with the California Environmental Quality Act (CEQA), as amended. Compliance with CEQA statutes and guidelines requires both public and private projects with financing or approval from a public agency to assess the project's impact on cultural resources (Public Resources Code Section 21082, 21083.2 and 21084 and California Code of Regulations 10564.5). Specifically, under Public Resources Code Section 201084.1, a "project that may cause a substantial adverse change in the significance of an historical resources is a project that may have a significant effect on the environment." The first step in the CEQA compliance process in terms of historical resources is to identify any that may be impacted by the project.

"Historical resource" is a term with a defined statutory meaning (Public Resources Code Section 21084.1). The determination of significant impacts on historical and archaeological resources is described in Sections 15064.5(a) and 15064.5(b) of the State CEQA Guidelines. Section 15064.5(a) states that historical resources include the following:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the [CRHR] (Public Resources Code Section 5024.1).
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the [CRHR] (Public Resources Code Section 5024.1).
4. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1[g] of the Public Resources Code) does not preclude a lead agency from

determining that the resource may be an historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

Cultural resources are buildings, sites, humanly modified landscapes, traditional cultural properties, structures, or objects that may have historical, architectural, cultural, or scientific importance based on established criteria. CEQA states that if a project will have a significant impact on important cultural resources, deemed "historically significant," then project alternatives and mitigation measures must be considered. Additionally, any proposed project that may affect historically significant cultural resources must be submitted to the State Historic Preservation Officer (SHPO) for review and comment prior to project approval by the lead agency and prior to construction.

### *California Register of Historical Resources*

The CRHR established a list of properties that are to be protected from substantial adverse change (Public Resources Code Section 5024.1). A historical resource may be listed in the CRHR if it exhibits significance under one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. It is associated with the lives of persons important in California's past.
3. It 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 value.
4. It has yielded or is likely to yield information important in prehistory or history.

In addition to exhibiting significance under one or more of the above criteria, a resource must also retain sufficient historical integrity to convey its significance. Historical integrity is the physical aspects of a resource related to its historic character. Integrity is evaluated through seven aspects: location, design, setting, materials, workmanship, feeling, and association.

The CRHR includes properties that are listed or have been formally determined to be eligible for listing in the NRHP, State Historical Landmarks, and eligible Points of Historical Interest. Other resources require nomination for inclusion in the CRHR. These may include:

- resources contributing to the significance of a local historic district,
- individual historical resources,
- historical resources identified in historic resource surveys conducted in accordance with State Historic Preservation Office procedures,
- historic resources or districts designated under a local ordinance consistent with Commission procedures, and
- local landmarks or historic properties designated under local ordinance.

### *California Historical Building Code*

The California State Historical Building Code (CHBC) (California Code of Regulations, Title 24, Part 8) is intended to save California's architectural heritage by recognizing the unique construction issues inherent in maintaining and adaptively reusing historic buildings. The CHBC's standards and regulations facilitate the rehabilitation or change of occupancy so as to preserve

their original or restored elements and features; to encourage energy conservation and a cost-effective approach to preservation; and to provide for reasonable safety from fire, seismic forces, or other hazards for occupants and users of such buildings, structures, and properties and to provide reasonable availability and usability by the physically disabled. The 2019 triennial edition of the CHBC, effective January 1, 2020, is the currently adopted code. The City has adopted the CHBC by reference.

### *California Health and Safety Code (Sections 7050.5, 7051, and 7054)*

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the California Public Resources Code [PRC]). These sections also address the disposition of Native American burials in archaeological sites and protect such remains from disturbance, vandalism, or inadvertent destruction. Procedures to be implemented are established for (1) the discovery of Native American skeletal remains during construction of a project; (2) the treatment of the remains prior to, during, and after evaluation; and (3) reburial.

Section 7050.5 of the California Health and Safety Code specifically provides for the disposition of accidentally discovered human remains. Section 7050.5 states that if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

### *California Public Resources Code (Section 5097.98)*

Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the NAHC within 24 hours. When the NAHC receives this notification from a County Coroner, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land or his or her authorized representative, inspect the site of the remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. This regulation also requires that, upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations and all reasonable options regarding their preferences for treatment. This section of the PRC has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

### *Historical Resources*

CEQA requires a lead agency to determine whether a project may have a significant effect on one or more historical resources. A “historical resource” is defined as a resource listed in or determined to be eligible for listing in the CRHR (PRC §21084.1); a resource included in a local register of historical resources (14 CCR 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR §15064.5[a][3]).

Section 5024.1 of the California Public Resources Code, Section 15064.5 of the State CEQA Guidelines, and Sections 21083.2 and 21084.1 of the CEQA Statutes were used as the basic guidelines for the analysis. Section 5024.1 of the California Public Resources Code requires evaluation of historical resources to determine their eligibility for listing in the CRHR. The purposes of the CRHR are to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP.

Section 15064.5(a)(3) of the State CEQA Guidelines states that "[g]enerally, a resource shall be considered by the Lead Agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (PRC §5024.1; 14 CCR §4852), including if the resource:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage (Criterion 1);

B. Is associated with lives of persons important in our past (Criterion 2);

C. 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 (Criterion 3); or

D. Has yielded, or may be likely to yield, information important in prehistory or history (Criterion 4).

The Lead Agency shall concurrently determine whether a project will cause damage to a unique archaeological resource (as defined in PRC §21083.2[b]) and, if so, must make reasonable efforts to permit the resources to be preserved in place or left undisturbed. Section 21083.2(g) of CEQA defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be demonstrated that without merely adding to the existing body of archaeological knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

To the extent that unique archaeological resources are not preserved in place, mitigation measures shall be required (PRC §21083.2[c]).

Using the information outlined above, a determination is made whether a resource on a site is a historical resource and/or a unique archaeological resource that would be considered eligible for the CRHR and, therefore, significant.

Impacts to significant cultural resources that affect those characteristics of the resource that qualify it for the CRHR or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to cultural resources are considered significant if a project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the

setting of the resource that contributes to its significance; and/or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

"Historical Resources" are defined in CEQA (Section 21084.1) and the State CEQA Guidelines (14 CCR 15064.5). Section 21084.1 of CEQA states:

> A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section.

The State CEQA Guidelines (14 CCR 15064.5[b]) state:

> A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.
>
> (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
>
> (2) The significance of an historical resource is materially impaired when a project:
>
> (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
>
> (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources...unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
>
> (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

An archaeological resource must be determined to be "unique" or "historic" for an impact to the resource to be considered significant. A "unique archaeological resource" is defined in Section 21083.2(g) of CEQA.

### *Senate Bill 18*

SB 18 (California Government Code §65352.3) incorporates the protection of or mitigation of impacts to California traditional tribal cultural places into land use planning for cities, counties, and agencies. It establishes responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC's SB 18 Tribal Consultation List within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the California Public Resources Code that may be affected by the proposed adoption of or amendment to a general or specific plan. The Project requires consultation under SB 18. The City notified tribes and individuals listed on the NAHC contacts list, as described in Section 4.16 of this EIR, Tribal Cultural Resources.

### *Assembly Bill 52*

AB 52, which was approved in September 2014 and became effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a project, if so requested by the tribe. A provision of the bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the CRHR; or,
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
    c. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

2. TCRs are further defined under Section 21074 as follows:
    a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and,
    b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique

> archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe(s) pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource. The City's consultation with tribes pursuant to AB 52 is described in Section 4.16 of this EIR, Tribal Cultural Resources.

## Local

### *City of Moorpark Downtown Specific Plan*

The Moorpark Downtown Specific Plan promotes the revitalization of the City's downtown area (City of Moorpark 1998). This Specific Plan encompasses the areas along Moorpark Avenue, High Street, Charles Street, Everett Street, and a portion of Spring Road, within the City's historic core. This area is developed with older commercial, industrial, public, and residential land uses. The Specific Plan promotes commercial development, economic development and employment through commercial retail, service, and civic uses that would create a business core in the City; be compatible with adjacent civic center, industrial, and residential uses; and create jobs for local residents. In addition, design guidelines, landscape guidelines, and site development standards for each land use category, maintenance and renovation guidelines, circulation and roadway improvements, and other infrastructure and service improvements are provided to guide development within the downtown area and to help create a unified and revitalized downtown.

### *City of Moorpark Municipal Code*

Chapter 15.36 of the Moorpark Municipal Code addresses historic preservation (City of Moorpark 2022). As set forth in Chapter 15.36, its purpose is to

> …provide for the identification, protection, enhancement, perpetuation and use of historic landmarks within the city that reflect special elements of the city's historical heritage and to promote the general welfare by:
>
> A. Encouraging public knowledge, understanding, and appreciation of the city's past;
>
> B. Fostering civic pride in the beauty and personality of the city and in the accomplishments of the city's past;
>
> C. Safeguarding the heritage of the city by protecting landmarks which reflect the city's history;
>
> D. Protecting and enhancing property values within the city and increasing economic and financial benefits to the city and its inhabitants;
>
> E. Identifying as early as possible and resolving conflicts between the preservation of historical landmarks and alternative land uses;
>
> F. Preserving historic building materials through maintenance and restoration of existing historical landmarks;

G. Taking whatever steps are reasonable and necessary to safeguard the property rights of the owners whose building or structure is declared to be a landmark;

H. Promoting the use of landmarks for the education and enjoyment of the people of the city; and

I. Promoting awareness of the economic benefits of historic preservation.

As also described in Chapter 15.36 Municipal Code, the City can designate as a landmark, a building, site, tree, or structure which has significant historical significance which meets one or more of the following criteria:

1. It is associated with persons or events significant in local, State, or national history.
2. It reflects or exemplifies a particular period of national, State, or local history.
3. It embodies the distinctive characteristics of a type, style, or period of architecture or of a method of construction.
4. It is strongly identified with a person or persons who significantly contributed to the culture, history, or development of the area.
5. It is one of the few remaining examples in the area possessing distinguishing characteristics of an architectural type of specimen.
6. It is a notable work of an architect or master builder whose individual work has significantly influenced the development of the area.
7. It embodies elements of architectural design, detail, materials, or craftsmanship that represents a significant architectural innovation.
8. It has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community, or the area.
9. It has unique design or detailing.
10. It is a particularly good example of a period of style.
11. It contributes to the historical or scenic heritage or historical or scenic properties of the area (to include, but not limited to landscaping, light standards, trees, curbing, and signs).

### 4.4.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential cultural resources impacts. The Project would result in a significant impact related to cultural resources if it would:

***Threshold 4.4-a*** ***Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.***

***Threshold 4.4-b*** ***Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.***

***Threshold 4.4-c*** ***Disturb any human remains, including those interred outside of dedicated cemeteries.***

## 4.4.4 IMPACT ANALYSIS

***Threshold 4.4-a Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?***

**Less Than Significant With Mitigation Incorporated**. As stated previously, no historic built environment resources over 45 years old were identified within the Project Site as a result of the background research and pedestrian field survey. The existing buildings and structures within the Project Site were all constructed in the 1980s by unknown architects. Buildings near the Project Site include a U.S Post Office located at 100 West High Street (built circa 2009) and the CRHR-listed Tanner Corner Building located at 601 Moorpark Avenue, which is an historical resource under CEQA (South Environmental 2022).

The Tanner Corner Building is a one-story commercial building located on the northwest corner of Moorpark Avenue and High Street with an irregular floor plan. It is comprised of a wood framed structural building with a cross-gabled roof. In the 1913, a buff-colored brick façade was added to the south, east, and north elevations featuring a flat parapet wall at the roof. Entrances into each storefront are located on the primary south and east elevations; there is a storefront entrance on the southeast corner of the building that is oriented at an angle. Storefront entrances feature fabric awnings. Metal fixed windows are located on the primary elevations.

The Tanner Corner Building (P-56-152817) was evaluated and formally listed in the CRHR on November 3, 2000. The Tanner Corner Building is also eligible for the NRHP and as a City of Moorpark landmark. The building is listed in the CRHR under criteria 1, 2, and 3, with a period of significance of 1913-1953. The Tanner Corner Building is significant under criterion 1 for its association with the events and patterns of development of Moorpark, and for it being one of the only surviving commercial building from the early days of Moorpark. The building is significant under criteria 2 for its association with Ira G. Tanner, a resident of Moorpark who contributed greatly to the community's development. Finally, the building is also eligible under criterion 3 as a significant example of commercial architecture with a distinctive design that has made it an established visual landmark in downtown. The Tanner Corner Building also retains a high degree of architectural integrity from its period of significance.

The Project would ultimately demolish the existing city hall, community center/active adult center, city library, portable structures, and parking areas located north and west of the Tanner Corner Building. Also, the Project would construct new city hall and library buildings directly adjacent to the north and west elevations of the Tanner Corner Building. Across High Street to the south, new construction is also proposed as part of the Project that would consist of a proposed farmer's market/mercado use. All of these activities have the potential to impact the Tanner Corner Building's physical integrity through groundborne vibration and inadvertent construction damage. These pre-construction measures include (1) completion of a groundborne vibration analysis in consideration of the building's type and all proposed construction equipment that would be used in the vicinity, and (2) development of a protection plan for the building during demolition and construction activities.

The Project would implement **COA CUL-1** through **COA CUL-3**. **COA CUL-1** consists of required procedures to be implemented in case of unanticipated archaeological or historical finds. **COA CUL-2** consists of the procedures to be implemented in case human remains are found during project construction. **COA CUL-3** consists of required archaeological training for Project construction personnel. To mitigate impacts to historical resources, the Project would implement **MM CUL-1**, which includes the development of a vibration protection plan for the building during demolition and construction activities. Compliance with **COA CUL-1** through **COA CUL-3**, as well

as implementation of **MM CUL-1** would reduce impacts to historical resources to a less than significant level.

***Threshold 4.4-b Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?***

**Less than Significant Impact.** The results of the records search conducted by the NAHC revealed that 40 cultural resource studies have been conducted and 8 cultural resources have been identified within the ½-mile radius of the Project Site. Of the 8 cultural resources, 2 historic-period cultural resources (P-56-152817, P-56-153133) were identified within the boundaries of the Project Site. Of the 8 resources, 3 resources are prehistoric in origin, and the remaining 5 resources have been identified as historic period resources. As stated previously, none of the identified prehistoric cultural resources are within the boundaries of the Project Site; therefore, none would be disturbed or impacted by Project-related activities. There were 3 prehistoric resources that were identified within proximity of the Project Site and are briefly discussed below. Additionally, the archaeological field survey conducted by Psomas in May 2022 did not identify archaeological resources within the Project Site.

- P-56-000791 (CA-VEN-000791) is a prehistoric site recorded in 1984 and updated in 2014. The site attributes consist of a lithic scatter with habitation debris. Resources were collected.
- P-56-001503 (CA-VEN-001503) is a prehistoric lithic scatter recorded in 2014. No resources were collected.
- P-56-001574 (CA-VEN-001574) is a prehistoric lithic scatter recorded in 1998 and updated in 2014. Resources were collected.

The Project would not impact any known archaeological resources; much of the surface (to an unknown depth) of the Project Site has been graded and/or developed. Because prehistoric sites are recorded within ½-mile of the Project Site, grading and excavation for the Project could impact unknown archaeological resources related to the prehistoric and historic use of the property. The Project would be required to comply with **COA CUL-1**, which requires that any uncovered archeological or historical finds be appropriately preserved or removed by a qualified Archaeologist. As such, the Project would not impact any known archaeological resources. While grading and excavation could impact unknown archaeological resources, the Project would be required to comply with **COA CUL-1**, which would ensure that no significant impacts would occur.

***Threshold 4.4-c Would the project disturb any human remains, including those interred outside of formal cemeteries?***

**Less Than Significant Impact.** There is no indication that there are burials present on the Project Site. Native American tribes have not noted the potential presence of any ancestral burials. In the event that human remains are discovered during grading activities, **COA CUL-2**, which addresses procedures to follow in the event of a discovery of suspected human remains, would reduce Project impacts to human remains to a less than significant level.

### 4.4.5 CUMULATIVE IMPACTS

Although the Project, in conjunction with the effects of past projects, other current projects, and probable future projects, has the potential to result in the disturbance of prehistoric archaeological resources in the local area, the standard conditions, regulatory requirements, and mitigation measures that are reasonably anticipated to be required for each cumulative project would reduce

cumulative cultural resource impacts to less than significant levels. Despite the site-specific nature of the resources, SCs and MMs required for the identification and protection of unknown or undocumented resources would reduce the potential for cumulative impacts. On a cumulative basis, data recovered from a site, combined with data from other sites in the region, would allow for the examination and evaluation of the diversity of human activities in the region. As a result, development of the Project would not contribute to a significant cumulative impact on prehistoric cultural resources.

Implementation of the Project, in combination with past, present, and potential future cumulative development in the downtown area, could continue to alter the historic character of the area. This would more specifically apply to potential future development on East High Street and on streets east of Moorpark Avenue, including Walnut Street. Except for the Tanner Corner Building, implementation of the current Project would not significantly impact any additional known historic resources evaluated under federal, State, and local criteria. In addition, continued compliance with State and federal historic preservation guidelines would address the potential for impacts associated with future individual projects on a case-by-case basis. Implementation of the Mitigation Program set forth in this EIR would preclude significant impacts to prehistoric archaeological resources associated with the Project. The Project would not cumulatively impact historic resources.

### 4.4.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA CUL-1** If any archaeological, paleontological, or historical finds are uncovered during grading or excavation operations, all grading or excavation shall immediately cease in the immediate area and the find must be left untouched. The applicant, in consultation with the project paleontologist or archeologist, shall assure the preservation of the site and immediately contact the Community Development Director by phone, in writing by email or hand delivered correspondence informing the Director of the find. In the absence of the Director, the applicant shall so inform the City Manager and Planning Manager. The applicant shall be required to obtain the services of a qualified paleontologist or archeologist, whichever is appropriate to recommend disposition of the site. The paleontologist or archeologist selected must be approved in writing by the Community Development Director. The applicant shall pay for all costs associated with the investigation and disposition of the find.

**COA CUL-2** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 48 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative shall then

determine, in consultation with the property owner, the disposition of the human remains.

**COA CUL-3** Prior to any ground disturbing activity, construction personnel associated with earth moving equipment, drilling, grading, and excavating, shall be provided with basic training conducted by a qualified archaeologist. Issues that shall be included in the basic training will be geared toward training the applicable construction crews in the identification of archaeological deposits, further described below. Training will include written notification of the restrictions regarding disturbance and/or removal of any portion of archaeological, paleontological, or historical deposits and the procedures to follow should a resource be identified. The construction contractor, or its designee, shall be responsible for implementation of this measure. A tribal monitor shall be provided an opportunity to attend the pre-construction briefing if requested.

**Mitigation Measure**

**MM CUL-1** Prior to the start of Project phases that involve work within 75 feet of the Tanner Building, protection measures shall be developed in a formal plan for the adjacent Tanner Corner Building at 601 Moorpark Avenue. Protection measures shall include at a minimum: (1) clear denotation in the project construction plans that the project is located directly adjacent to an historical resource, marking the location of the Tanner Corner Building; (2) a protocol for informing all construction workers of the presence of the historical resource and making them aware of the protocol to avoid and protect it; (3) a list of approved construction equipment/distances in consideration of any identified groundborne vibration impacts; (4) recommendations for specific protective fencing and signage to be implemented during construction; and (5) if determined appropriate based on the results of the groundborne vibration analysis, recommendations for construction monitoring (pre-, post-, and during construction). The protection plan shall be prepared by a qualified architectural historian/historic preservation professional, clearly identify all responsible parties with their contact information, and be appended to the final set of construction plans. *(Also see **MM NOI-2** in Section 4.11, Noise, which relates to vibration monitoring requirements).*

### 4.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.4.8 REFERENCES

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Weeks and Grimmer. 1995. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings. Washington, DC: Weeks and Grimmer. https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf

# 4.5 ENERGY

## 4.5.1 EXISTING CONDITIONS

The Project Site contains a variety of existing land uses. The existing Civic Center consists of a city hall, a community center/active adult center, a city library, portable structures, and parking areas. The existing uses which will be replaced by the Project buildings consists of approximately 7,800 square feet of library, 9,260 square feet of Community and Active Adult Center, as well as the existing City Hall. These existing uses consume electricity as well as natural gas for heating needs. Depending on when these buildings were built or renovated, they would have complied with the energy efficiency standards that were adopted at that time.

## 4.5.2 REGULATORY SETTING

### Federal

#### *Office of Energy Efficiency and Renewable Energy*

The Office of Energy Efficiency and Renewable Energy's (EERE) mission is to accelerate the research, development, demonstration, and deployment of technologies and solutions to equitably transition America to net-zero greenhouse gas (GHG) emissions economy-wide by no later than 2050, and ensure the clean energy economy benefits all Americans, creating good paying jobs for the American people—especially workers and communities impacted by the energy transition and those historically underserved by the energy system and overburdened by pollution (EERE 2021). EERE's work will involves the four principles:

- Building the clean energy economy in a way that benefits all Americans. We must address environmental injustices that disproportionately affect communities of color, low-income communities, and indigenous communities.
- Fostering a diverse science, technology, engineering, and math (STEM) workforce. We need to increase awareness of clean energy job opportunities at minority-serving institutions and ensure that organizations receiving EERE funding are thinking through diversity and equity in their own work.
- Developing more robust workforce training opportunities to build a pipeline for permanent, good-paying jobs for the clean energy workforce.
- Working closely and learning from state and local governments.

### State

#### *Title 24 Energy Efficiency Standards*

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the California Code of Regulations [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Commission (CEC) adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020". Additionally, it has been California policy that all new residential buildings will be zero net energy (ZNE) by 2020 and new commercial buildings will be ZNE by 2030, as described in the 2008 California Public Utilities Commission (CPUC) long-term energy efficiency strategic plan. In 2013,

the CEC, in coordination with the CPUC, commenced a process to update the Title 24 energy efficiency standards and, the 2016 Title 24 Energy Efficiency Standards establish building design and construction requirements that move closer to achieving California's ZNE goals. The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Both natural gas use and electricity generation result in GHG emissions.

The currently applicable standards are the 2022 Standards, effective January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses:

1. Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
2. Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
3. Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid.
4. Strengthening ventilation standards to improve indoor air quality.

### *California Green Building Standards Code*

The 2022 California Green Building Standards Code (CCR, Title 24, Part 11), also known as the CALGreen Code, contains mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for hotel, retail, office, public schools, and hospitals) throughout California (CBSC 2022a). The development of the CALGreen Code is intended to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the following construction practices: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

### *Senate Bills 1078, 107, and SBX1-2 (Renewable Portfolio Standards)*

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and again in 2011 under Senate Bill (SB) X1-2, California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to RPS.

### *Senate Bill 100*

On September 10, 2018, Governor Brown signed SB 100, the 100 Percent Clean Energy Act of 2018. SB 100 requires renewable energy and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers and 100 percent of electricity procured to serve state agencies by December 31, 2045. This policy requires the transition to zero-carbon electric systems that do not cause contributions to increase of GHG emissions elsewhere in the western electricity grid (CEC 2021b). SB 100 also creates new standards for the RPS goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly owned utilities from 50 percent to 60 percent by 2030.

### 4.5.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential energy impacts. A project would result in a significant adverse energy impact if it would:

***Threshold 4.5-a*** ***Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.***

***Threshold 4.5-b*** ***Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.***

### 4.5.4 ENVIRONMENTAL IMPACTS

***Threshold 4.5-a*** ***Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

**Less Than Significant Impact.**

***Construction***

Construction of the Project would require the use of construction equipment for grading and building activities. All off-road construction equipment is assumed to use diesel fuel. Transportation energy use depends on the type and number of trips, vehicle miles traveled (VMT), fuel efficiency of vehicles, and travel mode. During construction, transportation energy would be used for the transport and use of construction equipment, from delivery vehicles and haul trucks, and from construction employee vehicles that would use gasoline and/or diesel fuel. The use of these energy resources fluctuates according to the phase of construction and would be temporary. Table 4.5-1, Construction-Related Energy Use for the Project, quantifies anticipated energy use during construction activities associated with the Project. The use of these energy resources fluctuates according to the phase of construction and would be temporary.

**TABLE 4.5-1**
**CONSTRUCTION-RELATED ENERGY USE FOR THE PROJECT**

| Source | Gasoline Fuel (gallons) | Diesel Fuel (gallons) |
|---|---|---|
| Off-road Construction Equipment | 46,522 | 21,426 |
| Worker commute | 26,049 | 124 |
| Vendors | 2,904 | 48 |
| On-road haul | 0 | 252 |
| **Total** | 75,475 | 21,850 |
| Source: Energy data can be found in Appendix F. | | |

Construction energy use could be considered wasteful, inefficient, or unnecessary if construction equipment is not well-maintained such that its energy efficiency is substantially lower than newer equipment; if equipment idles even when not in use; if construction trips utilize longer routes than

necessary; or if excess electricity and water[1] are used during construction activities. Pursuant to the Title 13, Section 2485 of California Code of Regulations, all diesel-fueled commercial motor vehicles must not idle for more than five consecutive minutes at any location. Mandatory compliance would reduce fuel use by construction vehicles. Fuel energy consumed during construction would also be temporary in nature, and there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the region or State. Short-term energy usage for construction of the Project would result in long-term energy savings from newly constructed buildings that are compliant with the current Title 24 CALGreen code. The Project buildings would also service the civic, commercial, residential and recreational needs of local residents of Moorpark. As such, energy use associated with construction of the Project would not result in significant impacts related to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the Project would result in a less than significant impact related to this threshold, and no mitigation is required.

### *Operation*

The Project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 Energy Efficiency Standards and CALGreen). Development of the Project is required to comply with the latest building energy efficiency standards adopted by the State and the City at the time of Project implementation. Mobile source energy consumption is based on estimated Project-related trip generation forecast of a net increase of 1,329 daily trips, as provided in the Project's Traffic Impact Analysis (Psomas 2022) and the VMT assumptions for the Project's trips (CAPCOA 2022). The number of electric vehicle chargers within the Project Site is anticipated to increase as demand for charging increases. The Project Site is also supported by existing bus services. The energy use for the Project also includes the anticipated electrical demand and natural gas demand. The estimated energy consumption attributable to the Project as calculated by CalEEMod is shown in Table 4.5-2, Energy Use During Operation of the Project, below.

**TABLE 4.5-2**
**ENERGY USE DURING OPERATION OF THE PROJECT**

| Land Use | Gasoline (gallons/yr) | Diesel (gallons/yr) | Natural Gas (kBTU/yr) | Electricity (kWh/yr) |
|---|---|---|---|---|
| Project Land Uses | 427,413 | 45,062 | 3,059,867 | 1,079,636 |
| kBTU: kilo-British thermal units; kWh: kilowatt hour; yr: year<br>Source: Energy data can be found in Appendix F. | | | | |

Adherence to the 2019 Building Energy Efficiency Standards would result in a reduction of energy use as compared to previous energy standards (CEC 2021). The reduction in energy use intensity typically consists of upgrades to higher efficiency equipment and improved building automation, lighting controls, and sequences of operations. The CEC states that the 2019 energy efficiency standards are projected to result in a 30 percent improvement in energy efficiency over the 2016 standards for nonresidential buildings. Future building efficiency standards are expected to be even more energy efficient. Therefore, the new buildings would be more energy efficient than existing buildings that are proposed to be demolished and buildings proximate to the Project Site and would be among the most energy-efficient buildings in the City.

[1] Indirect energy use for the extraction, treatment, and conveyance of water.

Because the Project would involve the most energy-efficient buildings required under the latest Title 24 Energy Efficiency Standards, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Therefore, the Project would result in a less than significant impact related to this threshold and no mitigation is required.

***Threshold 4.5b Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?***

**Less Than Significant Impact.** As discussed above, strategies and measures have been implemented at the State level with the California's Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the CALGreen Code. The Project would be more energy-efficient than the existing buildings in the vicinity of the site, including the buildings to be demolished. The CALGreen Code requires the development of electric vehicle charging infrastructure to promote and support alternatively fueled vehicles and bicycling. Furthermore, the Project would increase energy efficiency for buildings, developing higher density, mixed-use, walkable, bikeable, and disabled-accessible neighborhoods. As such, the Project would not conflict with or obstruct the State or the City's goals for energy efficiency. Therefore, the Project would result in a less than significant impact related to this threshold, and no mitigation is required.

## 4.5.5 CUMULATIVE IMPACTS

The geographic area for consideration of cumulative impacts is the City. Future development throughout the City would generate additional energy demand and construction and operational fuel energy demand. Future development projects in the City would also need to comply with all applicable local and State energy efficiency and renewable energy regulations. The electrification of the transportation sector is anticipated throughout California and would contribute to reduced fuel energy use related to future development throughout the City. Also, regional (i.e., Southern California Association of Governments) planning documents support a denser land use pattern with a focus on proximity to transit. Therefore, the Project would not result in a cumulatively considerable impact related to energy.

## 4.5.6 MITIGATION PROGRAM

### Conditions of Approval

No conditions of approval or regulatory requirements are applicable to this resource topic.

### Mitigation Measures

No significant impacts pertaining to energy were identified; therefore, no mitigation measures are required.

## 4.5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.5.8 REFERENCES

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# 4.6 GEOLOGY AND SOILS

## 4.6.1 EXISTING CONDITIONS

A Preliminary Geotechnical Investigation was prepared for the first phase of the Project by Oakridge Geoscience, Inc. (OGI), which is provided as Appendix G (OGI 2017a). The Geotechnical Investigation included a site reconnaissance, field exploration, laboratory testing, engineering analysis, and the preparation of the preliminary geotechnical investigation. The report was prepared for the Project to evaluate subsurface soil and geologic conditions underlying the proposed library that would be constructed during Phase 1, and to provide conclusions and recommendations pertaining to the geotechnical aspects of design and construction. Subsequently, a Conceptual Ground Improvement Plan was prepared by OGI, which is provided as Appendix H, to provide a ground improvement plan and cost estimate for the library (OGI 2017b).

### Site Topography

Overall, the Project Site's topography slopes gently to the south. The ground surface at the Project Site slopes southward from an elevation of approximately +520 feet above mean sea level at the northern portion of the Project Site to an elevation of about +514 feet at the southern portion of the site over a distance of about 270 feet, which is an approximate 2.2 percent slope (OGI 2017).

### Groundwater

According to the Preliminary Geotechnical Investigation, groundwater was encountered at depths of about 36 to 37.5 feet below existing surface grade in the drill holes advanced within the Project Site (OGI 2017).

### Geologic Setting

The Project Site is located within the Transverse Ranges geologic/geomorphic province of California. This province is characterized by generally east-west-trending mountain ranges composed of sedimentary and volcanic rocks ranging in age from Cretaceous to Recent. Major east-trending folds, reverse faults, and left-lateral strike-slip faults reflect regional north-south compression and are characteristic of the Transverse Ranges. The Project Site is located south of the confluence of two southerly draining tributaries (Walnut Canyon and an unnamed canyon) to the Arroyo Simi. Earth materials in the vicinity of the Project Site consists of alluvial sediments of silt, sand, and gravel deposits (OGI 2017).

#### *Seismic Environment, Faulting and Surface Rupture*

The numerous faults in Southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey (CGS) for the Alquist-Priolo Earthquake Fault Zone Program. By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years) but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive. The Project Site is not within a State-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards (DOC 2021a). No active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the Project Site.

As with all of Southern California, the Project Site has experienced historic earthquakes from various regional faults. The Project Site could be subjected to strong ground shaking in the event of an earthquake. However, this hazard is common in Southern California and the effects of ground shaking can be reduced if the proposed structures are designed and constructed in conformance with current building codes and engineering practices.

The nearest known mapped fault to Project Site is an unnamed, Quaternary-age fault located approximately ½ mile east of the Project Site. This unnamed fault is shown to trend approximately southwest-northeast; it does not trend towards the site. Other known mapped faults near the Project Site include an unnamed, Late Quaternary fault, located approximately 1 mile to the northwest; the active Simi-Santa Rosa fault zone, located approximately 2.1 miles to the southeast; the active Oak Ridge Fault, located approximately 5 miles to the north-northwest; the potentially active San Cayetano Fault, located approximately 8 miles to the north-northeast; the and the historically active San Andreas Fault, located approximately 28 miles to the north-northeast. The Oak Ridge Fault is located north of the City at the foot of the Oak Ridge Mountains and the Simi-Santa Rosa Fault is located on the southeastern end of the City through the Las Posas Hills. There are no mapped active faults with surface expression that trend through or are adjacent to the Project Site (OGI 2017).

Seismic sources other than faults with known surface expression are referred to as “buried thrust faults”. These faults are not exposed at the surface and are typically defined based on the seismic wave recordings of small earthquakes in the Southern California area. Because of the buried nature of thrust faults, their existence is typically unknown until they produce seismic activity. It is believed that the magnitude 6.7, January 17, 1994, Northridge earthquake was caused by a blind section of the Oak Ridge system located beneath the San Fernando Valley (OGI 2017).

### *Seismic Hazard Zones*

Seismic Hazard Zones are regulatory zones that encompass areas prone to liquefaction and earthquake-induced landslides.

#### Landslides

According to the California Earthquake Hazards Zone Application (EQ Zapp) maintained by CGS, the Project Site is not located within a zone of potential earthquake-induced landslides (CGS 2022a). Also, there are no recorded landslide incidents within or near the Project Site identified in the CGS Landslide Inventory (CGS 2022b).

#### Liquefaction

Liquefaction is the loss of soil strength or stiffness due to a buildup of water pressure between soil particles during severe ground shaking. This condition is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils that often make up alluvial materials and the presence of water within 50 feet of the surface. The preliminary geotechnical report prepared for the Project found that the Project Site is within the zone of required investigation for liquefaction hazards (CDMG 2000). These zones include areas where liquefaction has occurred historically or where local geological, geotechnical and groundwater conditions indicate the potential for permanent ground displacement due to liquefaction.

As part of the Project’s preliminary geotechnical report, the Project Site was evaluated for the potential for liquefaction using the computer program GeoLogisMiki and the subsurface conditions encountered during subsurface exploration. Overall, the liquefaction analyses indicate the very

loose to loose granular soils at the site are susceptible to liquefaction below the groundwater and dry seismic settlement above the groundwater (OGI 2017).

## Geologic Materials

The Project Site is underlain by fill overlying natural, alluvial soils. The soil profile of the Project Site consists of interbedded granular alluvial deposits of sand and silty sand underlain by interbedded silty to clayey sand, sandy clay, and silt. The underlain silt, clay, and sand layers are generally thinly bedded, ranging from several inches to two feet in thickness, with occasional clay or silty sand layers to about five feet thick (OGI 2017).

The deepest fill encountered during borings conducted as part of the preliminary geotechnical report was 13.5 feet thick. In general, the deeper fills are located within the large vacant areas at the central and western portion of the property. Along the eastern portion of the Project Site (east of the existing drainage channel) between zero and 4.5 feet of fill material was encountered. The fill is generally silty sand and clayey sand.

There is an approximate 10-foot-high fill stockpile located in the western portion of the Project Site. The fill stockpile generally consists of silty sand, which contains an abundance of oversized cobbles and boulders. The existing fill below the bottom of the stockpile generally consists of sand, silty sand, sandy silt, and clayey silt with gravel, rock fragments to 3 inches diameter, vary amounts of cobbles and boulders, and some construction debris. The construction debris includes brick, plaster, ceramic, and plastic fragments, asphalt pavement underlain by a 9-inch-thick sandy gravel base layer and organic material.

The underlying natural soils generally consist of sands and silty sands, with lesser layers of sandy silt and clayey silt. The sands and silty sands are slightly moist to wet beneath the groundwater, and are medium-dense to dense. Near the ground surface, soils are generally fine to medium-grained with some coarse sand zones with varying amounts of gravel and a few cobbles from four to eight inches diameter.

The existing fill and natural on-site soils generally have a low expansion potential.

## Paleontological Resources

Research performed at the Natural History Museum of Los Angeles County (LACM) notes no recorded fossil localities on the Project Site. However, the LACM has fossil locality information from sedimentary deposits similar to those that occur on the site (McLeod 2010).

Surface deposits on the Project Site consist of soil on top of younger Quaternary Alluvium. The uppermost layers of such deposits typically do not contain significant vertebrate fossils. There are exposures of the Plio-Pleistocene Saugus Formation in the elevated terrain in the northeast portion of the Project Site. The Saugus Formation is both terrestrial and marine in origin and can contain a range of fossil types from small rodents and fish to large elephants and whales. The Saugus Formation is considered to have high paleontological sensitivity (McLeod 2010).

## 4.6.2 REGULATORY SETTING

### Federal

#### *International Building Code*

The International Building Code (IBC) is the national model building code providing standardized requirements for construction. The IBC establishes consistent construction guidelines for the nation, and has been adopted with amendments into the California Building Code. The IBC contains codes related to geology and soils, including Chapter 16 (structural design) and Chapter 18 (soils and foundations) (ICC 2021).

### State

#### *California Building Code*

The California Building Code (also known as the California Building Standards Code or CBC) is promulgated under the California Code of Regulations (CCR), Title 24 (Parts 1 through 12) and is administered by the California Building Standards Commission (CBSC) (CBSC 2022). The California Building Code may be adopted wholly or with revisions by State and local municipalities.

The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The CBC establishes general standards for the design and construction of buildings, including provisions related to seismic safety. The CBC provides standards that must be met to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures in its jurisdiction. Chapter 18 of the California Building Code, Soils and Foundations, specifies the level of soil investigation required by law in California. Requirements in Chapter 18 apply to building and foundations systems and consider reduction of potential seismic hazards.

#### *Alquist-Priolo Earthquake Fault Zoning Act of 1972*

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was adopted by the State of California in 1972 in order to mitigate surface fault rupture hazards along known active faults (California Public Resources Code [PRC] Section 2621 et. Seq.). The purpose of the Alquist-Priolo Act is to reduce the threat to life and property—specifically from surface fault rupture—by preventing the construction of buildings used for human occupancy on the surface trace of active faults. Under the Alquist-Priolo Act, the California Geological Survey has defined an “active” fault as one that has had surface displacement during the past 11,700 years (Holocene time). This law directs the State Geologist to establish Earthquake Fault Zones (known as “Special Studies Zones” prior to January 1, 1994) to regulate development in designated hazard areas. In accordance with the Alquist-Priolo Act, the State has delineated “Earthquake Fault Zones” along identified active faults throughout California. Prior to permitting, City and County jurisdictions must require a geologic investigation to demonstrate that a proposed development project, which includes structures for human occupancy, is adequately set back. An evaluation and written documentation of the site must be prepared by a licensed geologist. If the results of the report determine there is an active fault, no structure for human occupancy can be placed over the trace of the fault and a set back from the fault (generally at least 50 feet) is required (OGI 2017). The Seismic Hazards Mapping Act (SHMA) was passed in 1990 and directs the State of California Department of Conservation Division of Mines and Geology to identify and map areas subject to earthquake hazards such as liquefaction, earthquake-induced landslides, and amplified ground

shaking (PRC Sections 2690–2699.6). Passed by the State legislature after the 1989 Loma Prieta Earthquake, the SHMA is aimed at reducing the threat to public safety and minimizing potential loss of life and property in the event of a damaging earthquake event. Seismic Hazard Zone Maps are a product of the resultant Seismic Hazards Mapping Program and are produced to identify Zones of Required Investigation; most developments designed for human occupancy in these zones must conduct site-specific geotechnical reports to identify the hazard and to develop appropriate mitigation measures prior to permitting by local jurisdictions.

The SHMA establishes a statewide public safety standard for the mitigation of earthquake hazards. The California Geological Survey's Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for the evaluation and mitigation of earthquake-related hazards for projects in designated zones of required investigations (CGS 2008).

**Local**

***City of Moorpark General Plan Safety Element***

The Safety Element of the City's General Plan establishes goals, policies and implementation strategies for promoting public health, safety, and general welfare. The Safety Element outlines goals, policies and implementation actions for protecting life and for preventing property damage that may occur due to seismic and geologic hazards; risks from hazardous materials, flood hazards, and fire hazards; and for emergency preparedness. The site is located in areas identified in the Safety Element as having liquefaction hazards but outside fault zones and landslide areas. The Project's consistency with applicable General Plan safety goals and policies is provided later in this environmental impact report (EIR) section (City of Moopark 2023a).

***City of Moorpark Building Code***

Title 15, Buildings and Construction, of the Moorpark Municipal Code serves as the City's Building Code. This Title incorporates by reference the California Building Code and other State codes, as well as the Ventura County Fire Code and the City's standards for building and construction (City of Moorpark 2022).

### 4.6.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential geology and soil impacts. The Project would result in a significant impact related to geology and soils if it would:

***Threshold 4.6-a*** ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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 of based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

***(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. Refer to Division of Mines and Geology Special Publication 42.***

***(ii) Strong seismic ground shaking***

***(iii) Seismic-related ground failure, including liquefaction***

***(iv) Landslides***

***Threshold 4.6-b Result in substantial soil erosion or the loss of topsoil.***

***Threshold 4.6-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.***

***Threshold 4.6-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.***

***Threshold 4.6-e Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water?***

***Threshold 4.6-f Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.***

### 4.6.4 IMPACT ANALYSIS

***Threshold 4.6-a (i) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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. Refer to Division of Mines and Geology Special Publication 42.***

**Less Than Significant Impact.** According to the preliminary geotechnical report prepared for Phase 1 of the Project, there is no presence of active faulting within the Project Site (OGI 2017). Furthermore, the Project Site does not occur within an Earthquake Fault Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act (CGS 2022a). Therefore, the Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. The Project would result in less than significant impacts related to this threshold, and no mitigation measures are either required or recommended.

**Threshold 4.6-a (ii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?**

**Threshold 4.6-a (iii) Would the project directly or indirectly cause potential substantial adverse effects including the risk of loss, injury, or death from seismic-related ground failure, including liquefaction?**

**Less than Significant With Mitigation.** Like all of Southern California, the City of Moorpark is subject to ground shaking hazards associated with earthquake events in the region. Employees and visitors to the Project Site would be exposed to ground shaking during earthquakes. Ground shaking can cause damage to buildings and infrastructure, depending on the magnitude of the earthquake, soil conditions, and the design and construction of buildings.

Implementation of the Project would not change the intensity of ground shaking that would occur on the Project Site during a seismic event, but it would result in new exposure for the new structures and site occupants.

According to mapping prepared by the California Department of Conservation, the Project Site is located within a liquefaction zone (CGS 2022a). According to the preliminary geotechnical report, the potential for liquefaction during a seismic event is considered high if not mitigated prior to construction (OGI 2017a). Overall, the liquefaction analyses conducted as part of the preliminary geotechnical report indicate the very loose to loose granular soils at the Project Site are susceptible to liquefaction below the groundwater and dry seismic settlement above the groundwater. Seismically induced settlement or collapse can occur in soils that are loose, soft, or that are moderately dense, but weakly cemented. The onsite very loose to loose granular and silty soils above the groundwater are susceptible to seismically induced settlement. OGI's report notes that the groundwater is assumed to be at 15 feet below ground surface within the Project Site due to the historically high groundwater levels reported by the California Geological Survey; therefore, soils below that depth are subject to liquefaction potential in the analyses even though the groundwater depth encountered by OGI's explorations was about 36 to 37.5 feet below the existing surface grade (OGI 2017a)

The proposed buildings would be designed in accordance with the California Green Building Standards Code, which contains minimum standards regulating the design and construction of excavations, foundations, retaining walls, and other building elements to control the effects of seismic ground shaking and adverse soil conditions. The California Green Building Standards Code also includes provisions for earthquake safety based on factors such as occupancy type, the types of soil and rock on-site, and the strength of ground motion that may occur at the Project Site.

Implementation of Phase 1 would occur in accordance with the recommendations contained in the geotechnical reports that were prepared for Phase 1 of the Project (OGI 2017a and 2017b). Based on the geotechnical reports, Phase 1 of the Project is geotechnically feasible provided that the recommendations in those reports are reviewed in the context of the final Project design and are incorporated during the Project's construction phase. Seismic design parameters have been included in the geotechnical reports based on the seismic zone, soil profile, and proximity of known faults to the Project Site, which provide the minimum design procedures to avoid significant cosmetic damage structures (OGI 2017a). Compliance with the applicable regulations, and proper grading, design, and building construction methods, including the improvement of soils to address liquefaction issues, as specified in the geotechnical report, and as required by **MM GEO-1** would reduce potentially significant impacts related to this threshold to less than significant levels for Phase 1. As required by **COA GEO-1**, future Project phases, additional geotechnical reports would be required to identify specific geotechnical recommendations for new buildings; however, based on CGS mapping which identify liquefaction risk across much of the Project Site, it is anticipated that similar soil improvements would be required for future Project

phases as have been identified for the library that would be built under Phase 1. Overall, with implementation of recommendations from current and future geotechnical reports, the Project would have a less than significant impact related to this threshold.

**Threshold 4.6-a (iv) Would the project directly or indirectly cause potential substantial adverse effects including the risk of loss, injury, or death from seismic-related ground failure, including landslides?**

**Less Than Significant Impact.** As discussed above, no landslide, settlement, or subsidence hazards are known to be present at the Project Site. Lateral spreading is the lateral movement of stiff, surficial blocks of sediments as a result of a subsurface layer liquefying. The lateral movements can cause ground fissures or extensional, open cracks at the surface as the blocks move toward a slope face, such as a stream bank or in the direction of a gentle slope. When the shaking stops, these isolated blocks of sediments come to rest in a place different from their original location and may be tilted. An evaluation of lateral spreading was made as a part of this EIR. The risk for significant horizontal displacement due to lateral spreading is low. Therefore, less than significant impacts are anticipated related to this threshold, and no mitigation is required.

**Threshold 4.6-b Would the project result in substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact.** The Project would grade and develop the site with new impervious surfaces and new pervious landscaped areas. Project construction would expose soils on the Project Site and would require the hauling of soil off-site, which could result in soil erosion and the loss of topsoil if not implemented consistent with regulatory requirements. The largest source of erosion and topsoil loss is uncontrolled drainage during construction. As discussed in more detail in Section 4.9, Hydrology and Water Quality, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into “Waters of the U.S.”. Construction activities shall be conducted in compliance with the statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2012-0006-DWQ, NPDES No. CAS000002), adopted by the State Water Resources Control Board on July 17, 2012. In compliance with the NPDES permit, erosion potential during construction of the Project would be managed with Best Management Practices (BMPs) implemented on the Project Site as part of a Storm Water Pollution Prevention Plan during construction activities in accordance with NPDES requirements. Implementation of the BMPs would ensure that construction-related erosion impacts would be less than significant.

Although the Project Site already contains impervious surfaces, the Project may result in an increase in the percentage of the Project Site that is impervious, which would result in increased storm water runoff generated on the Project Site. As further discussed in Section 4.9, Hydrology and Water Quality, operational BMPs will be identified for each Project phase to reduce the potential for erosion and the transport of sediment off site. Long term, the Project’s contribution to erosion of channels downstream is expected to be less than significant because the stormwater runoff volume with the Project would be similar to existing conditions and would be mitigated through implementation of BMPs. Therefore, impacts related to soil erosion due to construction and operation of the Project would be less than significant, and no mitigation measures are either required or recommended.

**Threshold 4.6-c Would the project 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 with Mitigation Incorporated.** The Project's geotechnical reports found that the Project was geotechnically feasible with implementation of grading and foundation recommendations (OGI 2017a and 2017b). As noted above, the Project is not in a location susceptible to landslides liquefaction. Also, the Project Site is not located within an area of known ground subsidence. Any potential for significant impacts related to liquefaction would be mitigated through the implementation of the foundation design, grading, and ground improvement recommendations contained in the Project's geotechnical reports, as specified in **MM GEO-1**. With implementation of **MM GEO-1,** potentially significant impacts related to unstable soils would be reduced to less than significant levels.

**Threshold 4.6-d Would the project 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.** Expansive soils are materials that, when subject to a constant load, are prone to expand when exposed to water. The hazard associated with expansive soils is that they can overstress and cause damage to the foundation of buildings set on top of them. The surficial soils at the Project Site consist of sand and silty to clayey sand (OGI 2017). Thus, the onsite granular soils are anticipated to have a low expansion potential. Therefore, impacts associated with expansive soils are expected to be less than significant.

**Threshold 4.6-e Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water?**

**No Impact.** The Project Site is located within the service area of Ventura County Waterworks District (VCWWD) No. 1. The Project would connect to the existing sewer system and would not require the use of septic or alternative waste waster disposal systems. Therefore, no impacts would result related to this threshold, and no mitigation measures are either required or recommended.

**Threshold 4.6-f Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant Impact.** A paleontological resources records search was completed for the Project. No known fossil localities have been previously recorded within the Project Site, but fossil localities have been found nearby from sedimentary deposits that are similar to those that occur in the area. The paleontologically sensitive Saugus Formation may be present beneath the Project Site (McLeod 2010). Grading of the Saugus Formation could impact sensitive fossil resources. The Project would be required to comply with **COA CUL-1,** which states that in the event that any paleontological finds are uncovered during grading or excavation operations, all grading or excavation would immediately cease and the lead agency would obtain the services of a qualified paleontologist or archaeologist, approved in writing by the Community Development Director. Also, **COA CUL-3** would be implemented as part of the Project, which requires paleontological training for Project construction personnel. With implementation of **COA CUL-1 and COA CUL-3,** the Project would have less than significant impacts related to this threshold and no mitigation is required.

### 4.6.5 CUMULATIVE IMPACTS

The Project's potentially significant impacts related to strong seismic ground shaking and liquefaction would be mitigated through implementation of **MM GEO-1**, which requires compliance with the applicable regulations and implementation of proper grading, design, and building construction methods that are outlined in the Project's geotechnical reports. Given that paleontological resources could be encountered during Project construction, **COA GEO-2** will be implemented, which requires monitoring of grading and excavation activities in the native soils and salvage of fossils should they be found on-site.

All of the cumulative projects that include the construction of new structures would be required by the agency issuing their building permits to comply with the applicable State and local requirements such as the CBC and prepare a geotechnical report to evaluate and mitigate geotechnical hazards, if needed. Therefore, no significant cumulative impacts related to geotechnical hazards would result from the Project and cumulative projects collectively.

It is likely that most, if not all, of the cumulative projects would result in native ground disturbance that could encounter and affect paleontological resources. During each projects' entitlement process, it is the responsibility of the CEQA Lead Agency reviewing each cumulative project to identify potentially significant impacts, including potential paleontological resource impacts, and to require mitigation measures if needed, such as paleontological resources if appropriate. Therefore, no significant cumulative impacts related to paleontological resources would result from the Project and cumulative projects when considered collectively.

### 4.6.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA GEO-1** Prior to the issuance of a grading permit for each Project phase, a geotechnical report will be prepared and submitted to the City for review and approval. The geotechnical report shall be prepared by a registered Civil Engineer or certified Engineering Geologist and shall contain site-specific evaluations of the seismic and geologic hazards affecting the project and shall identify recommendations for earthwork and construction. All recommendations from forthcoming site-specific geotechnical studies shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City as part of the plan approval process.

**COA CUL-1** If any archaeological, paleontological, or historical finds are uncovered during grading or excavation operations, all grading or excavation shall immediately cease in the immediate area and the find must be left untouched. The applicant, in consultation with the project paleontologist or archeologist, shall assure the preservation of the site and immediately contact the Community Development Director by phone, in writing by email or hand delivered correspondence informing the Director of the find. In the absence of the Director, the applicant shall so inform the City Manager and Planning Manager. The applicant shall be required to obtain the services of a qualified paleontologist or archeologist, whichever is appropriate to recommend disposition of the site. The paleontologist or archeologist selected must be approved in writing by the Community Development Director. The

applicant shall pay for all costs associated with the investigation and disposition of the find. *(Note: repeated from Section 4.4).*

**COA CUL-3** Prior to any ground disturbing activity, construction personnel associated with earth moving equipment, drilling, grading, and excavating, shall be provided with basic training conducted by a qualified archaeologist. Issues that shall be included in the basic training will be geared toward training the applicable construction crews in the identification of archaeological deposits, further described below. Training will include written notification of the restrictions regarding disturbance and/or removal of any portion of archaeological, paleontological, or historical deposits and the procedures to follow should a resource be identified. The construction contractor, or its designee, shall be responsible for implementation of this measure. A tribal monitor shall be provided an opportunity to attend the pre-construction briefing if requested. *(Note: repeated from Section 4.4).*

**Mitigation Measures**

**MM GEO-1** Prior to approval grading plans, the Applicant shall demonstrate, to the satisfaction of the City's Planning Division that the recommendations in the project's geotechnical reports and in any future geotechnical reports have been fully and appropriately incorporated (OGI 2017a and 2017b).

### 4.6.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.6.8 REFERENCES

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# 4.7 GREENHOUSE GAS EMISSIONS

## 4.7.1 EXISTING CONDITIONS

### Greenhouse Gases

Climate change is a recorded change in the average weather of the earth measured by variables such as wind patterns, storms, precipitation, and temperature. Increasing greenhouse gas (GHG) emissions have led to an anthropogenic[1] warming trend of the Earth's average temperature, which is causing changes in the earth's climate. GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. This increasing temperature phenomenon is known as "global warming", and the climatic effect is known as "climate change" or "global climate change".

GHGs are atmospheric gases and clouds within the atmosphere that influence the Earth's temperature by absorbing most of the infrared radiation that rises from the sun-warmed surface and that would otherwise escape into space. This process is commonly known as the "Greenhouse Effect". GHGs are emitted by natural processes and human activities. The Earth's surface temperature averages about 58 degrees Fahrenheit (°F) because of the Greenhouse Effect. Without it, the Earth's average surface temperature would be somewhere around an uninhabitable 0°F. Anthropogenic GHG emissions enhance the Greenhouse Effect by absorbing radiation from other atmospheric GHGs that would otherwise escape into space, thereby trapping more radiation in the atmosphere and causing temperatures to increase.

GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ($SF_6$), and nitrogen trifluoride ($NF_3$). $CO_2$ is the most important anthropogenic GHG.[2] The global atmospheric concentration of $CO_2$ has increased from a pre-industrial (roughly 1750) value of about 280 parts per million (ppm) primarily due to fossil fuel use. The annual growth rate in $CO_2$ concentrations continues to increase, with a larger annual $CO_2$ concentration growth. In August 2022, the concentration measured at Mauna Loa, Hawaii was more than 419.15 ppm (ESRL 2022).

GHGs are global pollutants and are therefore unlike air pollutants such as ozone, particulate matter, and toxic air contaminants (TACs), which are pollutants of regional and local concern. While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. In addition, the GHG impacts are global, as opposed to the localized air quality effects of criteria air pollutants and TACs.

1 Caused or produced by humans.

2 General discussions on climate change often include water vapor, ozone, and aerosols in the GHG category. Water vapor and atmospheric ozone are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are not considered by either regulatory bodies (such as the California Air Resources Board [CARB]) or climate change groups (such as the California Climate Action Registry [CCAR]) as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, atmospheric ozone, or aerosols is provided in this EIR section.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called a global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to $CO_2$. For example, since $CH_4$ and $N_2O$ are approximately 21 and 310 times more powerful than $CO_2$ (respectively) in their ability to trap heat in the atmosphere, they have GWPs of 21 and 310, respectively ($CO_2$ has a GWP of 1). Carbon dioxide equivalent ($CO_2e$) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce $CO_2e$.

Climate change effects in California are anticipated to impact resources including, but not limited to, the following: public health, wildfires, energy, droughts, sea level and flooding, agriculture, forestry, and ecosystems.

## 4.7.2 REGULATORY SETTING

### Federal

#### *U.S. Environmental Protection Agency Findings*

On December 7, 2009, the U.S. Environmental Protection Agency (USEPA) Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act.

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—$CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

The findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emissions standards for vehicles (USEPA 2021a). A light-duty vehicle is defined any motor vehicle with a gross vehicle weight of 6,000 pounds or less (CARB 2021a).

#### *Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards*

The USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) have been working together on developing a National Program of regulations to reduce GHG emissions and to improve the fuel economy of light-duty vehicles. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking establishing standards for 2012 through 2016 model year vehicles. On October 15, 2012, the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 295 grams of $CO_2$ per mile by 2012, decreasing to 250 grams per mile by 2016, and finally to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg) and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency. The agencies expect, however, that a portion of these improvements will occur due to air conditioning technology improvements (i.e., they will leak less) and due to the use of alternative refrigerants, which would not contribute to fuel economy. These

standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG standards and NHTSA Corporate Average Fuel Economy (CAFE) standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other States that have adopted the California standards (USEPA and NHTSA 2012).

On September 19, 2019, NHTSA and the USEPA issued a final action entitled the "One National Program Rule" to enable the federal government to provide nationwide uniform fuel economy and GHG emission standards for automobile and light duty trucks. This action finalizes critical parts of the Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule that was first proposed in August 2018. In this proposal, the agencies proposed new and amended GHG and CAFE standards for model year 2021 to 2026 light duty vehicles (USEPA and NHTSA 2019).

In this action, USEPA withdrew the Clean Air Act waiver that had been granted to the State of California in January 2013 for the State's Advanced Clean Car program with respect to GHG and Zero Emission Vehicle (ZEV) elements. In November 2019, California, 21 other states, the District of Columbia, and four California cities filed a petition for the USEPA to reconsider SAFE-1. A petition for reconsideration was also filed by several environmental groups.

On April 28, 2021, USEPA published a Notice of Reconsideration: California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment. The public comment period closed July 6, 2021 (USEPA 2021b).

## State

### *Assembly Bill 1493 (Mobile Source Reductions)*

AB 1493, adopted September 2002, also known as Pavley I, requires the development and adoption of regulations to achieve the maximum feasible reduction of GHGs emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. The emission standards have become increasingly more stringent through the 2016 model year. California is also committed to further strengthening these standards beginning in 2017 to obtain a 45 percent GHG reduction from 2020 model year vehicles (CARB 2021b). Regulations to make California emissions standards for model year 2017 and beyond consistent with federal standards were adopted in 2012 and are discussed further below.

### *California Air Resources Board's Advanced Clean Cars Program*

In January 2012, California Air Resources Board (CARB) approved the Advanced Clean Cars Program, an emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. The program also requires car manufacturers to offer for sale an increasing number of ZEVs each year, including battery electric, fuel cell, and plug-in hybrid electric vehicles. In March 2017, CARB adopted GHG standards for 2022 through 2025 model years and directed staff to begin rule development for 2026 and subsequent model years (CARB 2021c).

### *Executive Order S-3-05 (Statewide GHG Targets)*

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

However, executive orders do not have the same status as a law because in California's constitutional system, it is the Legislature, not the Governor, who is entrusted with the role of making statewide laws. The Legislature declined to include the Executive Order's 2050 goal in AB 32 (discussed below), and again declined to use the EO's 2050 goal in adopting Senate Bill (SB) 375 (discussed below), nor has it incorporated it in any implementing legislation or applicable plans. Additionally, although CARB has the requisite authority to adopt whatever regulations are necessary beyond the AB 32 horizon year 2020 to meet the target set forth in S-3-05, the agency has not done so. Since the Legislature has never enacted EO S-3-05's 2050 target, and no expert agency has interpreted the California Environmental Quality Act (CEQA) to require it, the 2050 target has only the force and effect of an executive order issued by a former Governor. If the Legislature has delegated any of its authority to define CEQA's requirements, it delegated that authority to the Governor's Office of Planning and Research (OPR).

### *Senate Bill 97 and the CEQA Guidelines*

Pursuant to SB 97, OPR developed and California Natural Resources Agency (CNRA) adopted proposed amendments to the CEQA Guidelines (CEQA Amendments) for the feasible mitigation of GHG emissions and their effects. The CEQA Amendments became effective on March 18, 2010.

The CEQA Amendments for Greenhouse Gas Emissions state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Amendments note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (CNRA 2009b). Section 15064.4(b) of the CEQA Guidelines provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment (CNRA 2009b):

- The extent a project may increase or reduce GHG emissions as compared to the environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

All of these are considered in the impact analysis presented in this section. The revisions to Appendix G, Environmental Checklist Form, of the CEQA Guidelines, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds. Rather, Appendix G of the CEQA Guidelines asks whether the project would conflict with a plan, policy, or regulation adopted to reduce GHG emissions or would generate GHG emissions that would significantly affect the environment, indicating that the determination of what is a significant effect on the environment should be left to the lead agency. Accordingly, the CEQA Amendments do not prescribe specific methodologies for performing an assessment; they do not establish specific thresholds of significance; and they do not mandate specific mitigation measures. Rather, the CEQA Amendments emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009b).

The CEQA Amendments indicate that lead agencies should consider all feasible means, supported by substantial evidence and subject to monitoring and reporting, of mitigating the significant effects of GHG emissions. As pertinent to the Project, these potential mitigation measures, set forth in Section 15126.4(c) of the CEQA Guidelines, may include (1) measures in an existing plan or mitigation program for the reduction of GHG emissions that are required as part of the lead agency's decision; (2) reductions in GHG emissions resulting from a project through implementation of project design features; (3) off-site measures, including offsets, to mitigate a project's emissions; and (4) carbon sequestration measures (CNRA 2009b).

Among other things, the CNRA noted in its Public Notice for these changes that impacts of GHG emissions should focus on the cumulative impact on climate change. The Public Notice states (CNRA 2009):

> While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable.

Thus, the CEQA Amendments continue to make clear that the significance of greenhouse gas emissions is most appropriately considered on a cumulative level.

**Assembly Bill 32 (Statewide GHG Reductions)**

In furtherance of the goals established in EO S-3-05, the California Legislature adopted the public policy position that global warming is "a serious threat to the economic well-being, public health, natural resources, and the environment of California" (California Health and Safety Code, Section 38501). The public policy statements became law with the enactment of the California Global Warming Solutions Act of 2006 (AB 32) in September 2006, after considerable study and expert testimony before the Legislature. The law instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. AB 32 directed CARB to set a GHG emission limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. The scoping plan is described further below.

### *Executive Order B-30-15 (Statewide Interim GHG Targets)*

California EO B-30-15 (2015) set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030, and directed State agencies with jurisdiction over GHG emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels. Specifically, the Executive Order directed CARB to update the Scoping Plan to express this 2030 target in metric tons.

### *Senate Bill 32/Assembly Bill 197*

SB 32, signed September 8, 2016, implements a goal of EO B-30-15. Under SB 32, in "adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions," CARB must ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. SB 32's findings state that CARB will "achieve the state's more stringent greenhouse gas emission reductions in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature." AB 197, a companion to SB 32, adds two members to the CARB and requires measures to increase transparency about GHG emissions, climate policies, and GHG reduction actions.

### *California Air Resources Board Scoping Plan*

On December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emission level would require a reduction of GHG emissions of approximately 28.5 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business as usual"). The Scoping Plan evaluates opportunities for sector-specific reductions; integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities; identifies additional measures to be pursued as regulations; and outlines the role of a cap-and-trade program.

First Update to the Climate Change Scoping Plan

CARB approved the final "First Update to the Climate Change Scoping Plan" on May 22, 2014. The first update describes California's progress towards AB 32 goals, stating that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32". Specifically, "if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050" (CARB 2014). Reducing the "business as usual" condition of 509 metric tons carbon dioxide equivalent (MMTCO2e) to the 1990 emissions level of 431 $MMTCO_2e$ will require a reduction of 78 $MMTCO_2e$, or approximately a 15.3 percent reduction (compared to a 28.5 percent reduction as set forth in the original Scoping Plan but not directly comparable because of the change in methodology).

Second Update to the Climate Change Scoping Plan

CARB prepared a second update to the Scoping Plan to reflect the 2030 target established in Executive Order B-30-15 and in Senate Bill 32 (discussed above). The Final Proposed 2017 Scoping Plan was published in November 2017, and the third public Board Meeting for the Proposed Scoping Plan was held on December 14, 2017, where the Final Proposed 2017 Climate Change Scoping Plan (Second Update to the Climate Change Scoping Plan, or 2017 Scoping Plan Update) was adopted.

The 2017 Scoping Plan Update includes new statutory GHG reduction requirements that were not included in the current Scoping Plan, including Senate Bill 32 (discussed below) which sets a 40 percent GHG reduction target below 1990 GHG levels to be achieved by 2030, SB 350 (which sets a 50 percent reduction in GHG emissions from electricity generation and other energy uses in existing structures, and a 50 percent renewable energy portfolio requirement), and SB 650 (which establishes priority GHG reduction targets for designated types of greenhouse gases such as methane). The key elements of the 2017 Scoping Plan Update proposal call for further GHG reductions from the refinery sector specifically, further reductions from other stationary sources through either a renewed and expanded cap and trade or carbon tax program, further reductions from other sectors such as transportation technologies and services, water and solid waste conservation and management, and land uses in both open space and urban areas (CARB 2017).

2022 Scoping Plan Update

The 2022 Scoping Plan Update will assess progress towards achieving the Senate Bill 32 2030 target and lay out a path to achieve carbon neutrality by mid-century. The first public workshops for the 2022 Scoping Plan Update were held in June 2021 (CARB 2021d).

### *Senate Bill 375 (Land Use Planning)*

Signed September 30, 2008, SB 375 provides for a new planning process to coordinate land use planning and regional transportation plans (RTPs) and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires Metropolitan Planning Organizations, including the Southern California Association of Governments (SCAG), to incorporate a Sustainable Communities Strategy (SCS) in their regional transportation plans that will achieve GHG emission reduction targets set by CARB. There are two mutually important facets to SB 375: reducing vehicle miles traveled and encouraging more compact, complete, and efficient communities for the future. SB 375 also includes provisions for exemptions from or streamlined CEQA review for projects classified as transit priority projects. See additional discussion of the SCAG plan under “Regional” regulations below.

### *Senate Bills 1078, 107, and SBX1-2 (Renewable Portfolio Standards)*

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and again in 2011 under SBX1-2, California’s Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. Initially, the Renewable Portfolio Standard provisions applied to investor -owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to RPS.

### *Senate Bill 350*

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are as follows:

(1) To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources; and

(2) To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation (CEC 2021a).

### *Senate Bill 100*

On September 10, 2018, Governor Brown signed SB 100, the 100 Percent Clean Energy Act of 2018. SB 100 requires renewable energy and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers and 100 percent of electricity procured to serve state agencies by December 31, 2045. This policy requires the transition to zero-carbon electric systems that do not cause contributions to increase of GHG emissions elsewhere in the western electricity grid (CEC 2021b). SB 100 also creates new standards for the RPS goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly owned utilities from 50 percent to 60 percent by 2030.

### *Executive Order B-55-18*

On September 10, 2018, Governor Brown also signed California EO B-55-18, which sets a new statewide goal of carbon neutrality as soon as possible, and no later than 2045, and achieve net negative emissions thereafter. EO B-55-18 was added to the existing Statewide targets of reducing GHG emissions, including the targets previously established by Governor Brown of reducing emissions to 40 percent below 1990 levels by 2030 (EO B-30-15 and SB 32), and by Governor Schwarzenegger of reducing emissions to 80 percent below 1990 levels by 2040 (EO S-3-05).

### *Executive Order N-79-20*

On September 23, 2021, Governor Newsom announced that California will phase out the sale of new gasoline and diesel-powered cars to reduce GHG emissions. The Executive Order directs the State to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles. This would aid in reducing $CO_2$ emissions, half of which are from the transportation sector.

### *Title 24 Energy Efficiency Standards*

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the California Code of Regulations [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The currently applicable standards are the 2019 Standards, effective January 1, 2020 (CBSC 2018). The 2019 standards focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. The ventilation measures improve indoor air quality, protecting homeowners from air pollution originating from outdoor and indoor sources (CEC 2021c). The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Both natural gas and electricity use produce GHG

emissions. The goal of the standards is to reduce energy use in new homes by more than 50 percent. The 2019 standards require that there is sufficient on-site electricity generation to meet the annual electricity usage for low rise residential buildings. A 30 percent reduction in energy uses is anticipated for nonresidential uses. The requirement for low-rise residential buildings to develop onsite electricity generation is consistent with the goal to develop renewable sources of energy.

The California Energy Commission (CEC) adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020". Additionally, it has been California policy that all new residential buildings will be zero net energy (ZNE) by 2020 and new commercial buildings will be ZNE by 2030, as described in the 2008 California Public Utilities Commission(CPUC) long-term energy efficiency strategic plan. The 2019 Title 24 Energy Efficiency Standards establish building design and construction requirements that move closer to achieving California's ZNE goals by requiring single-family residential developments to incorporate solar photovoltaic panels to meet their annual electricity requirements. The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Both natural gas use and electricity generation result in GHG emissions.

### *California Green Building Standards Code*

The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, contains mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California) (CBSC 2019). The development of the CALGreen Code is intended to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the following construction practices: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

### *California Air Pollution Control Officers Association*

The California Air Pollution Control Officers Association (CAPCOA) is the association of Air Pollution Control Officers representing all 35 local air quality agencies throughout California. CAPCOA is not a regulatory body, but has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues. The August 2010 CAPCOA publication entitled Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures provides guidance on the quantification of project-level mitigation of GHGs associated with land use, transportation, energy use, and other related project areas. The guidance includes detailed procedures about the approaches to assessing and calculating the GHG emissions reductions associated with project design features and mitigation measures (CAPCOA 2010). This publication's methods are used in the California Emission Estimator Model (CalEEMod) computer model that is used to calculate GHG emissions.

## Regional

### *South Central Coast Air Quality Management District*

The Ventura County Air Pollution Control District (VCAPCD) is the agency responsible for comprehensive air pollution control in Ventura County. As a regional agency, the VCAPCD develops rules and regulations; establishes permitting requirements; inspects emissions sources; and enforces such measures though educational programs or fines, when necessary. The VCAPCD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. The 2022 Ventura County Air Quality Management Plan (2022 AQMP), adopted by the Ventura County Air Pollution Control Board on February 14, 2017, presents the County's strategy for attaining the federal 8-hour ozone standard as required by the Federal Clean Air Act Amendments of 2008 (VCAPCD 2022). The 2022 AQMP contains an attainment demonstration showing that Ventura County must attain the federal 8-hour ozone standard by July 20, 2021, the deadline for serious 8-hour ozone nonattainment areas (VCAPCD 2022).

The Ventura County Air Quality Assessment Guidelines (Guidelines) is an advisory document prepared by the District that provides lead agencies, consultants, and project applicants with a framework and uniform methods for preparing air quality impact assessments and the air quality section of environmental documents for projects that require discretionary entitlements. The Guidelines recommend specific criteria and threshold levels for determining whether a proposed project may have a significant adverse air quality impact. The Guidelines also provide mitigation measures that may be useful for mitigating the air quality impacts of proposed projects (VCAPCD 2003).

### *Southern California Association of Governments*

As previously discussed, SB 375 specifically required Metropolitan Planning Organizations (MPOs), including SCAG, to incorporate an SCS in their RTPs that will achieve GHG emission reduction targets set by CARB. SCAG's current SCS is included in its 2020–2045 RTP/SCS Connect SoCal (SCAG 2020).[3] The 2020 RTP/SCS combines the need for mobility with a "sustainable future" through a reduction in the emissions produced from transportation sources. The document was adopted by SCAG on September 3, 2020. The 2020–2045 RTP/SCS is expected to reduce per capita transportation emissions by 19 percent by 2035 relative to 2005.

### *Ventura County Air Pollution Control District*

The Ventura County Air Pollution Control District (VCAPCD) is the agency responsible for comprehensive air pollution control in Ventura County. As a regional agency, the VCAPCD develops rules and regulations; establishes permitting requirements; inspects emissions sources; and enforces such measures though educational programs or fines, when necessary. The VCAPCD is directly responsible for reducing emissions from stationary, mobile, and indirect sources.

The VCAPCD has not established a quantitative threshold for GHG emissions. In a September 2016 report to the VCAPCD Air Pollution Control Board, the VCAPCD staff stated, "Given that Ventura County is adjacent to the South Coast AQMD jurisdiction and is a part of the SCAG region, District staff believes it makes sense to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the South Coast AQMD" and "Unless directed otherwise, District staff will continue to evaluate and develop suitable interim

[3] The 2020-2045 RTP/SCS succeeds the 2016-2040 RTP/SCS.

GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region" (VCAPCD 2011). Therefore, the South Coast Air Quality Management District (SCAQMD) considerations of GHG thresholds are described below.

### *South Coast Air Quality Management District*

Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of $CO_2$ equivalent per year ($MTCO_2e$/year) for industrial projects where the SCAQMD is the lead agency. The policy objective for establishing this significance threshold is to capture projects that represent approximately 90 percent of GHG emissions from new sources and to avoid Environmental Impact Report (EIR)-level analysis for relatively small impacts (SCAQMD 2008).

In September 2010, the Working Group proposed extending the 10,000 $MTCO_2e$/year screening threshold currently applicable to industrial projects where the SCAQMD is the lead agency, described above, to other lead agency industrial projects. For all other projects, SCAQMD staff proposed a multiple tier analysis to determine the appropriate threshold to be used. The draft proposal suggests the following tiers: Tier 1 is any applicable CEQA exemptions, Tier 2 is consistency with a GHG reduction plan, Tier 3 is a screening value or bright-line[4], Tier 4 is a performance-based standard, and Tier 5 is GHG mitigation offsets. According to the presentation given at the September 28, 2010, Working Group meeting, SCAQMD staff proposed a Tier 3 draft threshold of 3,000 $MTCO_2e$ per year for all non-industrial land use types (SCAQMD 2010). For the Tier 4 draft threshold, SCAQMD staff presented a percent emission reduction target option but did not provide any specific recommendation for a numerical target; instead it referenced the San Joaquin Valley Air Pollution Control District approach. The percent reduction target is based on consistency with AB 32 as it was based on the same numeric reductions calculated in the Scoping Plan to reach 1990 levels by 2020. The second Tier 4 option is to utilize efficiency targets: 2020 targets are 4.8 $MTCO_2e$ per year per service population (SP) for project-level thresholds where SP is project residents plus employees and 6.6 $MTCO_2e$ per year per SP for a plan-level threshold (SCAQMD 2010). Targets for 2035 are 3.0 $MTCO_2e$ per SP for project level thresholds and 4.1 $MTCO_2e$ per year per SP for plan level threshold. The Working Group has not convened since the fall of 2010. It is noted that judicial decisions in recent years and the acceleration of State GHG thresholds have indicated that use of the Tier 4 method could be legally challenged. As of the publication of this EIR, the proposal to establish a GHG threshold for developments like the Project has not been considered or approved for use by the SCAQMD Board but the methodology has been used by lead agencies to evaluate GHG impacts under CEQA.

## Local

The Conservation Element of the City of Moorpark General Plan contains policies specifically relating to the reduction of GHG emissions, including Goal COS-8 which calls for the City to support greenhouse gas emission reduction and comprehensive sustainability practices throughout the community.

[4] A bright-line is a single value, applicable to all projects of one type, regardless of size. Thus, a bright-line is different from performance standards or efficiency standards that are generally based on a per-unit basis.

### 4.7.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential greenhouse gas emissions (GHG). A project would result in a significant adverse impact related to GHG emissions if it would:

***Threshold 4.7-a*** ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.***

***Threshold 4.7-b*** ***Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.***

Based on the VCAPCD guidance stated above, SCAQMD-recommended quantitative screening GHG emissions thresholds are used for Threshold 4.7-a.

### 4.7.4 IMPACT ANALYSIS

***Threshold 4.7-a*** ***Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

**Less Than Significant Impact.**

**Construction Emissions**

Temporary impacts would result from Project construction activities. Construction GHG emissions are generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips. Construction GHG emissions were calculated by using CalEEMod. The results are output in $MTCO_2e$ for each phase and year of construction. The estimated construction GHG emissions for each phase of the Project are shown in Tables 4.7-1 through 4.7-4.

**TABLE 4.7-1**
**ESTIMATED GHG EMISSIONS**
**FROM PHASE 1 CONSTRUCTION**

| Year | Emissions ($MTCO_2e$) |
|---|---|
| 2023 | 188 |
| 2024 | 34.5 |
| **Total** | **222.5** |

$MTCO_2e$: metric tons of carbon dioxide equivalent
[a] Combined total amortized over 30 years

**TABLE 4.7-2**
**ESTIMATED GHG EMISSIONS**
**FROM PHASE 2 CONSTRUCTION**

| Year | Emissions ($MTCO_2e$) |
|---|---|
| 2027 | 10.8 |
| 2028 | 2.4 |
| **Total** | **13.2** |

$MTCO_2e$: metric tons of carbon dioxide equivalent
[a] Combined total amortized over 30 years

**TABLE 4.7-3**
**ESTIMATED GHG EMISSIONS**
**FROM PHASE 3 CONSTRUCTION**

| Year | Emissions ($MTCO_2e$) |
|---|---|
| 2030 | 406 |
| 2031 | 51.0 |
| **Total** | **457** |

$MTCO_2e$: metric tons of carbon dioxide equivalent
[a] Combined total amortized over 30 years

**TABLE 4.7-4**
**ESTIMATED GHG EMISSIONS**
**FROM PHASE 4 CONSTRUCTION**

| Year | Emissions ($MTCO_2e$) |
|---|---|
| 2035 | 277 |
| 2036 | 1.59 |
| **Total** | **278.59** |

$MTCO_2e$: metric tons of carbon dioxide equivalent
[a] Combined total amortized over 30 years

Therefore, it is estimated that total construction combined GHG emissions for all phases of the Project would be 971.29 $MTCO_2e$. Based on an SCAQMD recommendation, construction over the life of a project and a common value for project life is 30 years (SCAQMD 2008). Therefore, the 30-year amortized construction emissions would be 32 $MTCO_2e$/yr.

## Operational Emissions

Operational GHG emissions anticipated for the Project are estimated by including purchased electricity; natural use for space and water heating; the electricity embodied in water consumption; the energy associated with solid waste disposal; and mobile source emissions. For utilities use, CalEEMod default values for civic center, residential, commercial, and library buildings were used. The estimated annual GHG emissions for the Project were calculated and are shown in Table 4.7-5.

**TABLE 4.7-5**
**ESTIMATED ANNUAL GHG EMISSIONS AT PROJECT BUILDOUT**

| Source | Emissions $MTCO_2e/yr$ |
|---|---|
| **Project Uses** | |
| Mobile Sources | 3,388 |
| Area | 2 |
| Energy | 292 |
| Water | 22 |
| Waste | 65 |
| Refrigerants | <1 |
| Amortized construction emissions | 32 |
| ***Subtotal Project*** | **3,801** |
| **Existing uses to be replaced** | |
| Mobile | 1,251 |
| Area | <1 |
| Energy | 122 |
| Water | 12 |
| Waste | 50 |
| Refrigerants | <1 |
| ***Subtotal Existing*** | ***1,437*** |
| ***Net Increase – Project*** | **2,364** |

$MTCO_2e/yr$: metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas.
Note: Detailed calculations in Appendix C.

As shown in Table 4.7-5, the estimated annual project related GHG emissions, including amortized construction emissions, would be approximately 3,801 $MTCO_2e/yr$; however, the Project would replace existing uses which currently generate approximately 1,437 $MTCO_2e/yr$. Therefore, the Project would generate a net increase of 2,364 $MTCO_2e/yr$. This value is less than the proposed SCAQMD Tier 3 screening threshold of 3,000 $MTCO_2e/yr$ for all land uses. It is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change (OPR 2008); therefore, any impact would be considered on a cumulative basis. Because the Project's GHG emissions would be less than 3,000 $MTCO_2e/yr$, the emissions would not be cumulatively considerable. The Project would result in less than significant impacts related to this threshold, and no mitigation is required.

***Threshold 4.7-b*** ***Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

**Less Than Significant Impact.** As discussed further above, under Section 4.7.2, Regulatory Setting, on June 1, 2005, the California Governor signed Executive Order S-3-05, which calls for a reduction in GHG emissions to year 2000 levels by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The principal overall State plan and policy adopted for the purpose of reducing GHG emissions is AB 32 (California Global Warming Solutions Act of 2006). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020, through its 2008

Scoping Plan. In 2016, the Legislature passed Senate Bill 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation Assembly Bill 197, which provides additional direction for developing the Scoping Plan.

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires a MPO to adopt a sustainable communities strategy or alternative planning strategy that will address land use allocation in their regional transportation plans. SB 375 is being addressed at the State and regional levels, and the principles of SB 375 are incorporated in SCAG's RTP/SCS.

California EO B-30-15 set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030 and directed State agencies with jurisdiction over GHG emissions to implement measures pursuant to their statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels.

As discussed above the State policy and standards adopted for the purpose of reducing GHG emissions that are applicable to the Project are Executive Order S-3-05, AB 32, and SB 32. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020 to 80 percent below 1990 levels by 2050, and for SB 32, to 40% below 1990 levels by 2030. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the Statewide level, and compliance at a project level is not addressed. Therefore, the Project does not conflict with these plans and regulations.

However, for purposes of this analysis, a consistency analysis is provided in Table 4.7-6, Scoping Plan Measures Consistency Analysis, for the applicable portions of the Scoping Plan Reduction Measures (CARB 2008). As described in Table 4.7-6, the Project is consistent with applicable strategies, while others are not applicable to the Project. Therefore, the Project would result in less than significant impacts related to this threshold and no mitigation is required.

**TABLE 4.7-6**
**SCOPING PLAN MEASURES CONSISTENCY ANALYSIS**

| Scoping Plan Reduction Measure | Project Consistency |
|---|---|
| 1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions<br>Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms. | **Not Applicable**. The Cap and Trade program has begun. However, this Project is not targeted by the cap-and-trade system regulations, and that program is therefore not applicable to this Project. |
| 2. California Light-Duty Vehicle Greenhouse Gas Standards<br>Implement adopted Pavley 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. | **Not applicable**. This is a Statewide measure that cannot be implemented on a project level, but the standards for light-duty vehicles would be applicable for light-duty vehicles that access the Project Site. |
| 3. Energy Efficiency | **Consistent.** This measure is for the State to increase its energy efficiency standards. However, the Project would |

## TABLE 4.7-6
## SCOPING PLAN MEASURES CONSISTENCY ANALYSIS

| Scoping Plan Reduction Measure | Project Consistency |
|---|---|
| Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly-owned utilities). | be consistent with this measure because it would be required as applicable to comply with the latest Title 24 energy efficiency standards as required by **COA GHG-1**. The standards encourage demand responsible technologies, such as battery storage and heat pump water heaters to improve the buildings' thermal envelope through high-performance attics, walls, and windows. |
| 4. Renewables Portfolio Standard<br>Achieve 33 percent renewable energy mix statewide. | **Not Applicable**. This measure is for the State to increase its renewable use statewide. However, Southern California Edison (SCE), the electricity provider for the site, is required, through SB 2 (1x) to achieve a 33 percent renewable energy mix by 2020. It is also subject to the Renewable Portfolio Standards which require progressively increasing renewable energy sources of electricity generation and eventual phase-out of fossil fueled based energy generation by the year 2045. |
| 5. Low Carbon Fuel Standard<br>Develop and adopt the Low Carbon Fuel Standard. | **Not applicable**. This is a statewide measure that cannot be implemented at the Project level but Project vehicles subject to this requirement will comply. |
| 6. Regional Transportation-Related Greenhouse Gas Targets<br>Develop regional greenhouse gas emissions reduction targets for passenger vehicles. | **Not applicable**. This is a statewide measure. The Project is not related to developing GHG emissions reduction targets for passenger vehicles. |
| 7. Vehicle Efficiency Measures<br>Implement light-duty vehicle efficiency measures. | **Not applicable**. This is a statewide measure that cannot be implemented on a Project level, but the standards for light-duty vehicles would be applicable for light-duty vehicles that access the Project Site. |
| 8. Goods Movement<br>Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities. | **Not Applicable**. The Project does not propose any changes to goods movement activities, including maritime, intermodal facilities, or forms of transportation. |
| 9. Million Solar Roofs Program<br>Install 3,000 MW of solar-electric capacity under California's existing solar programs. | **Consistent**. This measure is for the State to increase solar throughout California, which is being completed by electricity providers and existing solar programs. The Project would comply with 2019 Title 24 standards as applicable for the Project by **COA GHG-1**. |
| 10. Medium/Heavy-Duty Vehicles<br>Adopt medium and heavy-duty vehicle efficiency measures. | **Not applicable.** This is a statewide measure that cannot be implemented on a Project level, but the standards for medium and heavy-duty vehicles would be applicable for medium- and heavy-duty vehicles that access the Project Site, such as for vendor trips during construction or for deliveries during operations of the Project. |
| 11. Industrial Emissions<br>Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries. | **Not applicable.** This measure would apply to the direct GHG emissions at major industrial facilities emitting more than 500,000 $MTCO_2e$ per year. The Project is a residential, governmental, commercial, and recreational land use development project that would generate substantially less than 3,000 $MTCO_2e$/yr (see Table 4.7-5, Estimated Annual GHG Emissions at Project Buildout). |
| 12. High Speed Rail<br>Support implementation of a high speed rail system. | **Not applicable.** This is a Statewide measure that cannot be implemented by a Project applicant or lead agency. |

**TABLE 4.7-6**
**SCOPING PLAN MEASURES CONSISTENCY ANALYSIS**

| Scoping Plan Reduction Measure | Project Consistency |
|---|---|
| | The Project would not prevent implementation of a high speed rail project. |
| 13. Green Building Strategy<br>Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. | **Consistent**. The Project would comply with the CEC as applicable through compliance with Title 24 building standards, as required by **COA GHG-1,** and would therefore incorporate applicable energy efficiency features designed to reduce energy consumption. |
| 14. High Global Warming Potential Gases<br>Adopt measures to reduce high global warming potential gases. | **Consistent**. This measure is applicable to the high global warming potential gases that would be used by sources with large equipment (such as in air conditioning). The Project would be required to comply with all CARB requirements for the Stationary Equipment Refrigerant Management Program. |
| 15. Recycling and Waste<br>Reduce methane emissions at landfills. Increase waste diversion, composting, and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste. | **Consistent**. The Project would reduce waste with implementation of State-mandated recycling and reuse mandates for construction and operations activities, including compliance with the CALGreen code. |
| 16. Sustainable Forests<br>Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. | **Not applicable.** The Project is not in a forested area, and therefore, preservation of on-site forest biomass is not applicable. |
| 17. Water<br>Continue efficiency programs and use cleaner energy sources to move and treat water. | **Not applicable.** This measure is for State and local agencies. |
| 18. Agriculture<br>In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020. | **Not applicable.** The Project Site is not designated for agricultural use by the County of Ventura General Plan. No grazing or other agricultural activities that could generate manure are proposed to occur at the Project Site. |
| Source: CARB 2008 | |

Additionally, a consistency analysis with applicable General Plan policies is provided below in Table 4.7-7, General Plan Consistency Analysis.

**TABLE 4.7-7**
**GENERAL PLAN CONSISTENCY ANALYSIS**

| General Plan Policy | Project Consistency |
|---|---|
| **COS 8.1**<br>Greenhouse gas reduction: Reduce community-wide and city operations greenhouse gas (GHG) emissions from vehicles, residential, and nonresidential energy use, waste generation, water and wastewater collection and treatment, off-road uses, and other GHG emission sources to meet or exceed the State's goal to achieve carbon neutrality by 2045. | **Consistent**. The Project would be consistent with this measure because it would be required, as applicable, to comply with the latest Title 24 energy efficiency standards as required by **COA GHG-1**. Additionally, the Project would reduce waste with implementation of State-mandated recycling and reuse mandates for construction and operations activities, including compliance with the CALGreen code. |
| **COS 8.2**<br>Climate action plan: Work collaboratively with regional agencies, neighboring cities, community-based organizations, businesses, and other partners, as appropriate, to develop and implement a Climate Action Plan to address statewide GHG reduction and elimination goals, including those of Assembly Bill 1279, Executive Order B-55-18, Senate Bill 32, and Executive Order S-03-05. | **Not Applicable**. This measure is for the City to implement a new Climate Action Plan. As such, this is a citywide measure that cannot be implemented on a Project level. |
| **COS 8.3**<br>Environmental education: Develop and implement a public information program on environmentally responsible and sustainable practices that can: (1) educate community residents as to the nature of these issues, opportunities for public input and dates and times of public participation meetings, hearings, workshops, etc., and (2) respond to current local issues and problems associated with environmental responsibility and sustainability. | **Not Applicable**. This measure is for the City to implement an education program. As such, this is a citywide measure that cannot be implemented on a Project level. |
| **COS 8.4**<br>Expanded environmental programs: Explore and promote opportunities for additional environmentally responsible and sustainable programs and practices for community residents and visitors, businesses, and city operations. | **Not Applicable**. This measure is for the City to implement City environmental programs. As such, this is a citywide measure that cannot be implemented on a Project level. |
| Source: Moorpark 2023 | |

## 4.7.5 CUMULATIVE IMPACTS

As noted above, it is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change; therefore, any impact would be considered on a cumulative basis. As described above, GHG emissions would not exceed the proposed SCAQMD screening threshold for development projects; therefore, the Project's cumulative impacts would be less than significant.

## 4.7.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA GHG-1** The Project is required to comply with the requirements established under the Title 24 development standards.

**Mitigation Measures**

No significant impacts pertaining to greenhouse gas emissions were identified; therefore, no mitigation measures are required.

## 4.7.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.7.8 REFERENCES

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# 4.8 HAZARDS AND HAZARDOUS MATERIALS

## 4.8.1 EXISTING CONDITIONS

### On-Site Development

The Project Site contains the City Hall and Library buildings, which were developed with several wood-frame and modular buildings, surface parking lots, a playground, and landscaped areas. The wood-frame structures were built in the 1980s and the modular buildings were added in the mid-2000s.

The vacant parcels located south of the Library do not contain any above-ground structures, except for chain link fencing and driveways extending north from West High Street. This area is relatively flat and was formerly developed with single-family residences and a mobile home park. The City acquired these parcels in 2001. The mobile home park was relocated in 2004 and the single-family units were demolished in 2009 and 2010.

The western portion of the Project Site contains limited vegetation, a concrete-lined above and below ground drainage channel, and wooden utility poles. This western section was formerly part of Moorpark Memorial High School's athletic fields. A chain-link fence runs along the western and southern boundaries of this area. This portion of the site is approximately 50 to 60 feet lower in elevation than the adjacent area now occupied by the Walnut Canyon Elementary School (formerly Moorpark Memorial High School). The southern portion of the Project Site contains a surface parking lot associated with the off-site United States Post Office.

### Listed Sites within the Project Site

Listed sites include both permitted facilities whose operations use, produce, or transport hazardous materials and the locations of reported releases and/or cleanup operations (remediation). A single site can be listed in multiple databases. The complete list of databases searched and identified sites can be found in the environmental database report (EDR) prepared for this Project, which is provided as Appendix I of this environmental impact report (EIR). Based on the EDR report, the following sites are listed as being within the Project Site boundaries:

**TABLE 4.8-1**
**LISTED SITES WITHIN THE PROJECT SITE**

| Site Name | Address | Distance |
|---|---|---|
| City of Moorpark Integrated Vector Management Program | 799 Moorpark Avenue | 0 mi |
| Javier Magdaleno | 799 Moorpark Dr | 0 mi |
| City of Moorpark | 799 Moorpark | 0 mi |
| City of Moorpark Civic Center | 799 Moorpark Ave | 0 mi |
| City of Moorpark/REDEV | 661 Moorpark Ave | 0 mi |
| JEMCO Plumbing | 675 Moorpark Ave | 0 mi |
| Moorpark Cleaners | 675 Moorpark Ave | 0 mi |
| Dennis A Gottlieb | 100 W High St #300 | 0 mi |
| Bug Mechanic Pest Control and Landscape Control | 100 W High St #300 | 0 mi |
| Source: EDR 2022. | | |

## Surrounding Land Uses

The Project Site is generally bordered by residential, commercial, public and institutional structures, vacant land, and railroad tracks. As noted in the EDR report an industrial use at Poindexter Street is listed in the Resource Conservation and Recovery Act (RCRA) database as a small quantity generator of hazardous waste. The Ventura County Yard is a solid waste facility located off of the Project Site. A number of gas stations and other facilities with underground fuel storage tanks are also located on Moorpark Avenue, East High Street, Flory Avenue, Walnut Street, Poindexter Avenue, and New Los Angeles Avenue. In addition, two sites located off-site to the north and west of the Project Site are identified as contaminated sites in the California Department of Toxic Substances Control's Envirostor database. Other hazardous material users in the area include dry cleaners, groceries, auto repair shops, the Moorpark Unified School District, fire stations, clinics, and various industrial uses. Listed sites near the Project Site are described in Table 4.8-2.

**TABLE 4.8-2**
**LISTED SITES NEAR THE PROJECT SITE**

| Site Name | Address | Distance |
|---|---|---|
| Patton S Union Station | 589 Moorpark Ave | .002 mi |
| Metrolink Moorpark Layover | 585 N Moorpark Ave | .002 mi |
| Towry S Shirley Chevron Service | 499 Moorpark Ave | .005 mi |
| AA Moorpark Transmission | 21 W High St | .011 mi |
| Fire Station #42 | 782 Moorpark Ave | .015 mi |
| Moorpark Fire Station | 782 Moorpark Ave | .015 mi |
| City of Moorpark | Charles St | .016 mi |
| A&P ARCO | 18 E High St | .017 mi |
| UNOCAL #1696 | 18 E High St | .023 mi |
| City of Moorpark | 530 ½ N Moorpark Ave. | .041 mi |
| Primo Corp | 31 Poindexter Ave. | .047 mi |
| Cascade Sprinkler | 177 Poindexter Ave. | .061 mi |
| Seacon Construction INC. | 175 Poindexter Ave. | .065 mi |
| CE & D MABRY Family Limited | 137 E. High St. | .067 mi |
| Moorpark Garage | 661 Walnut St. | .070 mi |
| City of Moorpark | 661 Walnut St. | .070 mi |
| Dick's Garage | 690 Walnut St. | .084 mi |
| Gail Covate | 80 1st Street | .098 mi |
| Rancho Cleaners | 419 Moorpark Ave. | .126 mi |
| Gifford Runkle | 393 McFadden Ave. | .151 mi |
| Texaco Station | 347 Moorpark Ave. | .192 mi |
| Francisco and Delia Morales | 507 Millard St. | .203 mi |
| Ann Dowd | 445 Millard St. | .225 mi |
| Source: EDR 2022. | | |

## 4.8.2 REGULATORY SETTING

### Federal

#### *Hazardous Materials Transportation*

The Hazardous Materials Transportation Act administered by the U.S. Department of Transportation governs the transport of hazardous materials, such as contaminated soil, asbestos, or lead-containing materials. The California Department of Transportation (Caltrans) implements the federal regulations published as Title 49 of the Code of Federal Regulations (CFR), which is known as the Hazardous Materials Transportation Act. These laws regulate the handling and transport of hazardous waste materials.

#### *Hazardous Materials Management*

The Federal Resource Conservation and Recovery Act (RCRA) was enacted in 1976 and mandated a national waste management program. Under the RCRA regulations, as established by the United States Environmental Protection Agency (EPA), hazardous wastes must be tracked from the time of generation to the point of disposal. The RCRA program also sets standards for hazardous waste treatment, storage and disposal, which is intended to have hazardous wastes managed in a manner that minimizes the present and future threat to the environment and human health. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days, or treated or disposed at a facility, any treatment, storage or disposal unit must be permitted under RCRA. EPA has largely delegated responsibility for implementing the RCRA program in California to the Department of Toxic Substances Control (DTSC), an agency within the California Environmental Protection Agency (CalEPA), which implements this program through the California Hazardous Waste Control Law (discussed below). While it is possible that future residential land uses at the Project Site may generate or handle small quantities of hazardous wastes, the Project would not generate hazardous wastes in quantities that would subject such uses to RCRA requirements.

#### *Occupational Safety and Health*

Federal worker safety and health laws contain provisions with respect to hazardous materials management. The applicable federal law is the Occupational Safety and Health Act of 1970, as amended, which is implemented by the Occupational Safety and Health Administration (OSHA) (29 U.S.C., sec. 651-678). Federal OSHA requirements, set forth in 29 Code of Federal Regulations Section 1910, et. seq., are designed to promote worker safety, worker training, and worker right--to-know. A significant component of the federal OSHA regulations is the requirement that employers implement the OSHA Hazard Communication Standard (HCS), in order to provide information to employees about the existence and potential risks of exposures to hazardous substances in the workplace. As part of the HCS, employers must (1) obtain material safety data sheets (MSDSs) from chemical manufacturers which identify the types and handling requirements of hazardous materials used in given areas; (2) make the MSDSs available to their employees; (3) label chemical containers in the workplace; (4) develop and maintain a written hazard communication program; (5) and develop and implement programs to train employees about hazardous materials. Future uses at the Project Site, including the pool area, would be subject to these OSHA requirements if the use involves chemical storage or handling.

### *Soil/Groundwater Contamination*

The Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. Section 9601, et. seq. (CERCLA) was enacted in 1980, and principally sets forth a framework for the remediation of hazardous waste disposal sites and other contaminated sites. CERCLA provides that generators and transporters of hazardous substances, and owners and operators of facilities at which there has been a release of hazardous substances, are liable for the costs of the removal and remedial actions and can be ordered to perform the actions.

## State

### *California Hazardous Waste Control Act*

The California Hazardous Waste Control Act (HWCA), as found in Sections 25100, et seq. of the California Health and Safety Code, authorizes the California Department of Toxic Substances Control (DTSC) and local Certified Unified Program Agencies (CUPAs) to regulate facilities that generate or treat hazardous waste. The HWCA authorizes the CUPAs to:

- Conduct inspections of any factory, plant, construction site, waste disposal site, transfer station or the establishment or any other place or environment where hazardous wastes are stored, handled, processed, disposed of, or being treated to recover resources.
- Maintain records of compliance with the HWCA.
- Require hazardous waste generators to pay inspection and administration fees to cover the costs of administering the provisions in the HWCA. Fees may include but shall not be limited to the costs of inspection, documentation of development and processing, recordkeeping, enforcement activities, and informational materials development and distribution.
- Allow authorization eligible persons to conduct on-site treatment of hazardous wastes pursuant to permit-by-rule, conditional authorization, or conditional exemption.
- Enforce against violations of the HWCA.

### *Asbestos Abatement*

Asbestos, a naturally occurring fibrous material, was used for years in many building materials for its fire-proofing and insulating properties. Loose insulation, ceiling panels, and brittle plaster are potential sources of friable (easily crumbled) asbestos. Nonfriable asbestos is generally bound to other materials such that it does not become airborne under normal conditions. Any activity that involves cutting, grinding, or drilling during demolition can release friable asbestos fibers unless proper precautions are taken. Inhalation of airborne fibers is the primary mode of asbestos entry into the body, which makes friable materials the greatest potential health risk.

Asbestos is a known human carcinogen; there is no known threshold level of exposure at which adverse health effects are not anticipated. Given this, the U.S. Environmental Protection Agency (USEPA) and California Environmental Protection Agency (CalEPA) have identified asbestos as a hazardous air pollutant pursuant to Section 12 of the Federal Clean Air Act. Further, the California Air Resources Board (CARB) has identified asbestos as a Toxic Air Contaminant (TAC) pursuant to the California Health and Safety Code (§§39650 et seq.). Asbestos is also regulated as a potential worker safety hazard under the authority of the California Occupational Safety and Health Administration (CalOSHA). These rules and regulations prohibit emissions of asbestos from asbestos-related demolition or construction activities; require medical examinations and

monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. Because of the age of the facilities and structures on the Project Site, asbestos may be present and would have to be abated if those facilities and structures are demolished, removed, relocated, or otherwise altered in a manner that may result in a release of asbestos into the atmosphere.

In California, asbestos abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. In addition, CalOSHA has regulations to protect worker safety during potential exposure to asbestos under Title 8 of the California Code of Regulations (§1529, Asbestos). All demolition that could result in the release of asbestos must be conducted according to CalOSHA standards. These standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials. Young children, the elderly, and people in poor health may be more susceptible to adverse health effects from exposure to asbestos released to the environment.

### *Lead Abatement*

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint; water pipes; solder in plumbing systems; soils around buildings; and structures painted with lead-based paint. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million [ppm]). However, some paints manufactured after 1978 for industrial uses or marine uses legally contain more than 0.06 percent lead. Because of its toxic properties, lead is regulated as a hazardous material. Lead is also regulated as a TAC. Because of the age of the facilities and structures on the Project Site, lead from paint may be present and would have to be abated if those facilities and structures are demolished, removed, relocated, or otherwise altered in a manner that may result in a release of lead into the atmosphere. As discussed further in the analysis below, laboratory testing on Project Site soils indicates that there are no metals present above regulatory limits.

In California, lead abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. In addition, CalOSHA has safety regulations to protect workers during potential exposure to lead under Title 8 of the California Code of Regulations (§1532.1, Lead). All demolition that could result in the release of lead must be conducted according to CalOSHA standards. These standards were developed to protect the general population and construction workers from respiratory illness and other hazards associated with exposure to these materials. Young children, the elderly, and people in poor health may be more susceptible to adverse health effects from exposure to lead released to the environment.

### *Certified Unified Program Agency*

In 1993, Senate Bill 1082 created the CUPA to foster effective partnerships between local, State and federal agencies. The program consolidated the administrative activities, permits, inspections, and enforcement activities of the following environmental and emergency management programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans);
- The California Accidental Release Prevention Program;

- The Underground Storage Program;
- The Aboveground Petroleum Storage Act Program;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs; and
- The California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements.

CUPA is implemented at the local level by government agencies certified by the Secretary of CalEPA. The CUPA for Ventura County is the Ventura County Fire Department.

### 4.8.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential hazards and hazardous materials impacts. Impacts to hazards and hazardous materials would be significant if the Project would:

***Threshold 4.8-a*** ***Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.***

***Threshold 4.8-b*** ***Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.***

***Threshold 4.8-c*** ***Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.***

***Threshold 4.8-d*** ***Would 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.***

***Threshold 4.8-e*** ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.***

***Threshold 4.8-f*** ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.***

***Threshold 4.8-g*** ***Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.***

## 4.8.4 IMPACT ANALYSIS

***Threshold 4.8-a*** ***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

**Less than Significant Impact.** The Project would not involve the routine use, transport, handling, or storage of hazardous materials on-site. The proposed land uses are limited to residential, commercial, and institutional, and no industrial or manufacturing land uses would be developed which routinely utilize hazardous materials. The Project would result in the on-site handling of materials that are common in similar residential developments, such as commercial cleansers, solvents and other janitorial or industrial use materials; paints; and landscape fertilizers/pesticides. While many such common materials are technically labeled "hazardous", the presence of such materials is common in a residential environment and the quantities of these materials would be relatively limited, and would not represent a significant hazard to the public or the environment. The Project would not generate hazardous emissions, nor would it involve transport, use, or disposal of hazardous materials that would create a substantive hazard to the public or environment.

Given the age of the existing facilities, it is possible asbestos and lead-based paint could be present in the building materials and require specialized removal and disposal. As required by **COA HAZ-1** and **COA HAZ-2**, adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials as well as the safety procedures mandated by applicable federal, State, and local laws and regulations. The Project would result in less than significant impacts related to this threshold, and no mitigation measures are either required or recommended.

**Threshold 4.8-b** ***Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

**Less than Significant Impact.** Project construction activities routinely involve the use and handling of limited volumes of commonly used hazardous materials, such as petroleum (fuel), paints, adhesives, and solvents. During construction, there is a limited risk of spills and/or accidental release of hazardous materials that are used for the operation and maintenance of construction equipment. The on-site temporary handling, storage, and usage of these materials would be subject to applicable local, State, and/or federal regulations in accordance with **COA HAZ-1** and **COA HAZ-2**.

As discussed previously, it is possible that lead-based paints (LBPs), asbestos-containing materials (ACMs), and/or other common hazardous building materials may be encountered during demolition. Demolition of buildings and facilities containing ACM that have not been properly abated would cause ACM to become friable and airborne, thus causing a danger from inhalation. Demolition of buildings/structures and facilities containing LBPs, polychlorinated biphenyl (PCB)-containing lighting ballasts, and mercury-containing thermostats or fluorescent light tubes that have not been properly abated would cause a danger from inhalation, direct absorption through the skin, and ingestion of impacted soils. Although this would be a potentially significant impact, various federal and State regulations governing testing and abatement of ACM, LBPs, PCB-containing lighting ballasts, and/or mercury containing thermostats or fluorescent light tubes require that buildings/structures and facilities containing these materials must be properly tested

and abated prior to demolition or renovation for reuse. **COA HAZ-3** requires testing and proper abatement of materials deemed hazardous prior to the issuance of a demolition permit.

With implementation of **COA HAZ-1** through **COA HAZ-3**, the Project would result in less than significant impacts related to this threshold, and no mitigation measures are either required or recommended.

**Threshold 4.8-c** ***Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

**Less than Significant Impact.** Walnut Canyon School and Chaparral Middle School are located within 0.25 mile of the Project Site. However, the Project would not develop land uses that involve the use, storage, or transport of acutely hazardous materials that represent a significant hazard to the public or the environment. During Project operations, the Project would result in the routine on-site handling of materials that are common in similar developments, such as commercial cleansers, solvents, and other janitorial or industrial use- materials and would be subject to applicable State, and federal regulations. As noted above, hazardous materials utilized during Project construction would be stored, transported, and used according to applicable regulations and ordinances. Therefore, the Project would result in less than significant impacts related to this threshold, and no mitigation measures are either required or recommended.

***Threshold 4.8-d Would the project 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.** Government Code Section 65962.5 requires the development of a hazardous waste and substances site list, also known as the Cortese List, which provides the location of known hazardous materials release sites. According to the EDR search conducted for the Project in 2022, as well as a search of the DTSC's ENVIROSTOR database that was conducted by Psomas in 2022, which consists of a search of selected government databases for potential environmental concerns in the vicinity of the Project Site (e.g., "listed sites"), no Cortese List properties occur within the Project Site (DTSC 2022). Therefore, no impact would result from implementation of the Project, and no mitigation measures are either required or recommended.

***Threshold 4.8-e For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of 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 Project Site is not located within an airport land use plan, within two miles of a public airport, or near a private airstrip. The Burbank, Van Nuys, and Oxnard commuter airports are the nearest airports and they are located over 35 miles away from the Project Site. Therefore, the Project would have no impact related to this threshold and no mitigation is required.

**Threshold 4.8-f** ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

**Less Than Significant Impact.** As described in further detail in response to threshold 4.18-a in Section 4.18, Wildfire, the Project would not substantially conflict with any of the applicable emergency response or evacuation plans including the County's Multi-Jurisdictional Hazard

Mitigation Plan, the County's Emergency Operations Plan, and the City's Emergency Operations Plan. Therefore, the Project would result in less than significant impacts related to this threshold, and no mitigation is required.

**Threshold 4.8-g** ***Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

**Less Than Significant Impact.** The Project Site is located within a Very High Fire Hazard Severity Zone (VHFHSZ), and is partially developed with buildings and other development and contains scattered ornamental vegetation. The western portion of the Project Site is previously graded and currently vacant, with low herbaceous vegetation growth. As such, there exists a potential for wildfire risk to future users and structures within the Project Site.

The Project would be constructed in compliance with the latest California Fire Code as well as the California Building Code, which contain regulations for safeguarding life and property from fire (ICC 2019; CBSC 2018). During design of Project structures, the establishing and ongoing maintenance of fuel modification zones may be required to minimize wildfire risk to Project buildings. With incorporation of California Building Code, the Project would have less than significant impacts related to this threshold, and no mitigation is required.

## 4.8.5 CUMULATIVE IMPACTS

Existing structures within the Project Site that would be demolished may contain asbestos and lead based paint. Also, during construction a limited amount of commonly used hazardous materials such as petroleum (fuel), paints, adhesives, and solvents would be utilized. As required by **COA HAZ-1** and **COA HAZ-2**, adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials as well as the safety procedures mandated by applicable federal, State, and local laws and regulations. Similarly, LBP, ACMs, and PCB could be encountered during construction which would be avoided through compliance with **COA HAZ-3**. Other cumulative projects would similarly be required to implement federal, State, and local laws to minimize their potential impacts, which would avoid cumulatively significant impacts related to these thresholds.

The Project would not conflict with any adopted emergency response or evacuation plan. Therefore, the Project would not conflict with any such plans individually or cumulatively when considered with the cumulative projects.

The Project as well as most of the cumulative projects are located within VHFHSZ's; therefore, the Project and cumulative projects would expose people and structures to wildland fires. Cumulatively considerable impacts related to wildfire would be avoided given that the Project and other cumulative projects would be built in conformance with the California Fire Code and California Building Code which would reduce potential fire risk.

Given these considerations, the Project would not result in cumulative impacts related to hazards and hazardous materials.

## 4.8.6 MITIGATION PROGRAM

### Conditions of Approval

**COA HAZ-1** Applicant/operator shall store, manifest, transport, and dispose of all on-site generated waste that meets hazardous waste criteria in accordance with California Code of Regulations Title 22 and in a manner to the satisfaction of the Manager, HCA/Hazardous Materials Program. Applicant shall keep storage, transportation, and disposal records on site and open for inspection to any government agency upon request.

**COA HAZ-2** Transport of materials deemed as hazardous must comply with the requirements of Title 22, Division 4.5 of the California Code of Regulations, the U.S. Department of Transportation regulations in the Code of Federal Regulations (specifically, Title 49, Hazardous Materials Transportation Act and Title 40, Part 263, Subtitle C of Resource Conservation and Recovery Act), California Department of Transportation (Caltrans) standards, and Occupational Safety and Health Administration (OSHA) standards.

**COA HAZ-3** Prior to issuance of a demolition permit for any buildings or facilities, building materials shall be assessed by a qualified Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 for the presence of lead-based paints (LBPs), asbestos-containing materials (ACM), and other common hazardous building materials (e.g., polychlorinated biphenyl [PCB]-containing lighting ballasts and mercury-containing light tubes and switches). If determined to be present, the Applicant shall prepare an abatement plan for their removal and safe transport in compliance with State and federal regulations, including Occupational Safety and Health Administration (OSHA) regulations in the Code of Federal Regulations (specifically Title 29, Part 1926) and South Coast Air Quality Management District (SCAQMD) Rule 1403. The abatement plan shall meet the satisfaction of the Manager, Orange County Health Care Agency (OCHCA)/Hazardous Materials Program.

### Mitigation Measures

No significant impacts pertaining to hazards and hazardous materials were identified; therefore, no mitigation measures are required.

## 4.8.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.8.8 REFERENCES

Department of Toxic Substances Control. 2022 (October 6, access date). ENVIROSTOR. Sacramento, CA: DTSC. https://www.envirostor.dtsc.ca.gov/public/

Environmental Data Resources, Inc. (EDR) 2022 (May). The Radius Map™ Report with GeoCheck®. Shelton, CT: EDR.

Oakridge Geoscience, Inc. 2017 (June 17). Preliminary Geotechnical Report Proposed Moorpark Library Moorpark, California. Camarillo, CA: OGI.

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# 4.9 HYDROLOGY AND WATER QUALITY

## 4.9.1 EXISTING CONDITIONS

### Hydrologic Setting

Moorpark is located within the Calleguas Creek Watershed, a 343-square-mile watershed in the southeastern section of Ventura County and western Los Angeles County. The watershed is approximately 30 miles long and 14 miles wide. The northern boundary of the watershed is formed by the Santa Susana Mountains, South Mountain, and Oak Ridge; the southern boundary is formed by the Simi Hills and Santa Monica Mountains. The Arroyo Simi begins in the Santa Susana Mountains and generally runs west and southwest through the Simi Valley; becoming Arroyo Las Posas through Las Posas Valley, Little Simi Valley and Pleasant Valley; and as Calleguas Creek through the Oxnard Plain to Mugu Lagoon and the Pacific Ocean. Discharges into these creeks include storm water runoff; water from dewatering wells; treated wastewater effluent; and urban runoff. Arroyo Simi was historically an ephemeral stream but year-round discharges from a dewatering well and of treated effluent have led to continuous flows into this creek (State Water Board 2022).

#### *Existing Site Drainage Conditions and Infrastructure*

Storm water runoff from the existing Civic Center parking areas flows east toward Moorpark Avenue and Charles Street; it then flows south to and west on West High Street toward a drainage channel along West High Street. Runoff from the building areas drains into the Walnut Canyon drainage channel, which is an open concrete channel along the western boundary of the existing Civic Center that conveys flows from Walnut Canyon and Casey Road. The Walnut Canyon drainage channel becomes an underground culvert as it crosses the Project Site. Located within a 50-foot-wide easement, it is a reinforced concrete box under High Street (Moorpark Storm Drain Number 1), but reverts back to an open concrete channel past the terminus of West High Street. The concrete box parallels the railroad tracks, eventually tying into the Arroyo Las Posas to the southwest. The facility is owned and maintained by the Ventura County Watershed Protection District. Runoff from the southern portion of the Project Site flows south toward West High Street and into the same drainage channel. Storm water originating from the vacant lots south and west of the existing Civic Center primarily percolates into the ground.

### Flood Hazards

The Project Site contains areas that are identified as being within the 500-year floodplain. Aditionally, the 100-year flows are conveyed through the Project Site within the concrete-lined Walnut Canyon drainage channel (FEMA 2022). The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site.

### Dam Inundation

The Bard Reservoir (or Wood Ranch Reservoir) is an 11,000-acre-foot dam owned by the Calleguas Municipal Water District (MWD) and is located east of State Route (SR) 23 approximately 4.4 miles southeast of the Project Site. In the event of dam failure, a large area of Little Simi Valley (in the cities of Simi Valley, Moorpark, and Camarillo) would flood, including the

Project Site. Reservoir 7 is also located upstream (northeast) of the Project Site and may release waters that would flow into the Project Site upon tank failure.

## Surface Water Quality and Designated Beneficial Uses of Receiving Waters

### *Beneficial Uses of Receiving Waters*

A beneficial use is one of the various ways that water can be used for the benefit of people and/or wildlife. Beneficial uses and specific water quality criteria for discharges comprise water quality standards for surface (navigable) waters, as defined by Section 303 of the federal Clean Water Act (CWA) (33 United States Code [USC] §1313). Under the Porter-Cologne Act (California Water Code, §13050) these concepts are separately considered as beneficial uses and water quality objectives. Twenty-three beneficial uses are defined statewide. The Los Angeles Regional Water Quality Control Board (RWQCB) has identified the beneficial uses of the watersheds in Ventura County in its Basin Plan. The Calleguas Creek Reach 6 (Arroyo Las Posas), where runoff from the Project Site drains into, has the following beneficial uses (LARWQCB 2020): Groundwater Recharge (GWR); Freshwater Replenishment (FRSH)' Warm Freshwater Habitat (WARM); and Wildlife Habitat (WILD). It has the following potential beneficial uses (LARWQCB 2020): Municipal and Domestic Supply (MUN); Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR); and Cold Freshwater Habitat (COLD).

The SWRCB lists Calleguas Creek Reach 6 as an impaired water body under Section 303(d) of the Clean Water Act. The creek is considered impaired for ammonia, chloride, dichlorodiphenyltrichloroethane (DDT - sediment), fecal coliform, nitrate and nitrite, nitrate as nitrate (NO3), sedimentation/siltation, sulfates, total dissolved and solids (LARWQCB 2003). These impairments are due to both point sources and non-point sources that discharge runoff into Calleguas Creek.

## Groundwater Resources

The City is underlain by the Las Posas groundwater basin, which is divided into the West, East, and South basins. The northern edge of the City is underlain by the East Las Posas Basin and the rest of the City is underlain by the South Las Posas Basin. The East and West Las Posas Basins underlie 34,400 acres in the South Mountain area, with groundwater levels between 100 to 800 feet below surface. These basins have approximately 3.0 million acre-feet of capacity, with annual withdrawals of 20,030 to 36,000 acre-feet.

The South Las Posas Basin underlies 9,500 acres along Arroyo Las Posas, with groundwater levels approximately 40 feet below the surface. This basin has approximately 1.25 million acre-feet of capacity with annual withdrawals of 1,830 to 2,300 acre-feet (Calleguas Municipal Water District 2004).

Increasing groundwater levels in the East and South Las Posas Basins are attributed to the decrease in agricultural use because of the availability of imported water and percolation of discharges of treated wastewater effluent and dewatering operations in the western portion of the City of Simi Valley. Salinity of the groundwater has also increased as increases in groundwater levels have occurred. Chloride, sulfate, and sodium concentrations in the groundwater have increased over time along the Arroyo Las Posas and have moved from the shallow aquifer to the lower aquifer system and from the South Las Posas Basin into the East Las Posas Basin.

The Basin Plan also identifies the beneficial uses of groundwater basins. The existing beneficial uses of the Las Posas Basin include Municipal and Domestic Supply, Industrial Service Supply, Industrial Process Supply, and Agricultural Supply.

Groundwater was encountered in deeper borings at depths of 36 to 37.5 feet below existing surface grade. The historically highest groundwater level was approximately 15 feet below ground level. It should be noted that fluctuations in the level of the groundwater may occur due to climatic conditions and/or alterations in the existing groundwater recharge area (i.e., changes in landscaping irrigation rates, surface drainage, and surface water infiltration conditions) (OGI 2017).

### 4.9.2 REGULATORY SETTING

#### Federal

##### *Clean Water Act*

The United States (U.S.) Environmental Protection Agency (USEPA) is the federal agency responsible for water quality management. It administers the Federal Water Pollution Control Act Amendments of 1972 and 1987, collectively known as the Clean Water Act. In 1972, the Clean Water Act was amended to require National Pollutant Discharge Elimination System (NPDES) permits for the discharge of pollutants to "Waters of the U.S."[1] from any point source.[2] In 1987, the Act was further amended to require that the USEPA establish regulations for permitting municipal and industrial storm water discharges under the NPDES permit program. Final regulations regarding storm water discharges were issued on November 16, 1990, and require that municipal separate storm sewer system (MS4) discharges and industrial (including construction) storm water discharges to surface waters be regulated by an NPDES permit. NPDES permit requirements relevant to the proposed Project are discussed later in this section.

The Clean Water Act also requires states to adopt water quality standards for receiving water bodies and to have those standards approved by the USEPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing), along with the water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations or levels of constituents (such as lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because the State of California was unable to develop these standards for priority toxic pollutants, the USEPA promulgated the California Toxics Rule in 1992 (40 *Code of Federal Regulations* [CFR] §131.38), which fills this gap. As a separate Rule, the California Toxics Rule is discussed further below under State regulations.

When water quality issues compromise the designated beneficial uses of a particular receiving water body, Section 303(d) of the Clean Water Act requires the identification and listing of that water body as "impaired". Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (plus a "margin of safety"). Once established, the TMDL allocates the loads among the water body's current and future pollutant sources.

[1] "Waters of the U.S." include all waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide and all interstate waters including interstate wetlands (33 *Code of Federal Regulations* §328.3).

[2] Point sources are discrete water conveyances such as pipes or man-made ditches.

### *Federal Anti-Degradation Policy*

The Federal Anti-Degradation Policy was released in 1968 and was included in the USEPA's first Water Quality Standards Regulation. The Anti-Degradation Policy represents a three-tiered approach to maintaining and protecting water quality. First, all existing beneficial uses and levels of water quality necessary to protect those uses must be preserved and protected from degradation. Second, water quality must be protected in areas where the quality cannot support the propagation of fish, shellfish, and wildlife and recreation (known as "fishable/swimmable"). Third, the policy provides special protection of waters for which the ordinary water quality criteria are not sufficient. These waters are called "Outstanding National Resources Waters" and have been designated as unique or ecologically sensitive.

If an activity is going to be allowed to degrade or lower water quality (in situations where existing water quality is higher than that needed to maintain established beneficial uses), the Anti-Degradation Policy requires that proposed projects meet the criteria below:

- The project is necessary to accommodate important economic or social development in the area.
- Water quality is adequate to protect and fully maintain existing beneficial uses.
- The highest statutory and regulatory requirements and best management practices (BMP) for pollution control are achieved.

### *National Flood Insurance Act*

The National Flood Insurance Act of 1968 established the National Flood Insurance Program, which is based on the minimal requirements for floodplain management and is designed to minimize flood damage in Special Flood Hazard Areas. The Federal Emergency Management Agency (FEMA) is the agency that administers the National Flood Insurance Program. Special Flood Hazard Areas are defined as areas that have a 1 percent chance of flooding within a given year, also referred to as the 100-year flood. Flood Insurance Rate Maps have been developed to identify flood zones within participating communities.

## State

### *California Porter-Cologne Act*

California's Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) grants the State Water Resource Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) power to protect surface water and groundwater quality and is the primary vehicle for implementing California's responsibilities under the Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and the responsibility to adopt plans and policies; to regulate discharges of waste to surface and groundwater; to regulate waste disposal sites; and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The Basin Plan must conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State Water Policy. The Basin Plan establishes beneficial uses for surface and groundwater in the region and sets forth narrative and numeric water quality standards to protect those beneficial uses. The Porter-Cologne Act also states that an RWQCB may include

water discharge prohibitions applicable to particular conditions, areas, or types of waste within its regional plan.

### *California Toxics Rule*

The California Toxics Rule (40 CFR 131.38) is a USEPA-issued federal regulation that provides water quality criteria for potentially toxic constituents in California surface waters with designated uses related to human health or aquatic life. The rule fills a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. These federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the Clean Water Act.

The California Toxics Rule establishes two types of aquatic life criteria: (1) acute criteria represent the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time[3] without harmful effects and (2) chronic criteria equal the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. Due to the intermittent nature of storm water runoff (especially in Southern California), the acute criteria are considered to be more applicable to storm water conditions than chronic criteria.

### *State Anti-Degradation Policy*

Under the State's Anti-Degradation Policy (as set forth in SWRCB Resolution No. 68-16), whenever the existing quality of waters is better than what is needed to protect present and future beneficial uses, such existing quality must be maintained. This State policy has been adopted as a water quality objective in all the State's Basin Plans. The State policy establishes a two-step process to determine if discharges with the potential to degrade the water quality of surface or groundwater would be allowed.

The first step requires that, where a discharge would degrade high-quality water, the discharge may be allowed only if any change in water quality would:

- Be consistent with the maximum benefit to the people of the State;
- Not reasonably affect present and anticipated beneficial uses of such water;
- Result in water quality that is not less than that which is prescribed in State policies (i.e., Basin Plans).

The second step (as set forth in SWRCB Resolution No. 68-16) states that any activity resulting in discharge to high-quality waters is required to use the best practicable treatment or control of the discharge necessary in order to avoid the occurrence of pollution or nuisance and to maintain the "highest water quality consistent with the maximum benefit to the people of the state". The State policy applies to both surface and groundwater, as well as to both existing and potential beneficial uses of the applicable waters.

[3] The rule does not specify timeframe for "acute". Standard practice would likely imply that any condition that is permanent or semi-permanent is chronic—all else would be short-term.

### *National Pollutant Discharge Elimination Program (NPDES) Permits*

The NPDES permit program is administered in the State of California by the RWQCBs, and was first established under the authority of the Clean Water Act to control water pollution by regulating point sources that discharge pollutants into "Waters of the U.S.". If discharges from industrial, municipal, and other facilities go directly to surface waters, those facility operators must obtain NPDES permits. An individual NPDES permit is specifically tailored to a facility. A general NPDES permit covers multiple facilities within a specific activity category such as construction activities.

There are nine RWQCBs in the State of California. These boards have the mandate to develop and enforce water quality objectives and implementation plans within their regions The Project Site is located within the jurisdiction of the Los Angeles RWQCB.

## Regional

### *General Construction Permit*

The SWRCB has issued a statewide general NPDES Permit and Waste Discharge Requirements for storm water discharges from construction sites. Under this General Construction Permit, discharges of storm water from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for storm water discharges or be covered by the General Construction Permit. Each applicant under the General Construction Permit must file a Notice of Intent (NOI) with the RWQCB and ensure that a Storm Water Pollution Prevention Plan (SWPPP) is prepared prior to grading. The primary objective of the SWPPP is to identify BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the site during construction.

In 1999, the SWRCB issued and subsequently amended the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ), which governs discharges from construction sites that disturb one acre or more of surface area. Again, on September 2, 2009, the SWRCB adopted a new General Construction Permit that substantially alters the approach taken to regulate construction discharges through (1) requiring the determination of risk levels posed by a project's construction discharges to water quality and (2) establishing numerical water quality thresholds that trigger permit violations. These new permit regulations took effect on July 1, 2010.

### *Municipal Separate Storm Sewer System (MS4) NPDES Permit*

The State's Municipal Storm Water Permitting Program regulates storm water discharges from Municipal Storm Sewer Systems (MS4s). The MS4 NPDES Permit No. CAS004002 for Ventura County, dated May 7, 2009 and corrected on January 13, 2010, regulates storm water and non-storm water discharges in the County and incorporated cities in Ventura County. Under this permit, the Ventura County Watershed Protection District (VCWPD), the County, and incorporated cities formed a countywide Storm Water Quality Management Program to reduce pollutants in the storm water in the County to the maximum extent practicable, in order to comply with water quality standards and to protect the beneficial uses of receiving waters. The County and cities in the County have adopted storm water quality ordinances that enforce the requirements of the MS4 Permit for incorporating treatment-control, source-control, and operational BMPs by new developments and reuse projects; implementing hydrological control measures to prevent downstream erosion; using sediment-control and erosion-control BMPs during construction; and prohibiting non-storm water discharges. In addition, the VCWPD, the County, and incorporated cities implement public information programs to reduce storm water pollution by properly using

and disposing of fertilizers, pesticides, and wastes and by implementing measures that minimize pollutant discharges into the storm water.

The MS4 Permit also includes Total Maximum Daily Load (TMDL) Provisions for impaired waters in the County, including interim waste load allocations for existing or future point sources.

### *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*

The Los Angeles RWQCB has prepared and updated the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, which seeks to preserve and enhance water quality and to protect the beneficial uses of water bodies in the region. The Basin Plan designates beneficial uses for surface and ground waters; sets narrative and numerical water quality objectives to attain or maintain beneficial uses; and outlines the implementation programs that will protect the waters of the region. These programs are centered on the control of point source and non-point source pollutants and the remediation of water pollution. The Basin Plan also includes water quality objectives for ammonia, coliform bacteria, bioaccumulation, biochemical oxygen demand, biostimulatory substances, chemical constituents, total residual chlorine, color, exotic vegetation, floating material, methylene blue activated substances, mineral quality, nitrogen, oil and grease, dissolved oxygen, pesticides, potential of hydrogen (pH), polychlorinated biphenyls (PCBs), radioactive substances, suspended solids, taste and odor, temperature, toxicity, and turbidity. Implementation of the Basin Plan occurs primarily through issuance of waste discharge requirements (WDRs), including regulatory enforcement action, as necessary.

### *Flood Mitigation Plan for Ventura County*

The VCWPD has developed a Flood Mitigation Plan for Ventura County, which identifies flood hazards in the County and assesses the risks of flooding. The hazards from coastal and riverine flooding, inundation due to dam failure, and post-fire debris flow are evaluated in the plan, along with exposure of residents, critical facilities, and infrastructure. The plan identifies staff and personnel resources that are available at different agencies and existing regulations and programs that relate to flood hazards. The following are outlined as goals and objectives of the plan: cooperation and coordination with various agencies; public education and awareness; reduction in damages from flood; dam failure; and post-fire debris flows Implementation actions to achieve these goals and objectives are also included in the Plan.

### *Fox Canyon Groundwater Management Plan*

The Fox Canyon Groundwater Management Agency was formed by the California Legislature in 1982 to manage and protect groundwater resources in the southern portion of Ventura County, which lies above the Fox Canyon aquifer, and in turn, is part of the Lower Aquifer System. The Grimes Canyon and Fox Canyon Aquifers are found beneath the East Las Posas and South Las Posas Basins, which underlie the City of Moorpark (City). The Fox Canyon Aquifer is present under 185 square miles of the County (in the cities of Ventura, Oxnard, Port Hueneme, Camarillo, and Moorpark, and in several unincorporated communities). The agency regulates groundwater extraction and is responsible for groundwater management planning.

The Fox Canyon Groundwater Management Plan initially addressed seawater intrusion in the Oxnard Plain, but subsequent updates have addressed other water quality issues in the area. These issues include high salinity with high groundwater levels, saline intrusion from surrounding sediments, and nitrate in the groundwater. The Plan proposes to continue to limit groundwater extraction; to encourage water conservation and wastewater reclamation; to operate seawater intrusion abatement; to place restrictions on water wells; to monitor groundwater; to place

restrictions on pumping and drilling in the Las Posas Basins; to construct spreading basins; and to implement several other strategies. Additional management strategies are also under development.

***General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters***

The Los Angeles RWQCB issued Order No. R4-2008-0032 to regulate the discharge of treated and untreated groundwater generated from permanent or temporary dewatering operations or other applicable wastewater discharges not covered by the General Construction NPDES permit. To obtain coverage under this permit, an applicant must submit a Notice of Intent and data establishing the water quality characteristics of the dewatering discharge. A standard monitoring and reporting program is included as part of the permit. For dewatering activities that are not covered by the General Permit, an individual NPDES permit and WDRs must be obtained from the RWQCB.

**Local**

***City of Moorpark Municipal Code***

Chapter 8.52, Stormwater Quality Management, of the Moorpark Municipal Code implements the regulations in the Federal Clean Water Act, including the NPDES, and the California Water Code by prohibiting non-storm water discharges into the storm drain system.

The City prohibits illicit connections and discharges to the storm drain system. Activities that lead to discharges into the storm drain system are required to reduce pollutants in the storm water to the maximum extent practicable. In compliance with its NPDES Permit, the City requires new development to prepare and implement Storm Water Pollution Prevention Plans (SWPPPs) or Storm Water Pollution Control Plans (SWPCPs), which identify construction and post-construction BMPs that would be incorporated into the development. The regulations also identify prohibited acts that may affect storm water quality and the City's authority to eliminate illicit discharges.

Chapter 15.24 of the Municipal Code contains the City's floodplain management regulations. These regulations minimize public and private losses due to flooding by restricting or prohibiting uses which may cause flooding; requiring land uses to be protected against flood damage at the time of initial construction; controlling the alteration of natural floodplains, stream channels, and natural protective barriers; controlling activities that may increase flood damage; and preventing or regulating diversion of floodwaters or the construction of barriers that may increase flood hazards in other areas.

## 4.9.3 THRESHOLDS OF SIGNIFICANCE

A significant impact to hydrology and water quality would occur if the Project would:

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential hydrology and water quality impacts. Impacts to hydrology and water quality impacts would be significant if the Project would:

***Threshold 4.9-a*** ***Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.***

***Threshold 4.9-b*** ***Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.***

***Threshold 4.9-c*** ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the additional of impervious surfaces, in a manner which would:***

***(i) Result in a substantial erosion or siltation on- or off-site;***

***(ii) Substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site;***

***(iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or***

***(iv) Impede or redirect flood flows?***

***Threshold 4.9-d*** ***In flood hazard, tsunami, seiche zones, risk release of pollutants due to project inundation.***

***Threshold 4.9-e*** ***Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.***

### 4.9.4 IMPACT ANALYSIS

***Threshold 4.9-a*** ***Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

**Less than Significant Impact**. This section discusses the Project's potential construction- and operational-related water quality impacts.

**Construction-Related Water Quality Impacts**

The Project would result in short-term construction impacts to surface water quality from demolition, grading, and other construction-related activities. Storm water runoff from the Project Site during construction could contain soils and sediments from these activities. Also, spills or leaks from heavy equipment and machinery, construction staging areas, and/or building sites can also enter runoff and typically include petroleum products such as fuel, oil and grease, and heavy metals.

The SWRCB has issued the Statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2012-0006-DWQ, NPDES No. CAS000002, adopted by the SWRCB on July 17, 2012). Under this Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of storm water from construction sites with a disturbed area of one or more acres. For each phase of the Project that involves over one acre of ground disturbance, coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity would be required. To obtain coverage, the Developer must retain the services of a

certified Qualified SWPPP Developer to prepare a SWPPP for the Project. The Developer, or the contractor if specifically delegated, would electronically submit permit registration documents prior to beginning construction activities in the Storm Water Multi-Application Report Tracking System, which would consist of a Notice of Initiation, Risk Assessment, Post-Construction Calculations, a site map, the SWPPP, a signed certification statement, and the first annual fee. Project construction would also adhere to the South Coast Air Quality Management District's Rule 402 (Nuisance) and Rule 403 (Fugitive Dust) to avoid and minimize dust from leaving the site.

The requirement to prepare a SWPPP has been incorporated as **COA HWQ-1**, which would ensure that Project short-term impacts to surface water quality during construction would be less than significant, and no mitigation measures are either required or recommended.

Groundwater is neither expected to be encountered during construction or to impact foundation excavations or grading operations (UGI 2017). Therefore, it is unlikely that the Project would degrade groundwater quality, and a less than significant impact would occur.

**Operational Water Quality Impacts**

The Project would have the potential to increase the volume and quantity of pollutants within storm water that flows from the Project Site during operation of the Project. However, for each phase of the Project, a Water Quality Management Plan (WQMP) would be prepared in accordance with **COA HWQ-2** and **COA HWQ-3** to identify general pollutants that may result from the uses and structures proposed during that phase and to select and implement appropriate operational water quality BMPs for that Project phase. Therefore, construction and operation of these storm water BMPs would adequately convey and treat storm water runoff and a less than significant impact would occur, and no mitigation measures are either required or recommended.

***Threshold 4.9-b*** ***Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

**Less than Significant Impact.** The Project would not involve direct or indirect withdrawals of groundwater. Domestic water service would be provided by the Ventura County Waterworks District No. 1 (VCWWD No. 1), as described in Section 4.11, Public Services and Utilities, of this EIR (VC Public Works 2022). As indicated, demand for water would be met by existing supplies, and impacts would be less than significant.

The Project would increase the amount of impervious surface within the Project Site. However, as required **by COA HWQ-2,** the Project would include operational water quality BMPs such as detention and retention basins, infiltration trenches, and other BMPs that would generally maintain the amount of groundwater recharge that occurs within the Project Site.

Therefore, impacts related to this threshold would be less than significant, and no mitigation is required.

***Threshold 4.9-c*** ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the additional of impervious surfaces, in a manner which would:***

***(i) Result in a substantial erosion or siltation on- or off-site?***

**Less Than Significant Impact.** The Project has the potential to result in erosion and siltation during construction. Development and implementation of a SWPPP as required by **COA HWQ-1** would ensure potential effects related to erosion and siltation are reduced to less than significant levels during construction. Also, a system of storm water BMPs would be incorporated in the Project's design as part of each Project phase, which would reduce potential for erosion and siltation during Project operations. Given these considerations, less than significant impacts would result from the Project, and no mitigation measures are either required or recommended.

***(ii) Substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site?***

***(iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?***

**Less Than Significant Impact.** The Project would result in a minor increase in impervious surface coverage in the Project Site, which could increase the peak storm water runoff from the Project Site during operations. As discussed above and as required by **COA HWQ-2** and COA **HWQ-3**, a WQMP or similar plan will be prepared to demonstrate compliance with applicable NPDES requirements and to demonstrate that appropriate drainage infrastructure and water quality BMPs have been incorporated. With preparation and implementation of a WQMP, the Project would result in less than significant impacts relative to this threshold, and no mitigation measures are either required or recommended.

***(iv) Impede or redirect flood flows?***

**Less Than Significant Impact.** The Project Site contains areas that are identified as being within the 500-year floodplain. Aditionally, the 100-year flows are conveyed through the Project Site within the concrete-lined Walnut Canyon drainage channel (FEMA 2022). The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site. The Project would involve no imacts to the Walnut Canyon drainage channel; therefore, the Project would have no potential to impede or redirect the 100-year floodplain. Areas of the Project Site within the 500-year floodplain are classified by FEMA as areas of minimal risk for loss related to flood events. Therefore, the Project would result in less than significant impacts related to this threshold, and no mitigation is required.

***Threshold 4.9-d Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

**Less Than Significant Impact.** The Project Site contains areas that are identified as being within the 500-year floodplain. Aditionally, the 100-year flows are conveyed through the Project Site within the concrete-lined Walnut Canyon drainage channel (FEMA 2022).

The Project Site is not near the ocean or other water body with the potential to be at risk of seismically-induced tidal or seiche phenomena.

Although parts of the Project Site are within flood zones, the Project would not utilize, store, or otherwise contain pollutants that would be at risk of release if inundated. Therefore, hazards

related to the potential release of pollutants due to inundation caused by a flood, tsunami, and/or seiche are considered to be less than significant and no mitigation is required.

***Threshold 4.9-e Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

**Less Than Significant Impact.** The RWQCB prepares and maintains the Water Quality Control Plan for the Los Angeles Regional Board's Basin Plan (Basin Plan). The Basin Plan sets water quality standards for the Los Angeles RWQCB's jurisdictional area by establishing beneficial uses for specific water bodies and designating numerical and narrative water quality objectives. The Basin Plan sets water quality objectives for the Project Site and its surrounding areas. Water quality thresholds identified in the Basin Plan are intended to reduce pollutant discharge and ensure that water bodies are of sufficient quality to meet their designated beneficial uses. The Project would not conflict with the water quality standards outlined in the Basin Plan or worsen water quality conditions in any 303(d)-listed water body. As discussed above in response to threshold 4.9-e-a, pollutant discharge during construction would be avoided through compliance with the Construction General Permit including the preparation and implementation of a SWPPP. Once the Project is constructed, the Project would consist of a mix of institutional, commercial, and residential development. Pollutants generated during Project operations would be treated using BMPs identified in WQMPs that would be developed for each Project phase. Therefore, the Project would not be a source of pollutants for downstream water bodies and the Project would thereby not conflict with the Basin Plan. Therefore, the Project would result in less than significant impacts relative to this threshold, and no mitigation measures are either required or recommended.

## 4.9.5 CUMULATIVE IMPACTS

As discussed above, the Project would result in short-term construction impacts to surface water quality from demolition, grading, and other construction-related activities. Also, during Project operations potential water quality contamination might occur. Similar to the proposed Project, cumulative projects in the vicinity would be required to prepare and implement a SWPPP and WQMPs, which would minimize the potential for water quality degradation on a cumulative basis.

The Project does not occur in a tsunami or seiche zone; therefore, there is no potential for the Project to contribute to cumulative impacts related to these topics. Flood hazards for the Project are minimal, and flood impacts of other cumulative projects would be minimized through those projects complying with FEMA requirements for development within Special Flood Hazard Areas. The Project would result in a minor increase in impervious surface and storm water runoff volume from the Project Site, but water quality BMPs for the project and cumulative projects that would be developed as part of their WQMPs would minimize cumulative impacts to stormwater quantity and quality. Therefore, the project and cumulative projects would not result in cumulatively considerable impacts related to this resource topic.

## 4.9.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA HWQ-1** Prior to the issuance of any grading or building permit for each project phase, the applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge

Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Community Development Department. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the Project Site and be available for County review on request.

**COA HWQ-2** Prior to the issuance of any grading or building permits, the applicant shall submit for review and approval by the Community Development Department, a Water Quality Management Plan (WQMP) that must include the following minimum contents:

- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, and conserving natural areas;
- Incorporate applicable Routine Source Control BMPs; and
- Include an Operation and Maintenance (O&M) Plan that identifies the mechanism(s) by which long-term O&M of all structural BMPs will be provided.

**COA HWQ-3** Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Community Development Department, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;
- Demonstrate that the applicant has complied with all non-structural BMPs described in the project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP; and
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants.

**Mitigation Measures**

No significant impacts pertaining to hydrology and water quality were identified; therefore, no mitigation measures are either required or recommended.

### 4.9.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.9.8 REFERENCES

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Moorpark, City of. 2022 (March, current through). Moorpark Municipal Code, Moorpark, California (Title 17: Zoning). Seattle, WA: Quality Code Publishing for the City. http://qcode.us/codes/moorpark/.

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VC Public Works. 2022 (October 7, access date). Ventura County Waterworks District No. 1 (Moorpark) Overview. Moorpark, CA: VC Public Works. https://www.vcpublicworks.org/wp-content/uploads/2018/03/DescriptionWWD1.pdf

# 4.10 LAND USE AND PLANNING

## 4.10.1 EXISTING CONDITIONS

### On-Site Land Uses

The Project Site contains a variety of existing land uses. The eastern portion of the Project Site contains the existing Civic Center, which is oriented toward Moorpark Avenue. The existing Civic Center consists of a city hall, a community center/active adult center, a city library, portable structures, and parking areas. The southern portion of the Project Site contains a surface parking lot associated with the off-site United States (U.S) Post Office, which is generally located between West High Street to the north and the Union Pacific Railroad and Metrolink tracks to the south. The western portion of the Project Site is undeveloped, generally rectangular-shaped vacant land oriented in an east/west direction along the north side of West High Street. In conjunction with previous nearby residential development, the western portion of the Project Site has been subject to grading and is relatively flat with no distinguishing topographical features. The northern portion of the Project Site is developed with the existing City Hall buildings.

The Project Site contains areas that are identified as being within the 500-year floodplain. Aditionally, the 100-year flows are conveyed through the Project Site within the concrete-lined Walnut Canyon drainage channel. The Walnut Canyon drainage channel traverses the Project Site within a Ventura County Public Works flood control easement. It is a concrete-lined open channel that runs along the western boundary of the existing Civic Center and becomes an underground concrete box north of West High Street. It remains underground running west beneath West High Street, until it reverts back to an open concrete-lined channel at the western end of the Project Site.

All parcels within the Project Site are owned by the City of Moorpark, with the exception of Assessor's Parcel Number (APN) 511-0-020-275, which is owned by Essex Moorpark Owner LP.

### General Plan Land Use Designations

As depicted on Exhibit 3-4, General Plan Land Use Designations, the current General Plan land use designation for the entire Project Site is Downtown Specific Plan (SP-D).

### Zoning Designations

As depicted on Exhibit 3-5, Existing Zoning, the existing zoning for the Project Site includes Commercial Old Town (C-OT), Rural Exclusive (RE), and Institutional (I).

The proposed zoning for the entire Project Site is Mixed-Use Medium (MUM). MUM allows for a mix of commercial, office, and housing development.

### Surrounding Land Uses

The Project Site is surrounded by development including commercial, office, institutional, and residential uses. Single-family residential uses are located to the north of the Project Site (east and west of Moorpark Avenue/Walnut Canyon Road). Walnut Canyon Elementary School, the Moorpark Boys and Girls Club, and vacant land are located to the northwest of the Project Site. This vacant land off-site and northwest of the Project Site (APN 511-0-020-265) is approved for 200 apartment units. That project would take with vehicular access from Casey Road. Also, the southeastern boundary of the Hitch Ranch Specific Plan is located approximately 0.15 mile west

of the Project Site, which was approved by City Council in June 2022. The Hitch Ranch Specific Plan consists of a 270-acre, 755-unit development that would construct a primarily residential community with park facilities, private recreational facilities, open spaces, and equestrian trails that are expected to be built out by 2029.

Land uses to the east of the Project Site (east of Moorpark Avenue/Walnut Canyon Road) include a mix of commercial, office, and residential uses. A commercial building, the Tanner Corner Building, is located off site at the northwestern corner of Moorpark Avenue at High Street (southeast of the Project Site). The Tanner Corner Building is listed on the California Register of Historical Resources (CRHR). The Project Site is bordered to the south by the Union Pacific railroad, Metrolink railroad tracks, and a United States Postal Service post office. Land uses located south of the railroad tracks include Chaparral Middle School; Poindexter Park; commercial and light industrial uses; and residential uses. The Project Site is 0.2-mile northwest of the Moorpark Amtrak and Metrolink station. Existing land uses are shown in Exhibit 3-3, Existing Land Uses.

## 4.10.2 REGULATORY SETTING

### State

#### *Senate Bill 375*

Signed September 30, 2008, Senate Bill (SB) 375 provides for a new planning process to coordinate land use planning and regional transportation plans (RTPs) and funding priorities in order to help California meet the greenhouse gas (GHG) reduction goals established in Assembly Bill (AB) 32. SB 375 requires Metropolitan Planning Organizations (MPOs), including Southern California Association of Governments (SCAG), to incorporate a Sustainable Communities Strategy (SCS) in their regional transportation plans that will achieve GHG emission reduction targets set by California Air Resources Board (CARB). There are two mutually important facets to SB 375: reducing vehicle miles traveled (VMT) and encouraging more compact, complete, and efficient communities for the future. SB 375 also includes provisions for exemptions from or streamlined California Environmental Quality Act (CEQA) review for projects classified as transit priority projects.

### Regional

#### *Connect SoCal*

Under federal law, SCAG is designated as a MPO and under state law as a Regional Transportation Planning Agency and a Council of Governments for Orange County and the Project Site. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. The agency develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs assessment (RHNA) and a portion of the South Coast Air Quality management plans (SCAG 2022a).

On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy) (RTP/SCS) (SCAG 2020). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward

a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal outlines more than $638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura (SCAG 2022b).

## Local

### *City of Moorpark General Plan 2050*

State law requires cities and counties, as political subdivisions of the State, to adopt general plans that provide a comprehensive set of policies and guidelines that form the basis for land use decisions. The City of Moorpark General Plan serves as the long-range guide for growth and development in the City. It includes the following General Plan elements: Land Use, Circulation, Housing, Economic Development, Open Space, Parks and Recreation, Conservation, Safety; and Noise. A discussion of the Project's consistency with applicable goals and policies in the General Plan is provided later in this section. The policy analysis for other environmental topics addressed in this Environmental Impact Report (EIR) is provided in each respective technical EIR section.

#### Land Use Element

The Land Use Element provides goals and policies pertaining to the use of land in the City. This Element includes: a discussion of existing land uses, neighborhoods, districts, and land use planning issues; a discussion of proposed land uses; development standards for each land use category; and goals and policies related to land use. The General Plan identifies the Project Site as containing public facilities and vacant lands. The General Plan also identifies the Project Site as occurring within the Downtown District of the City. The Downtown District encompasses the High Street Corridor and Civic Center areas. As described in the General Plan, Moorpark's Civic Center anchors the western edge of the Downtown District and encompasses the city hall, library, and community rooms. Its proximity to a revitalized High Street and the Charles Street neighborhood offers the opportunity to function as an integral continuation of the downtown core (Moorpark 2023a).

The Land Use Element identifies the Project Site as three General Plan land use designations, which include: (1) SP-D, Downtown Specific Plan; (2) PUB, Public/Institutional; and (3) C-A, Commercial – Auto (0.5 FAR) (Moorpark 2023a

#### 2021-2029 Housing Element

The City's 2021-2029 Housing Element establishes and City's goals, policies and implementation programs for the adequate provision of decent, safe, and affordable housing for all residents of Moorpark. The Element discusses the population and housing stock of the City, constraints to housing development in Moorpark, and areas where future housing development may occur. Quantified objectives, housing programs, and associated funding were developed to meet the City's existing and future housing needs, as outlined in the RHNA by SCAG. None of the goals, policies, and housing programs in the Housing Element are directly applicable to the proposed Project or the Project Site.

Circulation Element

The City's Circulation Element is comprised of two sections, Mobility and Infrastructure. The Element classifies the existing roadway system and sets a level of service (LOS) standard of "D" for roadways and intersections in the City. Moorpark Avenue and High Street are identified as local collectors with a traffic signal at the intersection of the two roadways. There are Class III Bike Routes[1] planned on segments of Moorpark Avenue and High Street near the Project Site. No equestrian trails are planned near the Project Site.

Safety Element

The primary goals of the Safety Element are to promote public health, safety, and general welfare. The Element identifies existing geologic, seismic, fire, and flood hazards in the City; hazardous materials and wastes; and emergency preparedness. It also includes goals and policies to protect life and property from these hazards.

Noise Element

The Noise Element serves as a comprehensive program for noise control in the City. The Element identifies existing noise sources and noise concerns in Moorpark; existing and future noise levels along roadways; and sets noise standards for various land uses. Major noise sources include traffic noise on State Route (SR) 23 (east and northeast of the site) and train noise on the tracks south of the Project Site. The interior noise standard for institutional office uses is 50 A-weighted decibels (dBA) on the Community Noise Equivalent Level (CNEL) and 45 dBA CNEL for libraries. The exterior noise standard for parks is 60 dBA CNEL.

Open Space, Parks and Recreation Element

The Open Space, Parks and Recreation Element provides goals and policies for the conservation, preservation and management of Moorpark's open space and natural resources. These resources include agricultural lands, mineral resources, air resources, water resources, biological resources, petroleum resources, parks and recreational resources, open space resources (including scenic views and vistas) and energy resources. Moorpark Avenue and High Street are identified as scenic routes and bike paths near the site. The Project Site is not located in a scenic viewshed.

### *Moorpark Zoning Code*

The Moorpark Zoning Code is Title 17 of the City's Municipal Code and serves as the primary tool for implementing the City's General Plan. It regulates land uses in the City by zone, with applicable development requirements, standards, and regulations (i.e., setbacks, building height, site coverage, parking, and sign requirements). The Zoning Code also includes noise regulations, transportation demand management requirements, and Specific Plan overlay zones.

As depicted on Exhibit 3-5, Existing Zoning, the existing zoning for the Project Site includes Commercial Old Town (C-OT), Rural Exclusive (RE), and Institutional (I).

The proposed zoning for the entire Project Site is Mixed-Use Medium (MUM). MUM allows for a mix of commercial, office, and housing development.

[1] The Circulation Element defines a Class III Bike Route as a conventional street where bike routes .are identified by sign only. There are no specially paved bikeways and bicycle traffic shares the roadway with motorized traffic.

### *Downtown Specific Plan*

The Downtown Specific Plan addresses the need to improve the City's downtown; the planning process; consistency of the Specific Plan with the City's General Plan; and development standards in the City's Zoning Code that are applicable to land within the Specific Plan boundaries. This Specific Plan encompasses the areas along Moorpark Avenue, High Street, Charles Street, Everett Street, and a portion of Spring Road within the City's historic core. This area is developed with older commercial, industrial, public, and residential land uses.

The Specific Plan promotes commercial development, economic development, and employment through commercial retail, service, and civic uses that would create a business core in the City; that would be compatible with adjacent civic center, industrial, and residential uses; and that would create jobs for local residents. Design guidelines, landscape guidelines, and site development standards for each land use category, for maintenance and renovation guidelines, for circulation and roadway improvements, and for other infrastructure and service improvements are provided to guide development in the downtown area and to help create a unified and revitalized downtown.

The Downtown Specific Plan states that land uses and permitted uses within the plan boundaries are regulated by the Zoning Code. The eastern and southern sections of the Project Site are located within the Downtown Specific Plan area.

## 4.10.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential to land use and planning impacts. Impacts to land use and planning would be significant if the Project would:

***Threshold 4.10-a*** ***Physically divide an established community.***

***Threshold 4.10-b*** ***Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.***

## 4.10.4 ENVIRONMENTAL IMPACTS

***Threshold 4.10-a*** ***Would the project physically divide an established community?***

**Less Than Significant Impact.** The Project Site does not contain any established communities to the south or west; therefore, the Project Site does not play a role in connecting any established communities. Furthermore, public roadways with sidewalks exist north, south, and east of the Project Site, which would be maintained by the Project that would ensure that connectivity amongst existing communities north and east of the Project Site is maintained. Therefore, the Project would result in no impacts related to this threshold, and no mitigation measures are either required or recommended.

***Threshold 4.10-b Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

**Less Than Significant Impact.** This section includes an analysis of the Project's consistency with adopted plans, policies, and regulations that are applicable to the Project.

## Regional

### *Connect SoCal*

In their development of the demographic and growth assumptions associated with Connect SoCal, SCAG utilized parcel-level existing and future (general plan) land use designations. The Project would require amendments to the City's General Plan, to the Downtown Specific Plan, and to land use designations for the Project Site. Prior SCAG assumptions assumed a mix of land uses for the Project Site, which are described above in Section 4.10.1. However, the Project would allow for 13,000 square feet of commercial development and 75 additional dwelling units that were not assumed in the Connect SoCal plan, which is a nominal amount relative to the amount of commercial square footage and number of dwelling units within the City, County, and region, and would not result in a significant impact. The Project would not otherwise conflict with the regional roadway system identified within the Connect SoCal plan.

## Local

### *Zoning Consistency*

As depicted on Exhibit 3-5, Existing Zoning, the existing zoning for the Project Site includes Commercial Old Town (C-OT), Rural Exclusive (RE), and Institutional (I). The proposed zoning for the entire Project Site is Mixed-Use Medium (MUM). MUM allows for a mix of commercial, office, and housing development. The MUM designation allows for all of the Project's proposed land uses. Furthermore, the City would review each phase of the Project as it is implemented to ensure compliance with the development standards applicable to the MUM designation. The MUM designation provides for a mix of commercial, office, and housing development in buildings that contain active ground floor uses located at or near the sidewalk with housing or office next to or above (City of Moorpark 2023a).

### *General Plan Consistency*

Table 4.10-2 addresses the consistency of the Project with the relevant goals and policies of the City's 2050 General Plan. As identified in Table 4.10-2, the Project would be consistent goals and policies in the City's General Plan intended to avoid or mitigate an environmental effect.

## TABLE 4.10-1
## GENERAL PLAN (2050) CONSISTENCY ANALYSIS

| Relevant Goals and Policies | Consistency Analysis |
|---|---|
| **General Plan Land Use Element** | |
| **Goal LU 1**<br>Development Capacity: Sustainable growth through well-planned development that provides for the needs of Moorpark's residents and businesses, makes efficient land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the city as a special place in the region. | **Consistent.** The Project would redevelop an underutilized Project Site into a cohesive site with a diverse mix of land uses. |
| **LU 1.1**<br>Growth respecting Moorpark's values and character: Accommodate growth that is consistent with community values and complements the scale and character of Moorpark's residential neighborhoods, business districts, and natural environmental setting. | |
| **LU 1.2**<br>Types and distribution of land uses: Accommodate population and employment growth attributable to the categories and standards for densities/intensities of the land uses depicted on the Land Use Diagram and as evaluated in the General Plan Program Environmental Impact Report (PEIR). | |
| **LU 1.4**<br>Public services to support growth: Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted. | **Consistent.** No significant adverse impacts on public facilities and services would occur with the Project, as addressed in Section 4.13, Public Services and Utilities. Future coordination with utility providers would occur to ensure ability to serve each Project phase. |
| **LU 1.5**<br>Development timing: Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character. | |
| **LU 1.6**<br>Development priorities: Prioritize infill and redevelopment of existing developed areas and immediately adjoining properties to achieve a seamless and connected development pattern, limiting expanded development outward into hillsides and natural areas. | **Consistent.** The Project would allow for the reuse of the existing Civic Center site and the diverse development of adjacent vacant land to the south and west with the proposed Project land uses. |
| **GOAL LU 3**<br>Land use mix: a mix of land uses that meets the diverse needs of the Moorpark community. | |
| **LU 3.4**<br>Reuse of declining commercial properties: Promote the redevelopment of commercial centers and corridors that are underutilized, where businesses have closed, and do not exhibit supportable market demand for economically viable uses desired by the community. | |

## TABLE 4.10-1
## GENERAL PLAN (2050) CONSISTENCY ANALYSIS

| Relevant Goals and Policies | Consistency Analysis |
|---|---|
| **LU 3.5**<br>Mixed-use development: Provide for development projects that mix housing with commercial uses to enable Moorpark's residents to live close to businesses and employment, reducing vehicle trips, and supporting social interactions. | **Consistent.** The Project would allow for a diverse mix of land uses within the City's downtown. |
| **GOAL LU 4**<br>Urban form: a city of distinct, compact, and walkable centers and corridors, surrounded by diverse and complete neighborhoods, and connected to a unifying network of greenways and open spaces. | **Consistent.** The Project would directly help to achieve this goal and policy by redeveloping the existing Civic Center, while allowing for a mix of uses that would add vitality and economic activity to the area. |
| **LU 4.1**<br>Sustainable urban form: Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality. | **Consistent.** The Project Site is located in the downtown area adjacent to Moorpark Avenue (SR-23) and within walking distance of the Metrolink Station on High Street. Bus service is available from the Project Site. The density of development for the Project would be consistent with the standards contained in the Municipal Code, Downtown Specific Plan, etc. |
| **LU 4.2**<br>Focused development: Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace. | |
| **LU 4.5**<br>Community-serving uses: Encourage uses that meet the daily needs of residents such as grocery stores, local-serving restaurants, and service businesses to be located within safe walking distance of residents. | **Consistent.** The Project would directly achieve these policies by developing a new City Hall, Library, mercado, and park spaces in the City's downtown area. |
| **LU 4.6**<br>Highway-oriented development: Cluster commercial development in compact areas along major roadways and provide pedestrian links to adjacent residential areas. | **Consistent.** The Project Site is located in the downtown area adjacent to Moorpark Avenue (SR-23) and within walking distance of the Metrolink Station on High Street. |
| **LU 5.1**<br>Development complements existing character: Require that new development be designed to complement Moorpark's historical family-oriented small-town feel. | **Consistent.** The City's design review process will ensure that the Project's design complies with applicable plans, policies, and ordinances. |
| **LU 5.2**<br>Integration of public spaces: Maintain public spaces and services to create an aesthetically and functionally welcoming environment. | |
| **LU 5.3**<br>Special design districts: Establish design concepts for the overall community and special treatment areas, such as the downtown district, which may include guidelines for architecture, landscape architecture, signage, streetscape, and infrastructure. | |
| **LU 5.5**<br>Compatible land uses: Require design features that provide visual relief and separation between land uses of conflicting character. | |

## TABLE 4.10-1
## GENERAL PLAN (2050) CONSISTENCY ANALYSIS

| Relevant Goals and Policies | Consistency Analysis |
|---|---|
| **LU 7.3**<br>Protect uses from hazards: Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions. | **Consistent.** No significant adverse impacts associated with hazards would occur with implementation the Project, as addressed in Section 4.8, Hazards |
| **LU 7.5**<br>Arroyo Simi corridor recreation: Encourage the development of compatible open space/recreational uses of the Arroyo Simi floodway that are consistent with the provisions of the Federal Emergency Management Agency for floodway uses. | |
| **LU 8.2**<br>Reduction of energy and water use: Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use. | **Consistent.** As discussed in Sections 4.2, Air Quality, 4.5, Energy, and 4.7, Greenhouse Gas Emissions, the Project would have less than significant impacts associated with energy and greenhouse gas emissions. |
| **LU 8.3**<br>Design for climate change: Require major development projects, as defined in the Municipal Code, to prepare greenhouse gas reduction and climate change resilience plans. | |
| **LU 8.9**<br>Design to avoid hazards: Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element. | **Consistent.** No significant adverse impacts associated with hazards would occur with implementation the Project, as addressed in Section 4.8, Hazards |
| **LU 9.18**<br>Library and lifelong learning: Provide and promote a state-of-the-art library that offers resources and engaging programs to meet the varied educational, cultural, civic, and general business needs of all residents and support opportunities for lifelong learning and enrichment. | **Consistent.** The Project would directly help to achieve this goal and policy by redeveloping the existing Civic Center and Library, while allowing for a mix of uses that would add vitality and economic activity to the area. |
| **LU 13.1**<br>Commercial uses and diversity: Provide for and encourage the development of a broad range of uses in Moorpark's commercial centers and corridors consistent with Economic Development Element that reduce the need to travel to adjoining communities and capture a greater share of local spending. | **Consistent.** The Project would redevelop an underutilized Project Site into a cohesive site with a diverse mix of land uses that would add vitality and economic activity to the area. |
| **LU 13.4**<br>Economic enhancement of commercial centers: Prioritize the transition of existing commercial centers to incorporate experiential uses that enhance their economic vitality and role as active places for community gathering and patronage. | |

## TABLE 4.10-1
## GENERAL PLAN (2050) CONSISTENCY ANALYSIS

| Relevant Goals and Policies | Consistency Analysis |
|---|---|
| **LU 13.5**<br>Commercial center identities: Establish and maintain distinct identities for Moorpark's commercial centers and corridors to reflect their location, mix of uses, surrounding uses, and targeted markets, differentiating these by use, scale and form of development, and amenities. | **Consistent.** The Project would directly achieve these policies by developing a new City Hall, Library, mercado, and park spaces in the City's downtown area. |
| **LU 15.2**<br>Mix uses to enhance economic activity: Support mixed-use development projects as a strategy to enhance the economic vitality of adjoining commercial districts, through increases of population in proximity to these uses. | |
| **LU 17.1**<br>Services supporting Moorpark's residents: Provide public facilities and services that are cost effective, and contribute to the health, safety, welfare, and personal development of all residents. | |
| **LU 17.2**<br>Efficient development: Promote the co- location of parks, schools, libraries, health services, recreation facilities, and other community facilities to support resident needs and leverage limited resources. | |
| **LU 19.1**<br>Core community district: Support the continued development of the area along High Street as a distinct place identified as the symbolic and functional downtown of Moorpark. | **Consistent.** The Project Site is located in the downtown area adjacent to Moorpark Avenue (SR-23) and within walking distance of the Metrolink Station on High Street. Bus service is available from the Project Site. The density of development for the Project would be consistent with the standards contained in the Municipal Code, Downtown Specific Plan, etc. |
| **LU 19.2**<br>Complementary development: Promote the development of new commercial and office uses, housing, park or recreational facilities, public parking, and a potential multimodal transportation center in the commercial core. | |
| **LU 19.3**<br>Relationship to transit station: Locate and design development to capitalize on and reflect its adjacency to the Metrolink station, including developing direct pedestrian connections. | |
| **LU 19.4**<br>Visual character: Strengthen the visual character of the downtown commercial core in order to attract a variety of commercial and mixed-use (commercial and housing) projects and promote the economic viability of downtown Moorpark. | **Consistent.** The City's design review process will ensure that the Project's design complies with applicable plans, policies, and ordinances. |
| **LU 19.5**<br>Tree canopy: Maintain and expand the tree canopy in the downtown area to provide shade, improve air and water quality, reduce the heat island effect, and create habitat for birds and pollinators. | |

### *Municipal Code Consistency*

An evaluation of the Project's consistency with the City of Moorpark Municipal Code regulations related to tree removal and replacement is provided in Section 4.3 of this EIR, Biological Resources. During the future development of buildings as part of this Project, the Project would review each proposal for adherence to applicable requirements from the Municipal Code, including Chapter 17.24, Development Requirements; Chapter 17.28, Standards for Specific Uses; Chapter 17.30, Lighting Requirements; Chapter 17.40, Signage; and Chapter 17.72, Downtown Specific Plan Overlay Zone (SP-D). As detailed in **COA AES-1**, the Project would comply with Section 12.12.070 of the City's Municipal Code, Tree Removal Permits – Requirements, which encourages the avoidance of mature trees and mitigation for trees that must be removed.

The City's design review process will ensure that the Project's design complies with applicable plans, policies, and ordinances, including with applicable aspects of the Municipal Code.

### *Downtown Specific Plan*

The Project is located on the southwest edge of the City's Downtown Specific Plan. The Project would not require any amendments to the Downtown Specific Plan. Goals and policies specific to the Project are analyzed in Table 4.10-2, Downtown Specific Plan Consistency Analysis.

**TABLE 4.10-2**
**DOWNTOWN SPECIFIC PLAN CONSISTENCY ANALYSIS**

| Relevant Goals and Policies | | Consistency Analysis |
|---|---|---|
| **Downtown Specific Plan** | | |
| 3.3.3c: | Maintain coordination with the VCTC, Union Pacific, and Metrolink to ensure that vacant and under-used sites along the tracks are maintained and developed with compatible uses that are integrated into the downtown. | **Consistent.** The Project is consistent with this goal. The Project would allow for continued development on the north side of the railroad tracks with recreational and institutional uses similar to what currently is found to the north and south of the tracks. The Civic Center Campus is within walking distance of the Metrolink station on High Street. |
| 3.3.3d: | Encourage evening and weekend activities in the downtown, especially those that support one another such as dining, strolling, art galleries, crafts, etc. | **Consistent.** The existing Civic Center is used for community functions and meetings during both the daytime and nighttime hours. The provision of additional civic buildings and potentially a City park would provide for additional opportunities to evening and weekend events. |
| 3.3.3f: | Continue to maintain a civic presence in downtown through the expansion of the Civic Center area to provide for an enlarged City Hall and Library. | |
| Sources: City of Moorpark 1998. | | |

### *Conclusion*

During the City's design review process of future buildings and other aspects of the Project, the Project will be reviewed to ensure compliance with applicable plans, policies, and ordinances. The Project would result in less than significant impacts related to this threshold, and no mitigation measures are either required or recommended.

## 4.10.5 CUMULATIVE IMPACTS

As described above, the Project would not divide an established community. Therefore, the Project has no potential to cumulatively contribute to impacts related to this threshold.

The Project and other cumulative projects are not anticipated to conflict with any land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect since each of these projects would be reviewed for consistency through each jurisdictions' design review process.

## 4.10.6 MITIGATION PROGRAM

### Conditions of Approval

**COA AES-1** As required by Section 12.12.070 of the City's Municipal Code, Tree Removal Permits – Requirements, no native oak tree, historic tree or other mature tree, where that tree is on public or private property, except as provided for in subsection B of this section, or is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the city. The director of community services shall establish the format and information required for a tree removal permit consistent with this chapter. In no event shall a permit be denied if to do so would cause interference with the economic use and enjoyment of the property. *(Note: repeated from Section 4.1).*

### Mitigation Measures

No significant impacts pertaining to land use and planning were identified; therefore, no mitigation measures are required.

## 4.10.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.10.8 REFERENCES

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# 4.11 NOISE

## 4.11.1 EXISTING CONDITIONS

### Noise Criteria and Definitions

#### *Sound*

Sound is a vibratory disturbance created by a moving or vibrating source and that is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. Excessive noise levels may also affect performance and learning processes through distraction, reduced accuracy and increase fatigue, annoyance and irritability, and the ability to concentrate.

#### *Decibels and Frequency*

In its most basic form, a continuous sound can be described by its frequency or wavelength (pitch) and its amplitude (loudness). Sound pressure levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Therefore, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Groundborne vibration consists of oscillatory waves that propagate from the source through the ground to adjacent structures. The frequency of a vibrating object describes how rapidly it is oscillating. The number of cycles per second of oscillation is the vibration frequency, which is described in terms of hertz (Hz). The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

### Perception of Noise and Vibration

#### *Noise*

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the “A-weighted” noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are written dB(A) or dBA.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of a 3 dBA increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase or decrease of 10 dBA sounds twice or half as loud, respectively.

As noise travels from the source to the receiver, noise changes both in level and frequency. The most obvious change is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance (noise attenuation) depends on a number of

factors. Ground absorption, atmospheric effects, and shielding (as by natural and man-made barriers) also affect the rate of noise attenuation.

### *Vibration*

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when the structure and the construction activity are connected by foundations or utilities, such as sewer and water pipes.

Although groundborne vibration is sometimes noticeable in outdoor environments, groundborne vibration is almost never annoying to people who are outdoors. The primary concern from vibration is the ability to be intrusive and annoying to nearby residents and other vibration-sensitive land uses. Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at greater distances from the source.

### *Noise and Vibration Metrics*

Several rating scales (or noise "metrics") exist to analyze effects of noise on a community. These scales include the equivalent noise level ($L_{eq}$), the community noise equivalent level (CNEL), and the day-night average sound level ($L_{dn}$). Average noise levels over a period of minutes or hours are usually expressed as dBA $L_{eq}$, which is the equivalent noise level for that period of time. The period of time averaging may be specified; for example, $L_{eq(3)}$ would be a three-hour average. When no period is specified, a one-hour average is assumed. It is important to understand that noise of short duration (i.e., a time period substantially less than the averaging period) is averaged into ambient noise during the period of interest. Therefore, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, a descriptor was developed that accounts for human sensitivity to nighttime noise. The descriptor is called the $L_{dn}$, which represents the 24-hour average sound level with a penalty for noise occurring at night. The $L_{dn}$ computation divides the 24-hour day into two periods: daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM). The nighttime sound levels are assigned a 10 dBA penalty prior to averaging with daytime hourly sound levels. CNEL is similar to $L_{dn}$ except that it separates a 24-hour day into 3 periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening and nighttime sound levels are assigned a 5 and 10 dBA penalty respectively, prior to averaging with daytime hourly sound levels. Several statistical descriptors are also often used to describe noise, including $L_{max}$, $L_{min}$, and $L_x$. $L_{max}$ and $L_{min}$ are respectively the highest and lowest A-weighted sound levels that occur during a noise event. The $L_x$ signifies the noise level that is exceeded x percent of the time; for example, $L_{10}$ denotes the level that was exceeded 10 percent of the time.

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (ppv) is defined as the maximum instantaneous positive or

negative peak of the vibration signal, usually measured in inches per second (in/sec). Since it is related to the stresses that are experienced by buildings, ppv is generally used to assess vibration to structures.

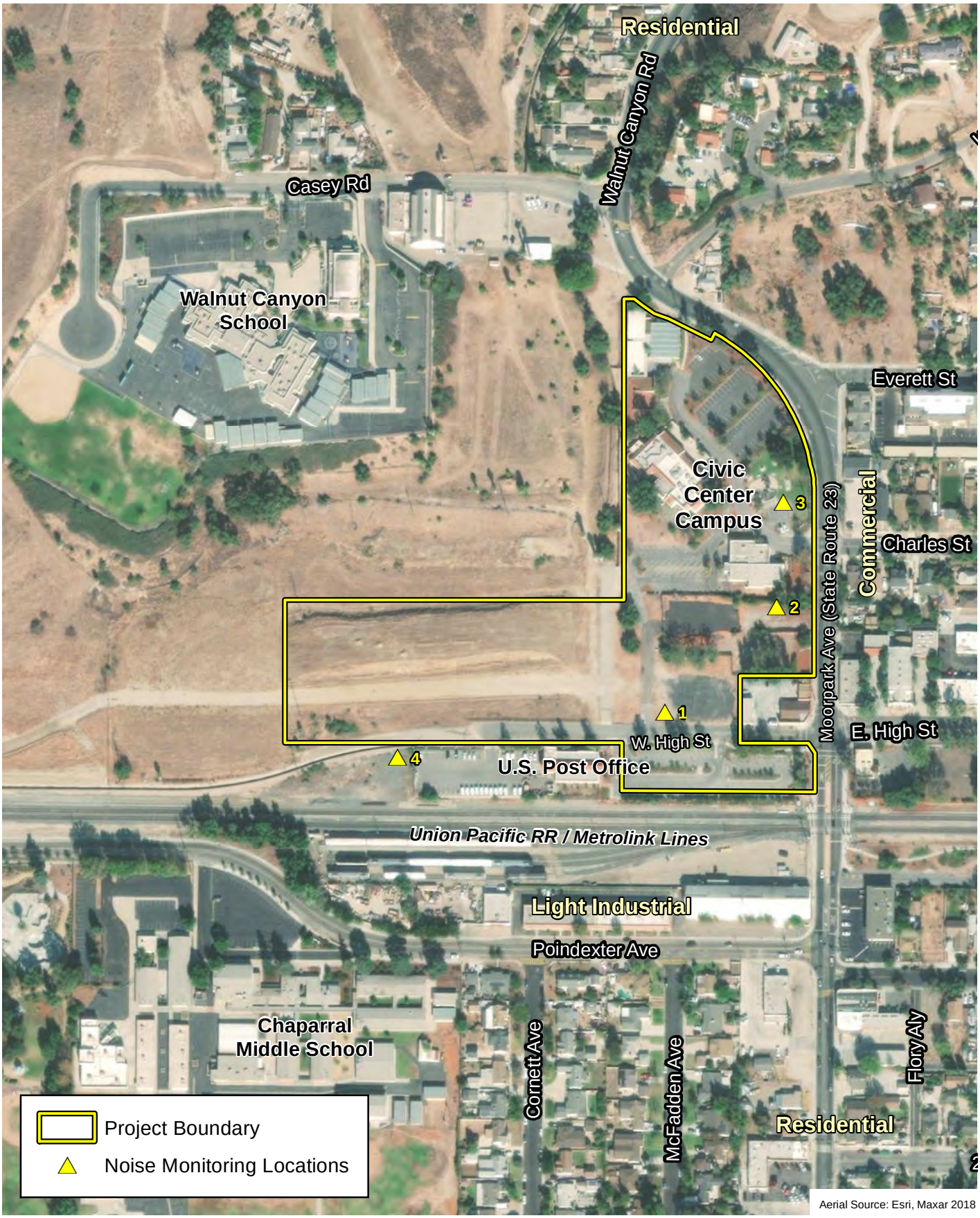
## Sensitive Receptors

Noise-sensitive receptors are generally considered to be those people engaged in activities or utilizing land uses that may be subject to the stress of significant interference from noise. Activities usually associated with sensitive receptors include, but are not limited to, talking, reading, and sleeping. Land uses often associated with sensitive receptors include residences, schools, libraries, hospitals, churches, and hotels. The nearest noise-sensitive receptors to the Project Site are residences located east of the Project Site along Charles Street, Everett Street, and Wicks Road; Walnut Canyon Elementary School located northwest of the Project Site; and Chaparral Middle School located south of the Project Site on Poindexter Avenue.

## Existing Noise Conditions

The primary source of noise affecting the Project Site is vehicular traffic on Moorpark Avenue east of the Project Site and train operations on the railroad line that runs south of and parallel to the south side of the Project Site. Moorpark Avenue is a two-lane roadway with observed cruise speeds of 30 miles per hour (mph). The railroad line is primarily used by Metrolink and Amtrak passenger trains, and also for freight trains. There are parallel spur tracks south of the Project Site that are being used for passenger (rail) car storage. During the site visit, it was observed that passenger trains travel at approximately 40 mph, blowing their horns as they pass by the at-grade crossing at Moorpark Avenue.

Noise measurements were taken as part of this environmental impact report (EIR). Exhibit 4.11-1, Noise Measurement Locations, shows the locations of the short-term noise level measurements taken at four locations. The results of these measurements are presented in Table 4.11-1. Generally, the noise condition in the vicinity of the Project Site is characteristic of quiet suburban/small town. During the survey, the average existing noise levels ($L_{eq}$) ranged from 55 to 64 dBA $L_{eq}$. The higher ambient noise levels were observed at the southern portion of the Project Site nearest to the railroad line and the eastern part of the Project Site near Moorpark Avenue. A noise measurement was taken on the southern boundary of the site during an Amtrak passenger train pass by; the event lasted approximately 40 seconds; the maximum noise level was 88 dBA during the locomotive pass by with the warning horn sounding.




Aerial Source: Esri, Maxar 2018

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# Noise Monitoring Locations

Exhibit 4.11-1

*Civic Center Master Plan Project*

N W E S

275 137.5 0 275 Feet

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**TABLE 4.11-1**
**EXISTING NOISE CONDITIONS**

| Measurement Number[a] | Location, Date, and Time | Noise Levels (dBA) | | | Primary Noise Source | Notes |
|---|---|---|---|---|---|---|
| | | $L_{eq}$ | $L_{max}$ | $L_{min}$ | | |
| 1 | Southeast portion of the Project Site north of the Post Office building approximately 320 ft from Moorpark Ave and 20 ft from High St (12:15-12:34 PM) | 55 | 72 | 42 | Traffic on Moorpark Ave and High St | A few heavy trucks pass bys on Moorpark Ave, sporadic traffic on High St; no train activities. |
| 2 | East portion of the Project Site south of the Library building approximately 65 ft from Moorpark Ave (12:38-12:58 PM) | 59 | 73 | 41 | Traffic on Moorpark Ave | A few heavy trucks pass bys on Moorpark Ave |
| 3 | East portion of the Project Site north of the Library building approximately 80 ft from Moorpark Ave (1:03-1: 30PM) | 61 | 79 | 41 | Traffic on Moorpark Ave | A few heavy trucks pass bys on Moorpark Ave |
| 4 | South portion of the Project Site west of the Post Office building approximately 150 ft from the railroad tracks. (12:15-12:34 PM) | 64 | 88 | 41 | Traffic on Moorpark Ave, High St, and a train pass by | The loudest event was an Amtrak train pass by blowing warning horn, otherwise noise levels were in the high 40 dBAs. |

Leq-Average noise level; Lmax-Maximum noise level; Lmin-minimum noise level

[a] See Exhibit 4.11-1 for measurement locations.

## 4.11.2 REGULATORY SETTING

### Local

#### *City of Moorpark General Plan Noise Element*

The City of Moorpark General Plan Noise Element (Noise Element) serves as a comprehensive program for noise control in the City. The Element identifies existing noise sources and noise concerns in Moorpark; existing and future noise levels along roadways; and sets noise standards for various land uses. The impacts of traffic noise to the Project and to existing noise-sensitive uses within the City are governed by the standards and policies included in the City's Noise Element. The City's noise compatibility guidelines are identified in Table 4.11-2, which are derived from the State General Plan Guidelines. These guidelines are primarily used to assess transportation noise impacts to new development. The City noise standards are presented in Table 4.11-3.

## TABLE 4.11-2
## CITY OF MOORPARK
## LAND USE COMPATIBILITY GUIDELINES

| Land Use Categories | | CNEL | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Categories** | **Uses** | **<55** | **55–60** | **60–65** | **65–70** | **70–75** | **75–80** | **>80** |
| **Residential** | Single-family, 2-Family, Multi-Family | A | A | B | B | C | D | D |
| **Residential** | Mixed Use | A | A | A/B | B | C | D | D |
| **Residential** | Mobile Home | A | A | A/B | B | C | C | D |
| **Commercial** Regional, District | Hotel, Motel, Transient Lodging | A | A | A | A | B | B | C |
| **Commercial** Regional, Village District, Special | Commercial Retail, Bank, Restaurant, Movie Theater | A | A | A | A/B | B | C/D | D |
| **Commercial Industrial Institutional** | Office Building, Research and Development, Professional Office, City Office Building | B | B | B | B/C | C | C/D | D |
| **Commercial** Recreational ***Institutional Civic Center*** | Amphitheatre, Concert Hall Auditorium, Meeting Hall | A | A | A | B | B | D | D |
| **Commercial** Recreational | Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club | A | A | A | A | A/B | B | B |
| **Commercial** General, Special **Industrial, Institutional** | Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities | A | A | A | B | C | D | D |
| **Institutional** | Hospital, Church, Library, Schools' Classroom | A | A | A | B | C | D | D |
| ***Open Space*** | Parks | A | A | A | A | B | C | C |
| **Open Space** | Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat | A | A | A | A | B | C | C |
| **Agriculture** | Agriculture | A | A | B | B | C | D | D |

CNEL: community noise equivalent level.

Zone A: Clearly Compatible—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B: Normally Compatible—New construction or development should be undertaken only after detailed analysis of the noise reduction requirements and are made and needed noise insulation features in the design are determined. Conventional construction with closed windows and fresh air supply systems or air conditioning will normally suffice.

Zone C: Normally Incompatible—New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Zone D: Clearly Incompatible—New construction or development should generally not be undertaken.

Source: Moorpark 1998a.

**TABLE 4.11-3**
**CITY OF MOORPARK NOISE STANDARDS**

| Land Use Categories | | Energy Average CNEL | |
|---|---|---|---|
| **Category Uses** | | **Interior[a]** | **Exterior[b]** |
| Residential | Single-Family, Two-Family, Multiple-Family | 45[c] 55[d] | 65 |
| | Mobile Home | – | 65[e] |
| Commercial, Industrial, Institutional | Hotel, Motel, Transient Lodging | 45 | 65[f] |
| | Commercial Retail, Bank, Restaurant | 55 | – |
| | Office Building, Research and Development, Professional Offices, City Office Building | 50 | – |
| | Amphitheater, Concert Hall, Auditorium, Meeting Hall | 45 | – |
| | Gymnasium (Multipurpose) | 50 | – |
| | Sports Club | 55 | – |
| | Manufacturing, Warehousing, Wholesale Utilities | 65 | – |
| | Movie Theaters | 45 | – |
| Institutional | Hospital, School classroom | 45 | 65 |
| | Church, Library | 45 | – |
| Open Space | Parks | – | 65 |

**Interpretation:**

a. Indoor environment excluding: Bathrooms; toilets; closets; corridors.
b. Outdoor environment limited to: Private yard of single-family; Multi-family private patio or balcony which is served by a means of exit from inside; Mobile Home Park; Hospital patio; Park's picnic area; School's playground; Hotel and motel recreation area.
c. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
d. Noise level requirement with open windows if they are used to meet natural ventilation requirement.
e. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
f. Except those areas around an airport within the 65 CNEL contour.

Source: Moorpark 1998a.

### *City of Moorpark Municipal Code*

Chapter 17.53, Noise, of the Moorpark Municipal Code is the City's Noise Ordinance. The purposes of the Noise Ordinance are to, "establish criteria and procedures to implement the noise element and to maintain quiet in those areas which exhibit low noise levels and to help control noise in those areas within the city where noise levels are above acceptable values" (City of Moorpark 2022). Chapter 15.26 of the Moorpark Municipal Code, Construction Activity Restrictions, prescribes limits for hours of construction (City of Moorpark 2022). The City-adopted exterior noise level limits are presented in Table 4.11-4.

**TABLE 4.11-4**
**CITY OF MOORPARK**
**NOISE ORDINANCE EXTERIOR NOISE LIMITS**

| Type of Land Use | Time Interval | Base Allowable Exterior Noise Level |
|---|---|---|
| Single-family and multi-family residential/rural and agricultural zone | 10:00 p.m. to 7:00 a.m. | 55 dBA |
| | 7:00 a.m. to 10:00 p.m. | 60 dBA |
| Commercial office/neighborhood | 10:00 p.m. to 7:00 a.m. | 55 dBA |
| | 7:00 a.m. to 10:00 p.m. | 60 dBA |
| General commercial/planned development | 10:00 p.m. to 7:00 a.m. | 60 dBA |
| | 7:00 a.m. to 10:00 p.m. | 65 dBA |
| Industrial Park | Anytime | 65 dBA |
| Limited industrial | Anytime | 70 dBA |
| Public Space | All Day | 70 dBA |
| Source: City of Moorpark 2022 | | |

The Noise Ordinance states:

> No person shall operate or cause to be operated, any source of sound at any location within the city or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other property, either incorporated or unincorporated, to exceed:
>
> 1. The noise standard for that land use as specified in Table 4 (Table 4.11-4 above) for a cumulative period of more than thirty (30) minutes in any hour; or
> 2. The noise standard for that land use as specified in Table 4 (Table 4.11-4 above) plus five (5) dB for a cumulative period of more than fifteen (15) minutes in any hour; or
> 3. The noise standard for that land use as specified in Table 4 (Table 4.11-4 above) plus ten (10) dB for a cumulative period of more than five (5) minutes in any hour; or
> 4. The noise standard for that land use as specified in Table 4 (Table 4.11-4 above) plus fifteen (15) dB for a cumulative period of more than one (1) minute in any hour; or
> 5. The noise standard for that land use as specified in Table 4 (Table 4.11-4 above) plus twenty (20) dB or the maximum measured ambient level, for any period of time.
> 6. If the measured ambient level differs from that permissible within any of the first four (4) noise limit categories above, the noise limit for that land use, as specified in Table 4 (Table 4.11-4 above), shall be adjusted in five (5) dB increments in each category as appropriate to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth (5th) noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.

Section 17.53.100 of the Noise Ordinance includes two exemptions applicable to the Project. The provisions of Section 16.53.100 do not apply to:

D. Occasional outdoor gatherings, public dances, shows, and sporting and entertainment events, provided said events are conducted pursuant to a permit issued by the city relative to the staging of said events.

E. Construction/Demolition: Repair, remodeling or grading of real property, provided the activities occur between the hours of seven (7:00) a.m. to seven (7:00) p.m. weekdays including Saturday.

The City also regulates noise produced from air conditioning or air handling equipment to no more than 50-55 dBA based on Section 17.53.070 Prohibited acts of the Municipal Code.

Construction Noise

Per Chapter 15.26 of the City's Municipal Code, it is unlawful within the incorporated limits of the City to engage in or conduct any outdoor work relative to construction, except between the hours of 7:00 AM and 7:00 PM, Monday through Saturday, unless a permit for different hours has first been issued by the Public Works Director for projects within the public right-of-way; or by the Community Development Director for projects on private property.

## Vibration Standards

Neither the City nor the State has established standards for a significant vibration impact. The Federal Transit Administration (FTA) has developed impact assessment guidelines in their publication Transit Noise and Vibration Impact Assessment Manual (FTA 2018). The California Department of Transportation (Caltrans) has also published guidelines in their Transportation- and Construction-Induced Vibration Guidance Manual (Caltrans 2004). Based these guidance documents, thresholds for potential structural damage and human annoyance are identified in Tables 4.11-5 and 4.11-6, respectively, and are used in this analysis.

The FTA also uses a conservative screening methodology to determine whether a quantitative analysis of vibration levels is required. For institutional uses near a conventional commuter railroad, the screening distance is 120 feet.

**TABLE 4.11-5**
**VIBRATION THRESHOLDS FOR STRUCTURAL DAMAGE**

| 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 | 0.20 | 0.10 |
| Historic and some old buildings | 0.50 | 0.25 |
| Older residential structures | 0.50 | 0.30 |
| New residential structures | 1.00 | 0.50 |
| Modern industrial/commercial buildings | 2.00 | 0.50 |

ppv: peak particle velocity

in/sec: inch per second

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. Caltrans states many types of construction activities fall between a single event and continuous sources. FTA states that the criteria of 0.20 in/sec for fragile buildings and 0.12 in/sec for extremely fragile historic buildings are appropriate vibration damage thresholds for construction vibration.

Source: Caltrans 2004, FTA 2006.

**TABLE 4.11-6**
**GROUND-BORNE VIBRATION IMPACT**
**CRITERIA FOR GENERAL ASSESSMENT**

| Land Use Category | Ground-borne Vibration Impact Levels | | |
|---|---|---|---|
| | Frequent Events (> 70 events/day) | Occasional Events (30-70 events/day) | Infrequent Events (< 30 events/day) |
| Institutional uses[a] | < 75 VdB | < 78 VdB | < 83 VdB |

VdB: Vibration decibels

a. Institutional land uses with primarily daytime use. Schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Source: FTA 2006

## 4.11.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential noise impacts. Impacts to aesthetics would be significant if the Project would:

***Threshold 4.11-a*** ***Result in a substantial temporary or permanent increase in ambient noise in the vicinity of the project levels in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies.***

***Threshold 4.11-b*** ***Generate of excessive groundborne vibration or groundborne noise levels.***

***Threshold 4.11-c*** ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted,***

***within two 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.***

**Noise Impact Criteria**

Long-term on-site and off-site impacts from non-transportation noise sources are measured against the City's Noise Ordinance, limits as stated in Table 4.11-4. Long-term off-site impacts from Project-generated traffic noise are measured against two criteria. For community noise assessment purposes, changes in noise levels greater than 3 dBA are often identified as discernible, while changes less than 1 dBA are not considered discernible to local residents. In the range of 1 to 3 dBA, persons who are very sensitive to noise may perceive a slight change. Both of the following criteria must be met for a direct significant impact to be identified:

- Project traffic must cause a substantial noise level increase (greater than 3 dBA) on a roadway segment adjacent to a noise sensitive land use, and
- the resulting future with project noise level must exceed the criteria level for the noise sensitive land use (e.g., residential use, school). In this case, the exterior criteria level is 65 dBA CNEL for residences and the interior level is 45 CNEL for schools.

The significance threshold for a cumulative off-site traffic noise impact is:

- The total noise increase must exceed 3 dBA, and
- the future exterior noise level at a sensitive receptor must exceed 65 dBA CNEL, and
- the project contribution to the noise increase must exceed 1 dBA.

**Vibration Impact Criteria**

Because there are no applicable State or local CEQA significance standards for vibration, the FTA recommended criteria from Tables 4.11-4 and 4.11-5 will be applied as follows:

- Excessive exposure to groundborne vibration resulting in potential structural damage would occur if construction vibration levels exceed the recommended building damage criteria of nearby existing buildings including existing historic structures. This value is based on a conservative interpretation of the California Department of Transportation's vibration guidance for construction activity impacts.

## 4.11.4 IMPACT ANALYSIS

***Threshold 4.11-a*** ***Would the project result in a substantial temporary or permanent increase in ambient noise in the vicinity of the project levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

**Less Than Significant With Mitigation Incorporated.**

**Temporary Construction Noise**

Construction noise would be related primarily to the use of heavy equipment during each construction phase. The primary source of construction noise is generally diesel engine driven equipment. Each phase of construction is expected to have a specific equipment mix, depending

on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some would have higher continuous noise levels than others, and some have high intensity-short duration noise events with lower average levels. The loudest phase is usually during earthmoving and grading. The average noise level of each construction activity is determined by combining the contributions from each piece of equipment used in that phase (FTA 2018). Typical duty cycles (the percentage of time during which equipment is operated) and noise levels generated by representative pieces of equipment are listed in Table 4.11-7.

**TABLE 4.11-7**
**TYPICAL MAXIMUM CONSTRUCTION EQUIPMENT NOISE LEVELS**

| Equipment | Noise Level (dBA) at 50 ft | Typical Duty Cycle |
|---|---|---|
| Auger Drill Rig | 85 | 20% |
| Backhoe | 80 | 40% |
| Blasting | 94 | 1% |
| Chain Saw | 85 | 20% |
| Clam Shovel | 93 | 20% |
| Compactor (ground) | 80 | 20% |
| Compressor (air) | 80 | 40% |
| Concrete Mixer Truck | 85 | 40% |
| Concrete Pump | 82 | 20% |
| Concrete Saw | 90 | 20% |
| Crane (mobile or stationary) | 85 | 20% |
| Dozer | 85 | 40% |
| Dump Truck | 84 | 40% |
| Excavator | 85 | 40% |
| Front End Loader | 80 | 40% |
| Generator (25 KVA or less) | 70 | 50% |
| Generator (more than 25 KVA) | 82 | 50% |
| Grader | 85 | 40% |
| Hydra Break Ram | 90 | 10% |
| In situ Soil Sampling Rig | 84 | 20% |
| Jackhammer | 85 | 20% |
| Mounted Impact Hammer (hoe ram) | 90 | 20% |
| Paver | 85 | 50% |
| Pneumatic Tools | 85 | 50% |
| Pumps | 77 | 50% |
| Rock Drill | 85 | 20% |
| Scraper | 85 | 40% |
| Tractor | 84 | 40% |
| Vacuum Excavator (vac-truck) | 85 | 40% |
| Vibratory Concrete Mixer | 80 | 20% |

KVA = kilovolt amps
Source: Thalheimer 2000.

Grading equipment including excavators, loaders, dozers, and loaded haul trucks have the potential to generate the highest noise levels. Noise from point sources (such as construction) decreases by approximately 6 dBA with each doubling of distance from source to receptor. For example, a noise level of 85 dBA measured at 50 feet from the noise source to the receptor would be reduced to 79 dBA at 100 feet from the source to the receptor, and would be further reduced to 73 dBA at 200 feet from the source to the receptor. Variation in power, equipment location, and terrain imposes complexity in characterizing the noise source level from construction equipment.

In accordance with **COA NOI-1**, noise-generating construction work on the Project would be restricted to the hours of 7:00 AM and 7:00 PM, Monday through Saturday, which complies with the City's Noise Ordinance. **COA NOI-2** provides further measures to assure that construction workers are aware of the time limits. This includes compliance with Chapter 10.04 of the Municipal Code that requires vehicles with internal combustion engines to use noise-muffling devices when operating near residential properties. COA **NOI-3** requires that the permitted hours for construction be posted on-site and be communicated to all construction staff. Compliance with these regulatory requirements would prohibit construction activities from occurring at night and limit noise produced from construction activities to the least noise sensitive portions of the day. In addition, construction activities would generally not occur close to existing residential and school uses. Therefore, the Project construction would not expose persons to or generate noise levels in excess of standards established in the General Plan or Noise Ordinance.

### *Phase 1*

During Phase 1 construction, the nearest affected uses would be residences located east of the Project Site approximately 160 feet across and east of Moorpark Avenue, Walnut Canyon Elementary School located approximately 600 feet to the northwest, and Chaparral Middle School located approximately 700 feet to the southwest.

A typical grading operation would have a scraper, a dozer, and a loader working concurrently (three pieces of grading equipment). Based on these operations occurring at the approximate center of the Phase 1 development area, noise levels east side of Moorpark Avenue (280 feet away) are estimated at 70 dBA $L_{eq}$, approximately 10 dBA higher than the existing traffic noise levels. Average noise levels at the Walnut Canyon Elementary School and the Chaparral Middle School for the same condition are forecast to be approximately 61 dBA $L_{eq}$ at a distance of approximately 760 feet away. The construction noise would be heard above existing ambient noise at residences close to Moorpark Avenue and at the school, and may create temporary annoyances. However, the noise levels are within the ranges considered typical and acceptable for construction and would be less when construction phases with construction vehicles are completed. As mentioned previously, noise from construction activities are required to occur during the least noise sensitive portions of the day. Although the noise levels during construction are not considered a significant impact, **MM NOI-1** requires that abatement measures be incorporated into the Project to reduce noise impacts from the operation of heavy equipment and truck traffic during construction.

### *Phases 2 through 4*

Construction of Project elements for Phase 2 would result in noise levels similar to those described above for Phase 1 to receptors east of Moorpark Avenue/Walnut Canyon Road but located at least 500 feet further away to the west. Noise levels would be approximately 65 dBA at Chaparral Middle School because construction would be located at least 500 feet from the school buildings.

Construction during Phase 3 would be located on the northern portion of the site and approximately 270 feet from the center of the proposed development area to receptors east of Moorpark Avenue. Construction activities could be as close as 100 feet to some buildings along Moorpark Avenue. Noise levels would range from 79 dBA $L_{eq}$ to 70 dBA $L_{eq}$ at distances of 100 feet to 270 feet, respectively. Phase 3 construction would occur approximately 500 feet from the nearest buildings at Walnut Canyon Elementary School which would result in noise exposures of 65 dBA $L_{eq}$.

Phase 4 construction activities would involve development of the new City Hall and Mercado/Market. Noise levels at the nearest noise sensitive residential uses across Moorpark Avenue Construction activities could be as close as 100 feet to some buildings along Moorpark Avenue. Noise levels would be as high as 79 dBA $L_{eq}$ at a distance of 100 feet.

While these noise levels are not unusual for construction, they would be audible at nearby land uses. However, noise from construction activities is limited to the hours of 7:00 a.m. and 7:00 p.m. when people are least sensitive to noise and the periods for which heavy construction are needed are relatively short. As such, construction noise produced from the Project would result in less than significant noise impacts.

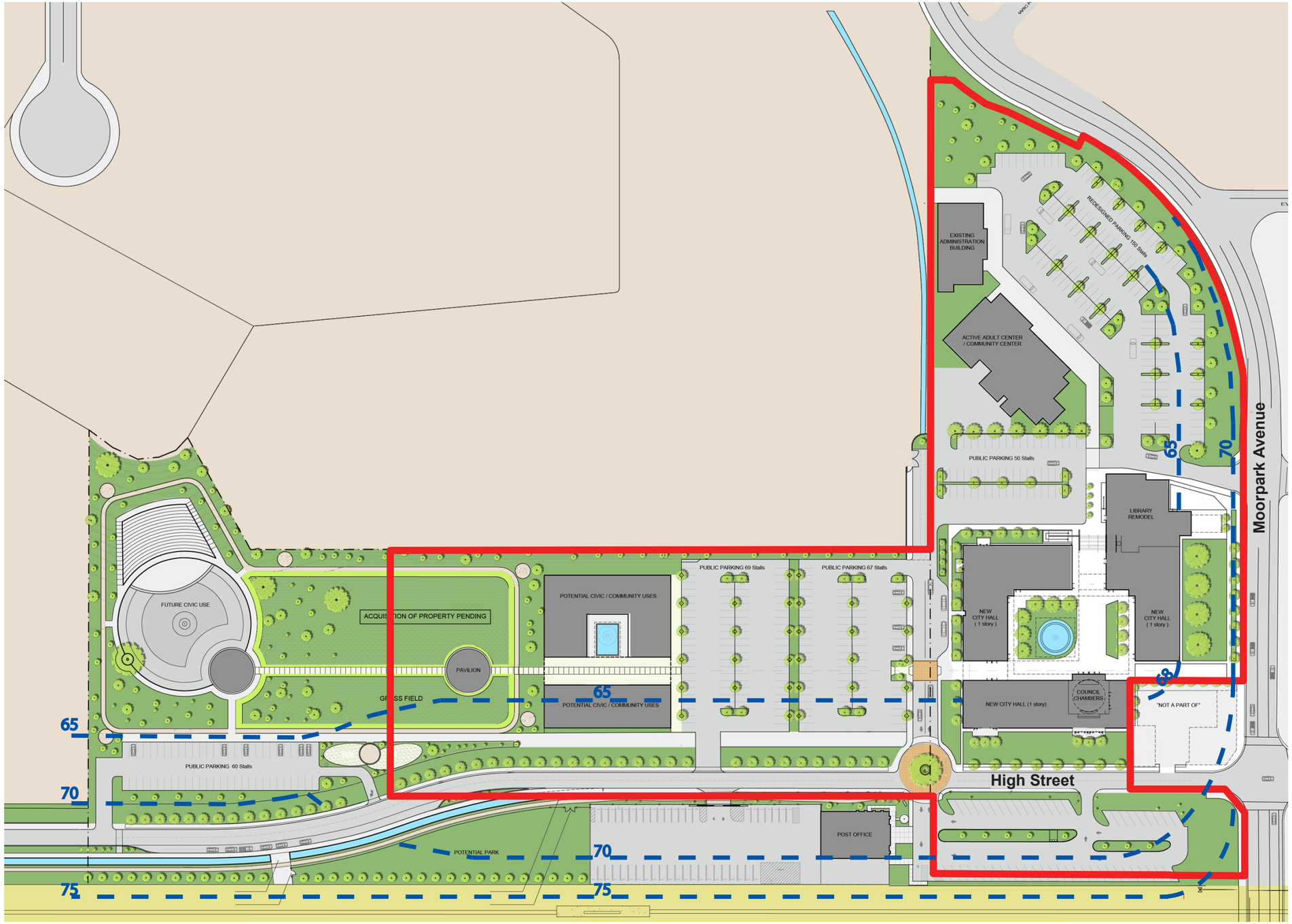
## Operational (Long-Term) Permanent Noise

Long-term noise impacts are evaluated for (1) off-site impacts resulting from traffic generated by the Project; (2) noise generated at the City Hall, Community Center and Library; and (3) noise generated by park activities. To estimate noise level increases and impacts due to the development of the Project, traffic noise exposure levels were calculated based on traffic projections in the Traffic Impact Analysis prepared for the Project. These traffic noise levels represent the distance from the centerline of the road to the contour value shown. Noise contours adjacent to the Project Site are shown on Exhibit 4.11-2.

### *Traffic Noise Impacts to Off-Site Receptors*

Traffic noise contours were assessed by evaluating the noise levels “with” and “without” the Project for the following scenarios: Year 2025 and Year 2037. Year 2025 was assessed as an interim year analysis for the Project and Year 2037 was analyzed under the full buildout of the Project.

***Year 2025 Conditions With and Without Project:*** Table 4.11-8 presents a comparison of the existing noise conditions with and without the Project. The Project would not increase the noise levels along the study area roadway segments due to less vehicle trip generation under Phase 1 as compared to the existing buildings. Changes in noise levels below 3 decibels are not considered to be perceptible in outdoor environments. Because Project related traffic would not result in traffic noise increases, the Project would not result in a significant traffic noise impact for the Project interim year of 2025. No mitigation would be required.




Source: City of Moorpark 2010

# Noise Contours

Exhibit 4.11-2

*Civic Center Master Plan Project*

N W E S Map Not to Scale

PSOMAS

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**TABLE 4.11-8**
**YEAR 2025 WITH AND WITHOUT PROJECT**
**TRAFFIC NOISE LEVELS**

| Roadway | Segment | CNEL at 50 feet (dBA) | | | |
|---|---|---|---|---|---|
| | | No Project | With Project | Project Contribution | Potential Impact? |
| Casey Road and Moorpark Avenue/Walnut Canyon Road | East Leg | 0 | 0 | 0 | No |
| | West Leg | 59.9 | 59.9 | 0 | No |
| | North Leg | 62.5 | 62.5 | 0 | No |
| | South Leg | 64.7 | 64.7 | 0 | No |
| Charles Street/Civic Center Driveway and Moorpark Avenue | East Leg | 52.0 | 52.0 | 0 | No |
| | West Leg | 49.7 | 48.3 | -1.5 | No |
| | North Leg | 66.5 | 66.5 | 0 | No |
| | South Leg | 66.5 | 66.5 | 0 | No |
| High Street and Moorpark Avenue | East Leg | 64.4 | 64.3 | -0.1 | No |
| | West Leg | 55.9 | 55.0 | -0.9 | No |
| | North Leg | 66.5 | 66.5 | 0 | No |
| | South Leg | 66.1 | 66.0 | -0.1 | No |
| High Street/Princeton Avenue and Spring Road | East Leg | 66.0 | 66.0 | 0 | No |
| | West Leg | 64.3 | 64.2 | -0.1 | No |
| | North Leg | 68.8 | 68.8 | 0 | No |
| | South Leg | 68.6 | 68.6 | 0 | No |
| First Street/Poindexter Avenue and Moorpark Avenue | East Leg | 50.7 | 50.7 | 0 | No |
| | West Leg | 59.0 | 58.9 | -0.1 | No |
| | North Leg | 64.7 | 64.6 | -0.1 | No |
| | South Leg | 63.6 | 63.5 | -0.1 | No |
| Los Angeles Avenue and Moorpark Avenue | East Leg | 72.8 | 72.8 | 0 | No |
| | West Leg | 72.6 | 72.6 | 0 | No |
| | North Leg | 64.8 | 64.8 | 0 | No |
| | South Leg | 62.7 | 62.7 | 0 | No |
| Spring Road and Walnut Canyon Road | East Leg | 64.3 | 64.3 | 0 | No |
| | West Leg | 45.7 | 45.7 | 0 | No |
| | North Leg | 68.2 | 68.2 | 0 | No |
| | South Leg | 63.5 | 63.5 | 0 | No |
| High Street and Gabbert Road | East Leg | 49.0 | 48.5 | -0.5 | No |
| | West Leg | 0 | 0 | 0 | No |
| | North Leg | 56.2 | 56.2 | 0 | No |
| | South Leg | 56.7 | 56.6 | -0.1 | No |

CNEL: community noise equivalent level; ft: feet; dBA: A-weighted decibels.
Source: FHWA RD 77-108 Highway Traffic Noise Prediction Model

***Year 2037 With and Without Project:*** Table 4.11-9 compares year 2037 noise levels with and without the Project. This timeframe corresponds with Project Buildout. The Project would increase the noise levels along the study area roadway segments up to 0.7 dBA $L_{eq}$ which is below the traffic noise impact criteria. Changes in noise levels below 3 decibels are not considered to be perceptible in outdoor environments. Because Project related traffic would result in traffic noise increases that are below the significance criteria set forth in this EIR, the Project would not result in a traffic noise impact for the Project buildout year of 2037. No mitigation would be required.

**TABLE 4.11-9**
**YEAR 2037 WITH AND WITHOUT PROJECT TRAFFIC NOISE LEVELS**

| Roadway | Segment | CNEL at 50 feet (dBA) | | | |
|---|---|---|---|---|---|
| | | No Project | With Project | Project Contribution | Potential Impact? |
| Casey Road and Moorpark Avenue/Walnut Canyon Road | East Leg | 4.8 | 4.8 | 0 | No |
| | West Leg | 60.0 | 60.0 | 0 | No |
| | North Leg | 62.8 | 62.8 | 0 | No |
| | South Leg | 64.9 | 65.0 | 0 | No |
| Charles Street/Civic Center Driveway and Moorpark Avenue | East Leg | 52.6 | 52.6 | 0 | No |
| | West Leg | 50.2 | 51.3 | 1.0 | No |
| | North Leg | 66.8 | 66.8 | 0 | No |
| | South Leg | 66.8 | 66.9 | 0 | No |
| High Street and Moorpark Avenue | East Leg | 64.7 | 64.8 | 0.1 | No |
| | West Leg | 56.1 | 56.8 | 0.7 | No |
| | North Leg | 66.8 | 66.8 | 0.0 | No |
| | South Leg | 66.5 | 66.5 | 0.1 | No |
| High Street/Princeton Avenue and Spring Road | East Leg | 66.4 | 66.4 | 0 | No |
| | West Leg | 64.6 | 64.7 | 0.1 | No |
| | North Leg | 69.2 | 69.2 | 0 | No |
| | South Leg | 69.0 | 69.1 | 0 | No |
| First Street/Poindexter Avenue and Moorpark Avenue | East Leg | 51.2 | 51.2 | 0 | No |
| | West Leg | 59.5 | 59.5 | 0.1 | No |
| | North Leg | 65.0 | 65.1 | 0.1 | No |
| | South Leg | 63.8 | 63.9 | 0.1 | No |
| Los Angeles Avenue and Moorpark Avenue | East Leg | 73.2 | 73.2 | 0 | No |
| | West Leg | 73.0 | 73.0 | 0 | No |
| | North Leg | 65.2 | 65.2 | 0 | No |
| | South Leg | 63.1 | 63.1 | 0 | No |
| Spring Road and Walnut Canyon Road | East Leg | 64.7 | 64.7 | 0 | No |
| | West Leg | 45.7 | 45.7 | 0 | No |
| | North Leg | 68.6 | 68.6 | 0 | No |
| | South Leg | 63.8 | 63.8 | 0 | No |
| High Street and Gabbert Road | East Leg | 49.0 | 49.3 | 0.3 | No |
| | West Leg | 4.8 | 4.8 | 0 | No |
| | North Leg | 56.3 | 56.3 | 0 | No |
| | South Leg | 56.8 | 56.8 | 0 | No |

CNEL: community noise equivalent level; ft: feet; dBA: A-weighted decibels.
Source: FHWA RD 77-108 Highway Traffic Noise Prediction Model

### *Project-Related Stationary Source Noises*

The primary noise stationary noise sources associated with the Project would be heating, ventilating, and air conditioning (HVAC) equipment and park activities. As mentioned previously, the City regulates noise produced from air conditioning or air handling equipment to no more than 50-55 dBA based on Section 17.53.070 Prohibited acts of the Municipal Code.

If a park is built under Phase 2, typical park uses could include playgrounds, athletic courts/fields, and picnic areas. Due to the size of the proposed park area, the amount of space available for each of these proposed activities is limited. The closest existing noise sensitive uses are residential uses located approximately 550 feet south of the Project Site. Future residential uses could be located as close as approximately 100 feet to the north of the park area. Due to the small scale of potential park uses, relatively low magnitude of noise produced by these park uses and the distance from the park uses and existing/future residential uses, the Project would result in less than significant noise impacts to offsite uses.

The proposed mercado/market would also have the potential to generate noise from visitors patronizing the site. This would result in low levels of noise associated with people talking and parking lot activities. Noise associated with these activities will not be substantial and would result in less than significant noise impacts to nearby uses.

### *Threshold 4.11-b Would the project generate excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant With Mitigation Incorporated.** The Project would generate groundborne vibration during construction of the Project. The operations phase of the Project would not involve substantial sources of vibration or groundborne noise levels based on the types of land uses proposed.

### *Temporary Vibration Impacts During Construction*

The effect of construction vibration depends on the amount and type of construction planned under each phase and the distance between construction activities and the nearest vibration-sensitive receptor. Table 4.11-10 identifies vibration levels during typical construction activities. The construction of the Project does not assume impact pile driving or blasting. The most substantial vibration sources associated with Project construction would be the equipment used during grading and preparation of the Project Site.

**TABLE 4.11-10**
**VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT**

| Equipment | PPV at 25 ft (in/sec)[a] | Approximate $L_v$ at 25 ft (VdB)[b] |
|---|---|---|
| Pile driver – impact (typical) | 0.644 | 104 |
| Pile driver – sonic (typical) | 0.170 | 93 |
| Large bulldozer | 0.089 | 87 |
| Caisson drilling | 0.089 | 87 |
| Loaded trucks | 0.076 | 86 |
| Jackhammer | 0.035 | 79 |
| Small bulldozer | 0.003 | 58 |

ft: feet; ppv: peak particle velocity; in/sec: inches/second; VdB: vibration decibels

[a] The ppv is defined as the maximum instantaneous positive or negative peak of the vibration signal, and is usually measured in in/sec.

[b] Root mean square velocity

Source: Source: FTA 2018

The Tanner Corner Building, a historic building, is located on the northwest corner of the intersection of Moorpark Avenue at West High Street. A vibration threshold of 0.25 ppv was used for historic structures based on FTA guidance. This is considered conservative because the

Tanner Corner Building is made of concrete masonry units which are not considered fragile. As shown in Table 4.11-11, with the exception of the Tanner Corner Building the vibration generated by construction equipment would not exceed the vibration building damage criteria threshold when construction activities occur under maximum (i.e., closest to the receptor) exposure conditions for vibration sensitive receptors. Vibration levels may potentially exceed the vibration threshold for building damage at the adjacent Tanner Corner Building to the east of the Project Site.

**TABLE 4.11-11**
**VIBRATION BUILDING DAMAGE AT NEAREST OFFSITE BUILDINGS**

| | Vibration Levels (ppv) | | | |
|---|---|---|---|---|
| | **North - Residential Uses** | **Northwest - Walnut Canyon School** | **South - Post Office** | **East - Tanner Corner Building** |
| **Equipment** | **(ppv @ 55 ft)** | **(ppv @ 320 ft)** | **(ppv @ 70 ft)** | **(ppv @ 10 ft)** |
| **Pile Driver (Sonic) Upper Range (VR Equivalent)** | 0.22 | 0.02 | 0.16 | **2.90** |
| Pile Driver (Sonic) Typical | 0.05 | 0.00 | 0.04 | **0.67** |
| Vibratory roller | 0.06 | 0.00 | 0.04 | **0.83** |
| **Caisson Drill (DSM Equivalent)** | 0.03 | 0.00 | 0.02 | **0.35** |
| Large bulldozer | 0.03 | 0.00 | 0.02 | **0.35** |
| Small bulldozer | 0.00 | 0.00 | 0.00 | 0.01 |
| Jackhammer | 0.01 | 0.00 | 0.01 | 0.14 |
| Loaded trucks | 0.02 | 0.00 | 0.02 | **0.30** |
| **Criteria** | **0.30** | **0.30** | **0.30** | **0.25** |
| **Exceeds Criteria?** | **No** | **No** | **No** | **Yes** |

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet; NA: not applicable
Source: FTA 2018 (Calculations can be found in Appendix J).

Based on the "Moorpark Library Project Site, Conceptual Ground Improvement Plan Cost Estimate" prepared by Oakridge Geoscience, Inc., there are two proposed ground improvement methods currently being considered. The two possible ground improvement methods are vibro-replacement (VR) or deep soil mixing (DSM). The VR method consists of advancing a 30-inch diameter mandrel using a combination of the weight of the mandrel and vibration. After the mandrel reaches the selected depth, gravel is vibrated and "rammed" into the hole as backfill. This approach is best approximated by the sonic pile driver shown in Table 4.11-11. It is unknown whether it is best characterized under typical or upper range vibration data. To provide a conservative analysis, it is assumed that vibrations generated by VR are comparable to the upper range data for sonic pile driving. The DSM method involves use of a large-diameter auger attached to a drill rig or crane to advance the auger to the necessary depth. Cement is mixed into the soil through the auger. Drilling through the use of the auger is anticipated to be comparable to the vibrations imparted by a caisson drill due to similar drilling activities. Table 4.11-12 shows the vibration levels from construction equipment at different distances from the Tanner Corner Building.

**TABLE 4.11-12**
**VIBRATION BUILDING DAMAGE AT DIFFERENT DISTANCES**

| Equipment | Vibration Levels (ppv) | | | |
|---|---|---|---|---|
| | (ppv @ 15 ft) | (ppv @ 20 ft) | (ppv @ 25 ft) | (ppv @ 55 ft) |
| **Pile Driver (Sonic) Upper Range (VR Equivalent)** | **1.58** | **1.03** | **0.73** | 0.22 |
| Pile Driver (Sonic) Typical | **0.37** | 0.24 | 0.17 | 0.05 |
| Vibratory roller | **0.45** | **0.29** | 0.21 | 0.06 |
| **Caisson Drill (DSM Equivalent)** | 0.19 | 0.12 | 0.09 | 0.03 |
| Large bulldozer | 0.19 | 0.12 | 0.09 | 0.03 |
| Small bulldozer | 0.01 | 0.00 | 0.00 | 0.00 |
| Jackhammer | 0.08 | 0.05 | 0.04 | 0.01 |
| Loaded trucks | 0.16 | 0.11 | 0.08 | 0.02 |
| **Criteria** | **0.25** | **0.25** | **0.25** | **0.25** |
| **Exceeds Criteria?** | **Yes** | **Yes** | **Yes** | **No** |

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet; NA: not applicable
Source: FTA 2018 (Calculations can be found in Appendix J).

As shown in Table 4.11-12, the distance for which construction equipment have to be separated from the Tanner Corner Building differs depending on the type of construction equipment. A 25-foot separation distance between conventional construction equipment and DSM equipment is sufficient. VR equipment would need to be separated by a distance of at least 55 feet if vibration levels are equivalent to the upper range of vibration from a sonic pile driver. The vibration exposure levels at the Tanner Corner Building are an estimate based on vibration levels provided by the FTA for general construction equipment and may not reflect the vibration levels of the proposed equipment nor the geology present at the site. As such, **MM NOI-2** which requires onsite vibration monitoring at the Tanner Corner Building would provide real-time and actual vibration exposure levels at the Tanner Corner Building. With the implementation of **MM NOI-2**, the impact would be less than significant.

With respect to impacts to people, the threshold of annoyance varies dependent on the frequency of occurrence and the character of vibration. The FTA guidance indicates that 75 vibration decibels (VdB) is a level that separates barely perceptible from distinctly perceptible. Based on the equipment to be used and the distance from occupied buildings, construction equipment vibration levels at occupied buildings would generally be less than 75 VdB and not perceptible. However, when heavy equipment is used near a building vibration may be noticeable to the occupants of buildings on and near to the Project Site. These events would occur for short periods and infrequently. Annoyance to people would not be excessive and the impact would be less than significant.

***Threshold 4.11-c*** **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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 Project Site is not located within an adopted Airport Land Use Plan or in the vicinity of a private airstrip, heliport, or helistop. The nearest airport is the Camarillo Airport located

approximately 11 miles southwest of the site. The Project Site would not be subject to excessive noise levels related to aircraft or airport operations. Therefore, the Project would have no impacts related to this threshold, and no mitigation is required.

## 4.11.5 CUMULATIVE IMPACTS

### Cumulative Construction Noise

Adverse noise impacts during construction of the Project would be localized and would occur intermittently for varying periods of time throughout the construction period. Short-term cumulative impacts related to ambient noise and vibration levels could occur if construction associated with the Project as well as surrounding current and future development were to occur simultaneously. The 200-unit apartment building planned northwest of the Project Site is approved; however, the timing of construction is unknown. Due to the differences in the size of development, these projects are not likely to be built concurrently. Any overlap with the Moorpark Civic Center Campus construction by these projects is expected to be minor. Compliance with the City's Noise Ordinance and conditions of approval would prevent any significant construction noise impacts.

### Cumulative Operational Noise

Off-site cumulative noise impacts describe how much noise levels are forecasted to increase over existing conditions with traffic growth. Cumulative increases in traffic noise levels were estimated by comparing the "2037 With Project" scenario to existing conditions.

As addressed in Section 4.11-7, a significant cumulative traffic noise impact would occur if all of the following occur: (1) the total noise increase exceeds 3 dBA, (2) the future noise level at a sensitive receptor exceeds 65 dBA CNEL, and (3) the Project contribution to the noise increase exceeds 1 dBA if noise levels exceed 65 dBA CNEL. A 3 dBA increase would result in a noticeable change in noise levels. The 65 dBA CNEL noise level is considered by the City to be the upper limit for acceptable exterior noise levels for noise sensitive uses and a 1 dBA allowance is provided if noise levels exceed 65 dBA CNEL.

Table 4.11-13 shows that the cumulative noise increases would range from 0 to 44.5 dBA CNEL with the majority of noise increases below the noticeable change threshold of 3 dBA. Cumulative noise increases greater than 3 dBA would occur at multiple segments. However, these increases would occur with total future noise levels that are less than the 65 dBA CNEL upper noise threshold. So the noticeable change in traffic noise levels will occur in noise environments that are still acceptable based the compatibility standards identified previously in Table 4.11-1. The only location where there is a 3 dBA or greater increase that approaches the noise limit of 65 dBA CNEL occurs at the southern roadway segment of Casey Road and Moorpark Avenue/Walnut Canyon Road. However, the Project's contribution to this cumulative traffic noise increase is less than 1 dBA because it is contributing 40 daily vehicle trips to the 11,060 vehicle trips estimated to occur there. Because the cumulative traffic noise increases would be less than the thresholds, cumulative traffic noise increases would be less than significant.

Stationary sources of noise for existing and future uses would continue to be regulated by the City's Municipal Codes. Compliance with the City's noise limits would reduce cumulative noise levels to less than significant levels and no mitigation measures would be required.

**TABLE 4.11-13**
**CUMULATIVE OFF-SITE TRAFFIC NOISE LEVELS**

| Roadway | Segment | CNEL at 50 feet (dBA) | | | | |
|---|---|---|---|---|---|---|
| | | Existing | 2037 With Project | Total Traffic Noise Increase | Project Contribution | Potential Impact? |
| Casey Road and Moorpark Avenue/Walnut Canyon Road | East Leg | 0 | 0 | 0 | 0 | No, <3 dBA |
| | West Leg | 52.1 | 60.0 | 7.9 | 0 | No, <65 dBA |
| | North Leg | 60.0 | 62.8 | 2.9 | 0 | No, <3 dBA |
| | South Leg | 60.8 | 65.0 | 4.1 | 0 | No, <1 dBA |
| Charles Street/Civic Center Driveway and Moorpark Avenue | East Leg | 51.9 | 52.6 | 0.7 | 0 | No, <3 dBA |
| | West Leg | 49.7 | 51.3 | 1.6 | 1.0 | No, <3 dBA |
| | North Leg | 64.2 | 66.8 | 2.6 | 0 | No, <3 dBA |
| | South Leg | 64.2 | 66.9 | 2.6 | 0 | No, <3 dBA |
| High Street and Moorpark Avenue | East Leg | 62.4 | 64.8 | 2.4 | 0.1 | No, <3 dBA |
| | West Leg | 50.3 | 56.8 | 6.5 | 0.7 | No, <65 dBA |
| | North Leg | 64.2 | 66.8 | 2.7 | 0.0 | No, <3 dBA |
| | South Leg | 64.4 | 66.5 | 2.1 | 0.1 | No, <3 dBA |
| High Street/Princeton Avenue and Spring Road | East Leg | 64.7 | 66.4 | 1.8 | 0 | No, <3 dBA |
| | West Leg | 62.3 | 64.7 | 2.4 | 0.1 | No, <3 dBA |
| | North Leg | 67.9 | 69.2 | 1.3 | 0 | No, <3 dBA |
| | South Leg | 67.8 | 69.1 | 1.2 | 0 | No, <3 dBA |
| First Street/Poindexter Avenue and Moorpark Avenue | East Leg | 50.4 | 51.2 | 0.8 | 0 | No, <3 dBA |
| | West Leg | 58.4 | 59.5 | 1.1 | 0.1 | No, <3 dBA |
| | North Leg | 62.2 | 65.1 | 2.9 | 0.1 | No, <3 dBA |
| | South Leg | 60.3 | 63.9 | 3.6 | 0.1 | No, <65 dBA |
| Los Angeles Avenue and Moorpark Avenue | East Leg | 71.6 | 73.2 | 1.6 | 0 | No, <3 dBA |
| | West Leg | 71.4 | 73.0 | 1.6 | 0 | No, <3 dBA |
| | North Leg | 62.6 | 65.2 | 2.6 | 0 | No, <3 dBA |
| | South Leg | 61.6 | 63.1 | 1.5 | 0 | No, <3 dBA |
| Spring Road and Walnut Canyon Road | East Leg | 63.0 | 64.7 | 1.7 | 0 | No, <3 dBA |
| | West Leg | 44.1 | 45.7 | 1.6 | 0 | No, <3 dBA |
| | North Leg | 66.5 | 68.6 | 2.2 | 0 | No, <3 dBA |
| | South Leg | 60.9 | 63.8 | 2.9 | 0 | No, <3 dBA |
| High Street and Gabbert Road | East Leg | 0 | 49.3 | 44.5 | 0.3 | No, <65 dBA |
| | West Leg | 0 | 0 | 0 | 0 | No, <3 dBA |
| | North Leg | 49.0 | 56.3 | 7.3 | 0 | No, <65 dBA |
| | South Leg | 49.0 | 56.8 | 7.9 | 0 | No, <65 dBA |

CNEL – Community Noise Equivalent Level; dBA - decibels

## 4.11.6 MITIGATION PROGRAM

### Conditions of Approval

**COA NOI-1** The Project shall comply with Section 15.26 of the City's Municipal Code, which requires contractors to not engage in or conduct any noise-generating outdoor

construction work, except between the hours of 7:00 AM and 7:00 PM, Monday through Saturday, unless a permit for different hours has been issued.

**COA NOI-2** The Project shall comply with Chapters 9.28, 10.04, 12.24 and 17.53 of the Moorpark Municipal Code and any provision amendatory or supplementary thereto, as a standard requirement for construction noise reduction.

**COA NOI-3** The Project shall include the posting, in a conspicuous location, of the construction hour limitations and make each construction trade aware of the construction hour limitations.

**Mitigation Measures**

**MM NOI-1** Prior to the start of grading of each Project phase, the Project applicant shall provide evidence acceptable to the City's Community Development Department, that:

a. All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.

b. Stationary equipment, such as generators and air compressors, would be located as far from local residences and Walnut Canyon Elementary School, as feasible.

c. Equipment maintenance and staging areas would be located as far away from local residences and Walnut Canyon Elementary School, as feasible.

d. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings and Walnut Canyon Elementary School.

**MM NOI-2** During construction activities, the Project applicant will ensure that ongoing vibration monitoring is conducted for Project activities within 75 feet of the Tanner Corner Building as specified below.

- Whenever vibratory replacement activities occur within 75 feet of the Tanner Corner Building.
- Whenever Deep Soil Mixing activities occur within 50 feet of the Tanner Corner Building.
- Whenever general construction equipment is utilized within 25 feet of the Tanner Corner Building.

If vibration levels at the Tanner Corner Building reach or exceed 0.25 ppv, there is a potential for building damage and an immediate stop work order will be issued. Alternative construction methods or vibration reduction measures will then be determined that keep vibration exposure levels below 0.25 ppv. *(Also see **MM CUL-1** in Section 4.3, Cultural Resources, which includes requirements for the development of a construction monitoring plan for work in proximity to the Tanner Corner Building).*

## 4.11.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.11.8 REFERENCES

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# 4.12 POPULATION AND HOUSING

## 4.12.1 EXISTING CONDITIONS

The Project Site does not currently contain any housing or residents. However, there are many employees that currently work within the Project Site associated with City Hall, the Library, and the Active Adult Center.

According to the United States (U.S.) Census Bureau, the existing population of Ventura County increased from 823,318 in 2010 to 843,843 in 2020 (U.S. Census Bureau 2021). The Department of Finance (DOF) projects population in Ventura County to increase to 885,628 by 2040 (DOF 2022a), while Southern California Association of Governments' (SCAG) population projection is 947,000 by 2045 for Ventura County (SCAG 2020). The City of Moorpark's current population is 35,399 as of January 2022 (DOF 2022b). According to SCAG's past and future projections for population, housing, and employment, the City will experience greater increases relative to County increases. Table 4.12-1, below provides SCAG's population, housing, and employment projections for years 2016 and 2045 for the County and the City.

**TABLE 4.12-1**
**ESTIMATES FOR**
**POPULATION, HOUSEHOLDS, AND EMPLOYMENT**

| Categories | Year 2016 | Year 2045 | Total Increase | Percent Increase |
|---|---|---|---|---|
| **Ventura County** | | | | |
| Population | 850,000 | 947,000 | 97,000 | 11.41 |
| Households | 271,000 | 306,000 | 35,000 | 12.92 |
| Employment | 335,000 | 389,000 | 54,000 | 16.12 |
| **City of Moorpark** | | | | |
| Population | 36,700 | 42,200 | 5,500 | 14.99 |
| Households | 11,000 | 13,000 | 2,000 | 18.18 |
| Employment | 11,300 | 15,000 | 3,700 | 32.74 |
| Source: SCAG 2020 | | | | |

## 4.12.2 REGULATORY SETTING

### State

#### *California Housing and Community Development Department Projections*

California housing law calls upon local jurisdictions to provide a fair-share of housing. In implementing this law, the California Housing and Community Development Department assigns fair share housing targets to each of the Council of Governments (COG) in the State based on the California Department of Finance (DOF) population projections and regional forecasts. Southern California Association of Governments (SCAG), a Joint Powers Agency established under Sections 6502 et seq. of the California Government Code, is designated as a COG, a Regional Transportation Planning Agency, and a Metropolitan Planning Organization for the six-county region consisting of Ventura, Imperial, Los Angeles, Orange, Riverside, and San Bernardino Counties.

## Regional

### *Regional Housing Needs Assessment*

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. RHNA quantifies the need for housing within each jurisdiction during specified planning periods. Communities use RHNA in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, and addresses social equity and fair share housing needs. On March 4, 2021, the SCAG Regional Council adopted the 6th Cycle Final RHNA Allocation Plan, which assigns housing need for each jurisdiction in the SCAG region for the October 2021 through October 2029 planning period. RHNA housing need allocation for the County of Ventura is 24,452 dwelling units (DUs) and 1,289 DUs for the City of Moorpark (SCAG 2021).

## Local

### *2021-2029 Housing Element*

The City's 2021-2029 Housing Element establishes and City's goals, policies and implementation programs for the adequate provision of decent, safe, and affordable housing for all residents of Moorpark. The Element discusses the population and housing stock of the City, constraints to housing development in Moorpark, and areas where future housing development may occur. Quantified objectives, housing programs, and associated funding were developed to meet the City's existing and future housing needs, as outlined in the RHNA by SCAG. None of the goals, policies, and housing programs in the Housing Element are directly applicable to the proposed Project or the Project Site.

## 4.12.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential population and housing impacts. Impacts to population and housing would be significant if the Project would:

***Threshold 4.12-a*** ***Induce substantial unplanned 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); or***

***Threshold 4.12-b*** ***Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

## 4.12.4 IMPACT ANALYSIS

***Threshold 4.12-a*** ***Would the project induce substantial unplanned 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)?***

**Less than Significant Impact.** The Project is not anticipated to generate substantial unplanned population growth. Using an estimate of 3.09 persons per dwelling unit for residential development in the City of Moorpark, the 75 dwelling units proposed for Phase 3 of the Project would generate approximately 232 new residents (U.S. Census Bureau 2021). When compared to the 2022 population of Moorpark, which is 35,399 people and SCAG's projected population of 42,200 in 2045, 232 new residents is not a substantial number of people and is within the projections identified (DOF 2022b, SCAG 2020).

Furthermore, the City's General Plan was updated in 2022 to meet the State-mandated RHNA allocation of 1,289 units of total new construction (SCAG 2021). The DUs proposed for the Project would be within the anticipated growth for the City as projected by SCAG at 42,200 residents and 13,000 households by 2045 (SCAG 2020). The Project would not result in substantial direct unplanned population growth and impacts would be less than significant.

The Project would result in temporary construction jobs, as well as an increase in permanent jobs within the Project Site than exist currently through the addition of 13,000 square feet of commercial land uses. This minor amount of commercial space would not induce substantial unplanned population growth.

The Project would not otherwise extend roads or other infrastructure in a manner that would have the potential to induce population growth.

The Project would result in less than significant impacts related to this threshold, and no mitigation is required.

***Threshold 4.12-b Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

**No Impact.** The Project Site does not contain existing housing; therefore, implementation of the Project would not displace any existing housing or residents. Furthermore, the Project would result in an increase of up to 75 residential units once constructed. Therefore, the Project would have no impacts related to this threshold and no mitigation is required.

## 4.12.5 CUMULATIVE IMPACTS

As described above, the Project would not displace any existing residents or housing units. Instead, the Project would result in the addition of approximately 232 new residents and 75 new housing units, which is not a substantial amount. None of the other cumulative projects would displace substantial numbers of residents or housing units. A number of the cumulative projects would increase the local housing supply and number of residents, consistent with local and regional plans. Therefore, no significant cumulative impacts would result related to this resource topic.

## 4.12.6 MITIGATION PROGRAM

### Conditions of Approval

No conditions of approval are applicable to population and housing.

**Mitigation Measures**

No significant impacts pertaining to population and housing were identified; therefore, no mitigation measures are required.

### 4.12.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

### 4.12.8 REFERENCES

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# 4.13 PUBLIC SERVICES

## 4.13.1 EXISTING CONDITIONS

### Ventura County Fire Department

The Ventura County Fire Department (VCFD) is responsible for providing fire protection services to the Cities of Moorpark, Camarillo, Ojai, Port Hueneme, Simi Valley, Thousand Oaks, Santa Paula, and unincorporated areas of Ventura County. VCFD's response area is approximately 848 square miles and serves more than 800,000 persons in unincorporated areas of Ventura County and the Cities of Ojai, Port Hueneme, Moorpark, Camarillo, Santa Paula, Simi Valley, and Thousand Oaks (VCFD 2022a). The Project Site is served by Fire Station 42, located approximately 0.02 miles away. Table 4.13-1 identifies the location, current equipment, and staffing levels for this station.

**TABLE 4.13-1**
**FIRE STATION 42 DETAILS**

| Station Number | Address | Equipment | Personnel |
|---|---|---|---|
| 42 | Moorpark Station<br>295 E. High Street<br>Moorpark | 1 Engine (Engine 42)<br>1 Reserve Engine (Engine 142)<br>1 Brush Engine (Engine 342) | 3 |
| Source: VCFD 2022a. | | | |

Fire Station 42 serves the central and eastern sections of the City. This station also supports larger incidents in the Santa Clara Valley (VCFD 2022b). Countywide, in 2020, the VCFD responded to more than 47,272 incidents of which 35,304 were medical emergency calls, 1,485 were fire related, 3,155 were public service calls, 3,645 were alarms, 1,079 were calls involving hazardous materials, and 1,485 calls related to fires (VCFD 2022b).

### Ventura County Sherriff's Office

The Ventura County Sheriff's Office (VCSO) provides law enforcement services to a service area that encompasses 1,882 square miles and serves unincorporated Ventura County and the Cities of Camarillo, Fillmore, Ojai, Moorpark, and Thousand Oaks (VCSO 2022). The VCSO operates stations throughout Ventura County, including the Moorpark Station located at 610 Spring Street less than one mile from the Project Site. Law enforcement services for the City are provided on a contract basis. From the Moorpark Station, the VCSO serves the City of Moorpark as well as the unincorporated areas of the Santa Rosa Valley and Simi Valley.

### Local and Regional Parks

As described in more detail in Section 4.14 of this Environmental Impact Report (EIR), Recreation, the City has 19 parks, seven of which are located in the downtown area. The Community Center Park is an approximate ½-acre public park located on the Project Site, which contains amenities including barbeques, picnic tables, playground, and restrooms located on the front lawn of the Civic Center Campus along Moorpark Avenue.

### Moorpark Unified School District

The Project Site is located within the Moorpark Unified School District (MUSD). The Project Site is located within the attendance boundaries for Arroyo West School (K–5), Chaparral Middle

School (6–8), and Moorpark High School (9–12) (My School Locator, 2022). MUSD charges developer fees of $3.36 per square foot of livable space for residential development and $0.54 per square foot for commercial/industrial development (MUSD 2022).

**Moorpark City Library**

The Moorpark City Library is located within the Project Site, which provides library service to the City of Moorpark. The Project involves the construction of a new City Library (Moorpark 2022b).

## 4.13.2 REGULATORY SETTING

### State

#### *Assembly Bill 2926 and Assembly Bill 1986*

To assist in providing school facilities to serve students generated by new development projects, the State passed Assembly Bill (AB) 2926 in 1986. This bill allows school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees are also referenced in the 1987 Leroy Greene Lease-Purchase Act, which requires school districts to contribute a matching share of costs for construction, modernization, and reconstruction projects.

#### *Senate Bill 50*

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill (SB) 50, restricts the ability of a local agency to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time building permits are issued. These fees are used by the local schools to accommodate the new students added by the Project, reducing potential impacts on schools to a less than significant impact. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation for school impacts of new development.

### Local

#### *Fire Protection and Emergency Services*

City of Moorpark Municipal Code

Title 15, Buildings and Construction, of the City's Municipal Code, contains the provisions of the Ventura Fire Code, which "apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation".

#### *Police Protection*

City of Moorpark Municipal Code

Chapter 3.36, Building Permit Fees, of the City of Moorpark Municipal Code, contains a provision stating that "within any service area for which the existing police station is overextended, a police

facilities fee computed pursuant to this article shall be paid as a condition precedent to the issuance of any building permit for new construction".

### 4.13.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential public services impacts. Impacts to public services would be significant if the Project would:

***Threshold 4.13*** ***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 public services:***

***a. Fire Protection.***

***b. Police Protection.***

***c. Schools.***

***d. Parks.***

***e. Other Public Facilities.***

### 4.13.4 IMPACT ANALYSIS

***Threshold 4.13-a*** ***Would the project 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 Project Site is currently partially developed; therefore, it already requires fire protection under existing conditions. As discussed in Section 4.12, Population and Housing, the Project would add approximately 75 residential units and other buildings, and would increase the population within the Project Site by approximately 232 residents, which would incrementally increase the demand for fire protection services, including administrative tasks associated with approval and construction of the Project (e.g., building plan check) and response to fire service calls once the Project is occupied. This minor increase in demand for fire protection services is not expected to independently require the construction of new or alteration of existing fire protection facilities to maintain an adequate level of fire protection service to the Project area. However, to maintain current levels of response times the VCFD may need to add to their existing staffing to accommodate the Project as well as other cumulative projects in the vicinity.

As required by **COA PUB-1**, the Project would comply with fire protection design standards, which would ensure that the Project would not inhibit the ability of fire protection or paramedic crews to respond at optimum levels.

Also, as required by **COA PUB-2**, the Project as well as other future development in the City would be required to pay typical City Development Impact Fees (DIF) that would be used exclusively for future facility improvements necessary to ensure contribution of its fair share of the cost of facilities and equipment. Payment of the DIF would allow future site-specific development to contribute to its fair share cost of facilities and equipment due to the increased demand for fire protection services. The construction of future fire department facilities would be subject to separate environmental review.

Therefore, less than significant impacts would result related to this threshold, and no mitigation is required.

***Threshold 4.13-b*** ***Would the project 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.** The Project Site is currently partially developed; therefore, it already requires police protection under existing conditions. The VCSO provides police patrol and investigative services to the Project Site. Although the existing uses within the Project Site already place some demand on police services, the Project would result in a minor incremental increase in the demand for police services with the addition of 75 residential units and other buildings, as well as approximately 232 new residents.

As required by **COA PUB-2**, the Project as well as other future development in the City would be required to pay property taxes that would be used for future facility improvements necessary to ensure adequate levels of service. Therefore, impacts related to police protection would be less than significant, and no mitigation measures are either required or recommended.

***Threshold 4.13-c*** ***Would the project 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 number of students expected to be generated by the development of the 75 residential units would be minimal. Using MUSD student generation rates, the Project would result in the addition of approximately 31 students to local schools, consisting of 16 elementary school students, seven middle school students, and eight high school students, as shown below in Table 4.13-2, Estimated Project Student Generation (MUSD 2020). As required by **COA PUB-2**, the Project as well as other future development in the MUSD service area would be required to pay developer school fees that would be used for future facility improvements necessary to ensure adequate levels of service. Developer school fees are considered full and complete school facilities mitigation pursuant to SB 50. Therefore, impacts related to schools would be less than significant, and no mitigation measures are either required or recommended.

**TABLE 4.13-2**
**ESTIMATED PROJECT STUDENT GENERATION**

| Grade Level | Student Generation Rate | Units Proposed by the Project | Estimated Student Generation |
|---|---|---|---|
| Elementary School (K–5) | 0.2118 students/unit | 75 units | 16 elementary school students |
| Middle School (6-8) | 0.0814 student/unit | 75 units | 7 middle school students |
| High School (9–12) | 0.1031 students/unit | 75 units | 8 high school students |
| **Total** | | | **31 total students** |
| Source: Moorpark Unified School District, Residential Development School Fee Justification Study. | | | |

***Threshold 4.13-d*** ***Would the project 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?***

**Less than Significant Impact.** The Project's impacts related to Recreation are evaluated in detail in Section 4.14 of this EIR. The Project includes the development of on-site recreational amenities within the Project Site including a City-owned park, the impacts of which have been addressed through the impact analysis presented in each of the topical issues in this EIR where applicable. Also, the Project would be required to comply with the minimum requirements of the Municipal Code that require dedication of parkland or payment of in-lieu fees associated with residential development. Any off-site park development that is partially funded through the Project's development fees would be subject to a separate environmental review pursuant to the California Environmental Quality Act (CEQA). Therefore, impacts related to parks would be less than significant, and no mitigation measures are either required or recommended.

***Threshold 4.13-e*** ***Would the project 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.** The Project would generate approximately 232 new residents that would utilize library services. Due to this relatively small residential population anticipated to be generated by the Project, implementation of the Project is not expected to adversely impact library services or to independently trigger the need for construction of new or expanded library facilities. Furthermore, the Project would construct a new and improved City library in Phase 1, which would expand the capacities of the City's library system above existing conditions. Therefore, the Project would not result in impacts associated with the need for new or physically altered governmental facilities. Additionally, the Project would provide payment of applicable development fees. Therefore, impacts related to other public facilities, including libraries, would be less than significant, and no mitigation measures are either required or recommended.

## 4.13.5 CUMULATIVE IMPACTS

Collectively, the cumulative projects and the Project would result in increased development that would collectively increase demand for public services provided by public service providers. The Project as well as other future development in the City would be required to pay property taxes that would be used for future facility improvements necessary to ensure adequate levels of service from these public service providers. Therefore, impacts related to the provision of new or physically altered governmental facilities would be less than significant, and no mitigation measures are either required or recommended.

## 4.13.6 MITIGATION PROGRAM

### Conditions of Approval

**COA PUB-1** The Developer shall comply with all applicable codes, ordinances, and regulations, including the most current edition of the California Fire Code and the City of Moorpark Municipal Code, regarding fire prevention and suppression measures; fire hydrants; fire access; water availability; and other, similar requirements. Prior to issuance of building permits, the City of Moorpark Community Development Department and the Ventura County Fire Department shall verify compliance with applicable codes and that appropriate fire safety measures are included in the Project design. All such codes and measures shall be implemented prior to occupancy.

**COA PUB-2** The Developer shall pay all applicable Development Impact Fees (DIFs) prior to the issuance of building permits, for parkland dedication, parkland improvements, public safety facilities, other governmental facilities, and outside agency fees including school district fees.

### Mitigation Measures

No significant impacts pertaining to public services were identified; therefore, no mitigation measures are required.

## 4.13.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impacts.

## 4.13.8 REFERENCES

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# 4.14 RECREATION

## 4.14.1 EXISTING CONDITIONS

The City has 19 parks, seven of which are located in the downtown area. The locations, acreage, and types of services and facilities within the City of Moorpark are presented in Table 4.14-1 below. The Community Center Park is an approximate ½-acre public park located on the Project Site. The Community Center Park contains amenities including barbeques, picnic tables, playground, and restrooms located on the front lawn of the Civic Center Campus along Moorpark Avenue.

**TABLE 4.14-1**
**CITY OF MOORPARK PUBLIC PARKS**

| Park Name | Location | Park Acreage | Facilities |
|---|---|---|---|
| **Downtown Area/Northern Area Parks** | | | |
| Mammoth Highlands Park | 700 Elk Run Loop | 6.5 | Barbecues, basketball court, picnic pavilion, playground, restroom, tennis court |
| Magnolia Park | 296 Charles Street | 0.3 | Barbecues, Picnic tables, playground |
| Community Center Park* | 799 Moorpark Avenue | 0.5 | Barbecues, picnic tables, playground, restroom |
| Poindexter Park | 500 Poindexter Avenue | 9.8 | Barbecues, basketball court, horseshoe pits, multipurpose fields, picnic pavilion, skatepark, tot lot |
| Villa Campesina Park | 4704 Leta Yancy Road | 0.5 | Barbeques, multipurpose fields |
| Veterans Memorial Park | Spring Rd at Flinn Avenue | 0.3 | Veterans statue |
| Walnut Acres Park | 161 Second Street | 0.34 | Barbecues, picnic tables, pinata pole, playground |
| **Mountain Meadows/Western Area Parks** | | | |
| Glenwood Park | 11800 Harvester Street | 4.5 | Barbecues, basketball court multipurpose fields volleyball court |
| Arroyo Vista Community Park | 4550 Tierra Rejada Road | 69.0 | Recreation center, athletic fields, ball fields, barbecues, disc golf, football field. gymnasium, multipurpose fields, parking, pet waste disposal stations, picnic pavilion, picnic tables, playground, recycle bin, restrooms, tennis court, tot lot, trash receptacles, water |
| County Trail Park | 11701 1/2 Mountain Trail Street | 8.0 | Barbeques, multipurpose fields, playground |
| Tierra Rejada Park | 11900 Mountain Trail Street | 8.0 | Barbeques, basketball court, bocce ball courts, multipurpose fields, pickleball courts, picnic pavilion, playground, restrooms. tennis court, tot lot |
| Mountain Meadows Park | 4350 Mountain Meadow Drive | 8.0 | Ball fields, barbeques, multipurpose fields, picnic pavilion, restrooms |
| **Peach Hill Area/Southern Area Parks** | | | |
| Peach Hill Park | 13200 Peach Hill Road | 10.0 | Ball fields, barbeques, multipurpose fields, picnic pavilion, playground, restrooms |
| Monte Vista Nature Park | 4201 Spring Road | 5.0 | Hiking trails |

**TABLE 4.14-1**
**CITY OF MOORPARK PUBLIC PARKS**

| Park Name | Location | Park Acreage | Facilities |
|---|---|---|---|
| Miller Park | 4530 Miller Parkway | 6.5 | Barbeques, basketball court, pickleball courts, picnic pavilion, playground, restrooms |
| **College Area/Eastern Area Parks** | | | |
| Virginia Colony Park | 14507 Condor Drive | 1.0 | Barbecues, picnic tables, playground. |
| Campus Park | 6400 Harvard Street | 2.5 | Barbeques, basketball court, playground, restrooms |
| College View Park | 15400 Campus Park Drive | 4.0 | Barbecues, basketball court, multipurpose fields, playgrounds, restrooms and a dog park with pet waste disposal stations, recycle bin (ADA accessible) |
| Campus Canyon Park | 6970 Campus Canyon Drive | 6.0 | Ball fields, barbeques, basketball court, multipurpose fields, playground, restrooms |
| | **Total Acres** | **150.74** | |

*The Community Center Park is located within the Project Site.
Source: City of Moorpark 2022.

As shown in Table 4.14-1, Moorpark has 19 parks (155 acres) of existing parkland which serves a population of 35,399 residents (DOF 2022b). This translates to a parkland ratio of approximately 4.37 acres per 1,000 persons. The City's General Plan Land Use Element identifies the City's parkland ratio as 5.0 acres per 1,000 persons (Moorpark 2023). However, the City's goal is higher than 3.0 acres per 1,000 persons set by the Quimby Act.

## 4.14.2 RELEVANT PROGRAMS AND REGULATIONS

### State

#### *Quimby Act of 1965*

California allows a City or County to pass an ordinance that requires, as a condition of approval of a subdivision, either the dedication of land, the payment of a fee in lieu of dedication, or a combination of both for park and recreational purposes (Section 66477 of the *California Government Code*). This legislation, commonly called the "Quimby Act," establishes a standard of three acres of parkland per 1,000 residents for new subdivision development unless the municipality has already established a higher rate, unless the amount of existing neighborhood and community park area exceeds that limit, in which case the city may adopt a higher standard not to exceed 5 acres per 1,000 residents. The Quimby Act also specifies acceptable uses and expenditures of such funds.

#### *California Public Park Preservation Act of 1971*

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971 (Public Resources Code [PRC], §§ 5400–5409). Under this PRC, cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

## City

### *General Plan*

The goals and policies of the City of Moorpark General Plan that are applicable to the Project are listed below.

Land Use Element

**GOAL LU 15** Mixed use districts and corridors: a diversity of well-designed districts and corridors containing an integrated mix of commercial, office, and/or housing that enable Moorpark's residents to live close to businesses and employment, reduce automobile use, and actively engage and enhance pedestrian activity. LU 15.4 Inclusion of recreation and amenities: Require that residential/commercial mixed-use projects provide on-site recreational areas and other pedestrian-scale amenities such as benches, fountains, and landscaping that contribute to the living environment of residents, or contribute funds for their development within proximity of the project.

**GOAL LU17** Public facilities and services: governmental, utility, institutional, educational, recreational, cultural, religious, and social facilities and services are located and designed to complement Moorpark's neighborhoods, centers, and corridors.

**LU 17.1** Services supporting Moorpark's residents: Provide public facilities and services that are cost effective, and contribute to the health, safety, welfare, and personal development of all residents.

**LU 17.2** Efficient development: Promote the co- location of parks, schools, libraries, health services, recreation facilities, and other community facilities to support resident needs and leverage limited resources.

**GOAL LU 19** Downtown: Revitalize the downtown commercial core (Moorpark avenue area, walnut street, bard street, magnolia avenue, and high street)

**LU 19.2** Complementary development: Promote the development of new commercial and office uses, housing, park or recreational facilities, public parking, and a potential multimodal transportation center in the commercial core.

Open Space, Conservation and Recreation Element

**GOAL OSPR 1** Public parkland is acquired, maintained, and provided for both passive and active use that is equally accessible on a neighborhood, community, and regional basis. OSPR 1.6 Expanded access: Expand access to parklands for all residents, including the young, handicapped, and elderly.

**OSPR 1.7** Recreational activities: Facilitate the development and provision of recreational activities that are both active and passive (e.g., hiking, biking, running, sightseeing, swimming).

**OSPR 1.14** New development: Allow new development to provide small plazas, pocket parks, civic spaces, and other gathering places that are available to the public, particularly in infill areas, to help meet recreational demands.

**OSPR 1.15** Park equity: Prioritize social equity considerations in the provision and design of public parks so that residents regardless of age, ability, or neighborhood where they live have quality active and passive green space.

### *Municipal Code*

The following section from the City's Municipal Code applies to the Project.

16.44.101 Parks and Recreation Facilities

A. As a condition of the subdivision of land, the subdivider shall dedicate a portion of such land and/or pay a fee for the purpose of providing park and recreational facilities to serve the future residents of the property being subdivided. This requirement shall apply to all subdivisions except those which:
    1. Are exempted by Section 66477 of the Subdivision Map Act;
    2. Are a redivision of four (4) or less existing contiguous parcels or lots, which does not result in the creation of a greater number of parcels or lots than existed immediately prior to such redivision; or
    3. Will not result in the creation of any parcel or lot which, under the zoning regulations applicable at the time the tentative map is approved, and without the prior issuance of a conditional use permit or other discretionary entitlement, could be developed so as to increase the total number of dwelling units on such parcel or lot; provided, however, that this exemption shall not apply to condominium projects or stock cooperatives which consist of the subdivision of air-space in an existing apartment building which is less than five (5) years old.
B. If the proposed subdivision contains fifty (50) parcels or less, the subdivider shall not dedicate any land for park and recreational purposes but shall pay a fee equal to the fair market value of land which would otherwise be dedicated plus improvement costs as determined in accordance with the provisions of this chapter.

City of Moorpark Parks and Recreation Master Plan

Adopted in 2009, the City's Parks and Recreation Master Plan (PRMP) outlines the needs, goals, and current state of the approximately 150.57 acres of parkland throughout the City. The PRMP identifies the City standard for parks as 5.0 acres per 1,000 residents and the necessity to add 77.5 additional acres by 2025 to meet this goal. The PRMP includes measures for development and guidelines and policies for successful operation of these additional parks and recreational facilities. The PRMP also discusses coordination with the Moorpark Unified School District, Moorpark College, and private developers to share the costs of design, construction, operations and maintenance.

## 4.14.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential recreation impacts. Impacts to recreation would be significant if the Project would:

***Threshold 4.14-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.***

***Threshold 4.14-b*** ***Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.***

## 4.14.4 IMPACT ANALYSIS

**Threshold 4.14-a** ***Would the project 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.** The Project consists of the phased development of a new Civic Center. During Phase 2, the Project would include the removal of the existing Community Center Park and the construction of a new City-owned public park on the west side of the Project Site. The proposed park would be of a similar size and would provide similar recreational uses for the public as the existing Community Center Park.

Phase 3 of the Project includes the construction of 75 dwelling units on the north side of the Project which are anticipated to be occupied by approximately 232 residents, based on an estimated 3.09 persons per household in the City (US Census Bureau 2021). These residents would generate a demand for nearby parks and recreational facilities. Construction of an on-site City-owned public park would occur during Phase 2, prior to the development of the proposed residential community and therefore would be available for use by the future and existing City residents. The future employees of on-site land uses would also result in a minor increase in demand for parks and recreational facilities in the City. Other nearby parks and recreational facilities, as listed in Table 4.14-1, that may be used by future employees and residents of the Project Site include Mammoth Highlands Park, Magnolia Park, Poindexter Park, Villa Campesina Park, and Walnut Acres Park (City of Moorpark 2022b, City of Moorpark 2022c).

The Project would be required to pay applicable fees according to Chapter 16.44.101, Park and Recreational Facilities Development Impact Fee, of the Moorpark Municipal Code, which requires residential developments to dedicate parkland or pay in-lieu fees (City of Moorpark 2022a).

Due to the small number of residents and other users that would be introduced by the Project and the Project's on-site provision of a new City-owned public park, the increase in the use of existing public park facilities by the Project would not be at a level that would result in physical deterioration of existing parks and other recreational facilities, nor would it require the need for new or physically altered facilities. Compliance with the City's Municipal Code related to dedication of parkland or payment of in-lieu fees would ensure that the Project would result in less than significant impacts related to this threshold and no mitigation is required.

***Threshold 4.14-b*** ***Would the project 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 Project includes the development of on-site recreational amenities within the Project Site including a City-owned park, the impacts of which have been addressed through the impact analysis presented in each of the topical issues in this document where applicable. Also, the Project would be required to comply with the minimum requirements

of the Municipal Code that require dedication of parkland or payment of in-lieu fees associated with residential development. Any off-site park development that is partially funded through the Project's development fees would be subject to a separate environmental review pursuant to the California Environmental Quality Act (CEQA). Therefore, impacts related to parks would be less than significant, and no mitigation measures are either required or recommended.

## 4.14.5 CUMULATIVE IMPACTS

The cumulative projects and the Project would result in increased development that would collectively increase demand for parks through the addition of new residents, workers, or other site users. All of these cumulative projects would be required to pay development fees to maintain and expand parks as needed. Therefore, less than significant cumulative impacts would result related to this threshold, and no mitigation measures are either required or recommended.

## 4.14.6 MITIGATION PROGRAM

### *Standard Conditions*

No standard conditions are applicable to this resource topic.

### *Mitigation Measures*

No significant impacts pertaining to recreation were identified; therefore, no mitigation measures are required.

## 4.14.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.14.8 REFERENCES

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# 4.15 TRANSPORTATION

## 4.15.1 EXISTING CONDITIONS

The Project Site is approximately 12.5 acres in size and is located in the central, downtown area of the City of Moorpark in Ventura County. A portion of the Project Site contains the existing civic center, which is located west of Moorpark Avenue/Walnut Canyon Road. Portions of the Project Site are located on the north and south sides of West High Street. The primary vehicular access into the existing Civic Center is provided from Moorpark Avenue/Walnut Canyon Road with secondary access provided from a driveway on West High Street. Moorpark Avenue/Walnut Canyon Road are co-signed as State Route (SR) 23 adjacent to the Project Site. SR-23 is a local two-lane roadway. Adjacent to the Project Site, Moorpark Avenue/Walnut Canyon Road has one travel lane in each direction.

SR-23 is primarily a north/south highway that stretches between the City of Fillmore through Moorpark and Thousand Oaks. SR-23 is a two-lane highway from Fillmore to Moorpark passing through rural and sometimes mountainous roads. In Moorpark, SR-23 turns into a six-lane freeway to US 101 in Thousand Oaks. SR-23 picks up again at Westlake Blvd as a non-freeway six-lane road through residential areas and becomes a two-lane road to the Ventura/LA County line. In Moorpark, SR-23 runs through the City of Moorpark north through open space and mountainous areas to the City of Fillmore (VCTC 2009).

Metrolink and Amtrak's Pacific Surfiner operate passenger trains through the Project area, with the Moorpark Station located 0.35-mile to the southeast of the Project Site at 300 High St, Moorpark CA 93021. Given the proximity to transit, the Project Site is considered to be located within a High Quality Transit Area (HQTA) as designated by the Southern California Association oif Governements (SCAG) (SCAG 2022). A HQTA is defined as an area that is within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.

Also, the Project Site is served during weekdays by Route 1 and Route 2, which are operated by Moorpark City Transit (Moorpark City Transit 2022). There are also paratransit, senior dial-a-ride, and other services provided within the City as well as by Ventura County Transportation Commission (VCTC).

## 4.15.2 REGULATORY SETTING

### State

#### *California Highway System*

As the owner and operator of the State Highway System, the State of California Department of Transportation (Caltrans) implements established State planning priorities in all functional plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact State highway facilities. Pursuant to Section 21092.4 of the Public Resources Code, for projects of statewide, regional, or area-wide significance, the lead agency shall consult with transportation planning agencies and public agencies that have transportation facilities which could be affected by the Project. The proposed Project will not affect any Caltrans facilities and is not considered a project of Statewide, regional, or area-wide significance.

Moorpark Avenue along the Project Site's eastern boundary is designated as SR-23. Generally north of the existing Civic Center, Moorpark Avenue changes names and becomes Walnut Canyon Road/SR-23. All work within and near the right-of-way for Moorpark Avenue is subject to permits and approval by Caltrans including but not limited to encroachment permits.

### *Congestion Management Program*

The Congestion Management Program (CMP) is the program by which State agencies monitor and report on the status of regional roadways. In June 1990, the passage of the Proposition 111 gas tax increase required urbanized areas in the State with a population of 50,000 or more to adopt a CMP. Compliance with the CMP requirements ensures a local jurisdiction's eligibility to compete for State gas tax funds for local transportation projects. The VCTC is the County's designated Congestion Management Agency (CMA). The latest CMP was prepared in July 2009.

### *Senate Bill 743*

With the adoption of Senate Bill (SB) 743, the State of California changed the method of traffic analysis required through the California Environmental Quality Act (CEQA) for publicly- and privately-initiated projects. The law changed the way local jurisdictions analyze transportation impacts from development projects and identify mitigation measures to reduce those impacts. SB 743 became effective on July 1, 2020. The previous practice of evaluating traffic transportation impacts used on-road congestion or level of service (LOS). SB 743 requires the amount of driving and length of trips — as measured by vehicle miles traveled (VMT) — be used to assess transportation impacts on the environment for CEQA review. These impacts will be reduced or "mitigated" by options such as increasing transit, providing for active transportation such as walking and biking, and participating in mitigation banks. All jurisdictions have the option to tailor requirements to their unique communities.

## Ventura County

### *Ventura County Congestion Management Program*

VCTC is the County's CMA. The CMP links transportation, land use, and air quality decisions in the County and addresses the impact of local growth on the regional transportation system. It requires (1) monitoring of the CMP road and highway system in the County; (2) development of a deficiency plan when the level of service (LOS) drops to service level "F" on the CMP network; (3) analysis of land use impacts on the regional transportation system; (4) implementation of Transportation Demand Management programs that promote alternatives to the automobile and the single-occupant driver; (5) monitoring the performance of the countywide multi-modal transportation system; and (6) identification of projects and/or programs to relieve congestion. Local jurisdictions, such as the City of Moorpark, are required to conform to local CMP requirements in order to receive their portion of State gas tax revenues. The CMP requires each jurisdiction to provide VCTC with roadway performance, transit operations data, and land use information, along with certification of local traffic impact models. When cities or the County have roadways on the CMP system that do not meet LOS standards, a local deficiency plan must be prepared. Both SR-118 (New Los Angeles Avenue) and SR-23 (Moorpark Avenue) are a part of the County's CMP network.

## City of Moorpark

### *General Plan Circulation Element*

The General Plan Circulation Element provides background research and goals and policies for mobility and infrastructure within the City.The Element classifies the roadway system and sets an LOS standard of “D” for roadways and intersections in the City1. For roadways and interchanges already operating at a lower level of performance than level of service "D", the standard shall be to maintain or improve the current level of service. The current roadway network relies primarily on two freeways, California State Route 23 (SR-23) and California State Route 118 (SR-118), to facilitate regional connections south through Thousand Oaks and east through Simi Valley, respectively. Moorpark Avenue and High Street are identified as local collectors with a traffic signal at their intersection in the Circulation Element’s Highway Network. The proposed future widening of Moorpark Avenue from Casey Road to Third Street would require an amendment to the Circulation Element to redesignate Moorpark Avenue from a local collector to a four-lane arterial. Class III Bike Routes are planned on the segments of Moorpark Avenue and High Street near the Project Site. No equestrian trails are planned near the site.

### *Moorpark Transportation Demand Management Ordinance*

Section 17.48 of the City’s Zoning Code is the Moorpark Transportation Demand Management (TDM) Ordinance. This ordinance requires the provision of transit stop improvements (i.e., bus pullouts, bus pads or shelters) and safe and convenient access for pedestrians and bicyclists from the external circulation system to on-site buildings or internal street/sidewalks. An information board with transit services, bicycle routes, and facilities/services for carpoolers, vanpoolers, bicyclists, transit riders, and pedestrians should be provided for developments with 50 or more employees. Carpool/vanpool spaces and bicycle/motorcycle parking spaces are required for developments with 100 or more employees. Pedestrian circulation; showers, lockers and changing rooms; and lunchrooms, cafeterias or other facilities are required for development with 150 or more employees.

## 4.15.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential transportation impacts. Impacts to transportation would be significant if the Project would:

***Threshold 4.15-a*** ***Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facility paths?***

***Threshold 4.15-b*** ***Conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b).***

***Threshold 4.15-c*** ***Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).***

[1] High Street between Moorpark Avenue and Spring Road is exempt from this standard.

***Threshold 4.15-d Result in inadequate emergency access.***

## 4.15.4 ENVIRONMENTAL IMPACTS

***Threshold 4.15-a Would the project conflict with an program plan, ordinance or policy addressing the circulation system, including transit and roadways, bicycle lanes, and pedestrian facility paths?***

**Less than Significant Impact.** The Project's consistency with programs, plans, ordinances, and policies related to the circulation system is evaluated below. There are no transit, bicycle, or pedestrian programs, plans, ordinances, or policies that are directly applicable to the Project.

**Circulation Element of the General Plan**

The purpose of the Circulation Element of the Moorpark General Plan is to designate a safe and efficient circulation systems which promotes the movement of people and goods in an around the City. The Project Site is adjacent to SR-23, which is a regional transportation corridor identified in the Circultaion Element. The goals and policies from the Circulation Element that relate to the Project are listed below in Table 4.15-1.

**TABLE 4.15-1**
**GENERAL PLAN CIRCULATION ELEMENT CONSISTENCY ANALYSIS**

| Relevant Goals and Policies | Consistency Analysis |
|---|---|
| **GOAL CI 1: Transportation System:** A transportation system supporting uses accommodated by the land use plan and providing for the safe and efficient movement of people of all ages and abilities, goods, and services into, out of, and through the city of Moorpark. | **Consistent.** The Project would result in new sidewalks and turning lane improvements that would improve the circulation system. Also, the Project is located less than 0.5-mile from the existing Moorpark Station, which provides Metrolink and Amtrak services for existing and future users of the Project Site. |
| **CI 1.1 Multimodal transportation:** Require that the planning, design, and construction of all transportation projects consider the needs for all modes of travel to create safe, livable, and inviting environments for motorists, pedestrians, bicyclists, and public transit users of all ages and abilities. | |
| **CI 1.2 Complete streets:** Design, plan, maintain, and operate streets using complete streets principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes. | |
| **CI 1.4 System improvements:** Promote the continued improvement of the circulation system, through the improvement of sub-standard roadways, sidewalk crossings, and intersections and the construction of missing links and related facilities through the city's Capital Improvement Program (CIP). | |
| **CI 1.10 Transportation Equity:** Consider health and equity in the design and operation of the city's transportation network; and make provisions for convenient, accessible, affordable, and alternative modes of mobility based on the needs of residents. | |

**TABLE 4.15-1**
**GENERAL PLAN CIRCULATION ELEMENT CONSISTENCY ANALYSIS**

| Relevant Goals and Policies | Consistency Analysis |
|---|---|
| **GOAL CI 2 Level Of Service:** a circulation system which supports existing, approved, and planned uses throughout the city while maintaining a desired level of service on all streets and at all intersections. | **Consistent.** Vehicular level of service is no longer an environmental impact pursuant to CEQA. However, consistent with the project's Traffic Study, phased circulation improvements have been incorporated into the Project to minimize LOS impacts of the Project. Furthermore, the Project would be responsible for payment of applicable fees as required related to the transportation system.<br><br>Additionally, the Project is located in a Transit Priority Area. As discussed in the Office of Planning and Research (OPR's) Technical Advisory on Evaluating Transportaton Impacts in CEQA, projects within 0.5-mile of an existing major transit stop or an existing stop along a high quality transit corridor are presumed to have a less than significant impact related to VMT (OPR 2018). The Project is located less than 0.5-mile from the existing Moorpark Station, which provides Metrolink and Amtrak services. |
| **CI 2.1 Roadway performance standard:**<br>Maintain Level of Service "D" as the standard for system performance for traffic volumes on the circulation system. High Street between Moorpark Avenue and Spring Road is exempt from this standard. For roadways and interchanges already operating at a lower level of performance than level of service "D", the standard shall be to maintain or improve the current level of service. | |
| **CI 2.2 Environmental impact threshold:**<br>Maintain thresholds for the determination of environmental impacts for proposed residential, commercial, and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types. Periodically review and adjust this threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan. | |
| **CI 2.3 VMT analysis.**<br>Require the analysis of VMT per resident and/or per employee as part of CEQA environmental review, and development of a mitigation program to reduce any significant impacts consistent with State law. | |
| **CI 2.4 VMT reduction:**<br>Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation. | |
| **CI 2.5 Phasing to maintain LOS:**<br>Coordinate project phasing to ensure that the timing of accompanying on-site and off-site circulation improvements maintain the level of service standards specified in CI 2.1. | |
| Sources: City of Moorpark 2023 | |

As shown above, the Project would be consistent with the City's Circulation Element. There are no other programs, plans, ordinances, or policies addressing the circulation system that directly relate to the Project. Therefore, the Project would result in a less than significant impact related to this threshold and no mitigation is required.

***Threshold 4.3-b Would the project conflict with or be inconsistenct with CEQA Guidelines Section 15064.3 subdivision (b).?***

**Less Than Significant Impact.** The Project is located in a Transit Priority Area. As discussed in the Office of Planning and Research (OPR's) Technical Advisory on Evaluating Transportaton

Impacts in CEQA, projects within 0.5-mile of an existing major transit stop or an existing stop along a high quality transit corridor are presumed to have a less than significant impact related to VMT (OPR 2018). The Project is located less than 0.5-mile from the existing Moorpark Station, which provides Metrolink and Amtrak services. Therefore, the Project is considered to have a less than significant impact related to this threshold and no mitigation is required.

***Threshold 4.15-c Would the project 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**. All project circulation improvements would be designed and constructed to City standards; therefore, the Project would not result in design hazards. Project design of such circulation improvements would be reviewed and approved by the City prior to construction. All new Project driveway access points would comply with applicable City roadway standards for adequate sight distance (**COA TRA-1**) which requires compliance with City sight distance requirements in a manner meeting the approval of the Public Works Department. With implementation of **COA TRA-1**, the Project would not increase hazards due to an incompatible use, and no mitigation measures are either required or recommended.

***Threshold 4.15-d Would the project result in inadequate emergency access?***

**Less than Significant Impact**. The City's design review process would ensure that the internal circulation and the location of new or modified driveway access points would be designed to comply with all applicable design and safety standards required by adopted fire codes, safety codes, and building codes.

As described in more detail, the Project would result in fewer trips in the morning peak hour than existing uses within the Project Site, but would result in 63 more trips in the evening peak hour. Overall, the Project would result in 401 more daily trips than the existing uses within the Project Site (Psomas 2022). Based on the results of the Traffic Analysis and as required by **COA TRA-2**, to alleviate delays the Project has been modified to include the addition of a left turn lane on the northbound approach at the intersection of High Street and Moorpark Avenue as part of the Project's Phase 1. The Project would also include the modification of the existing full movement eastbound Charles Street approach within the Project Site to be a right-in and right-out access along with the development of Phase 4 of the Project. With implementation of these improvements, adequate emergency access would be maintained to the Project Site.

During construction, temporary impacts to local roads such as lane closures may be needed to allow for the connection of utilities, and other related activities. As required by **COA TRA-3**, traffic control plans would be developed and coordinated with the City to ensure that no substantial impacts to the circulation system occur as a result of Project construction

Therefore, with implementation of **COA TRA-2** and **COA TRA-3**, the Project would have a less than significant impact related to this threshold and no mitigation is required.

## 4.15.5 CUMULATIVE IMPACTS

The Project as well as other cumulative projects nearby would increase the density of residential, commercial, and other development in the nearby vicinity, which would collectively increase VMT and could affect other aspects of the transportation system, including temporary and permanent impacts to LOS. All cumulative projects would be required to conduct their own transportation studies to evaluate potential impacts and to identify VMT and other applicable mitigation, as

needed. Furhermore, all cumulative projects would be reviewd by the City to ensure that no dangerous design features or incompatible uses are developed, and that adequate emergency access is maintaed. Therefore, the Project and other cumulative projects would not result in cumulatively considerable transportation impacts.

## 4.15.6 MITIGATION PROGRAM

### Conditions of Approval

**COA TRA-1** Prior to the issuance of a grading permit for each project phase, the applicant shall demonstrate adequate sight distance at all street intersections, in a manner meeting the approval of the City's Public Works Department.

**COA TRA-2** Prior to the issuance of any grading permits, the applicant shall demonstrate that applicable improvements for that phase from the Project's Traffic Study have been incorporated into Project design, in a manner meeting the approval of the City's Public Works Department.

**COA TRA-3** Prior to beginning each project phase, the applicant shall submit a construction traffic control plan for the review and approval of the City Engineer and Public Works Director. Traffic control plan shall include construction advisory speed limits, speed limit posting locations, and enforcement measures if needed.

### Mitigation Measures

No significant impacts pertaining to transportation were identified; therefore, no mitigation measures are either required or recommended.

## 4.15.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.15.8 REFERENCES

California, State of. 2022a (September 28, access date). California Code of Regulations (CCR). Sacramento, CA. https://oal.ca.gov/publications/ccr/

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# 4.16 TRIBAL CULTURAL RESOURCES

## 4.16.1 EXISTING CONDITIONS

Section 3.2 of this environmental impact report (EIR) provides an evaluation of cultural resources. As noted in that section, a cultural resource record search and literature review was conducted at the California Historical Resources Information System (CHRIS), which maintains records and literature regarding cultural resources within California. The CHRIS office for Los Angeles County is located at the South Central Coastal Information Center (SCCIC). No prehistoric archaeological sites or tribal cultural resources have been documented within the Project Site or the ½-mile search radius. Nevertheless, the results from the Native American Heritage Commission (NAHC) Sacred Lands Files confirmed the presence of a sacred site (tribal cultural resource) important to the local Gabrielino/Tongva community. The resource is located nearby, but not within the Project Site. The locations and other details of sacred sites are kept confidential in order to protect the sites.

## 4.16.2 REGULATORY SETTING

### State

#### *California Register of Historical Resources*

The California Register of Historical Resources (CRHR) program encourages public recognition and protection of resources of architectural, historical, archaeological, tribal cultural resources, and cultural significance; identifies historical resources for State and local planning purposes; determines eligibility for State historic preservation grant funding; and affords certain protections under the California Environmental Quality Act (CEQA). The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the National Register of Historic Places (NRHP).

In order to be eligible for listing in the CRHR, a building, object, or structure must satisfy at least one of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2) It is associated with the lives of persons important to local, California, or national history.
3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Archaeologists and Tribal Representatives assess sites based on all four of the above criteria but usually focus on the fourth criterion provided above. Historical resources eligible for listing in the CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance”. This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

### *Assembly Bill 52*

In September 2014, Governor Brown signed Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014), which creates a new category of environmental resources that must be considered under CEQA: "tribal cultural resources." The legislation imposes new requirements for offering to consult with California Native American tribes regarding projects that may affect a tribal cultural resource, emphasizes a broad definition of what may be considered to be a tribal cultural resource, and includes a list of recommended mitigation measures.

Recognizing that tribes may have expertise regarding their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. Mitigation measures (MM) agreed upon during consultation must be recommended for inclusion in the environmental document.

AB 52 became effective on July 1, 2015 and requires that the lead agency provide project notifications to California Native American tribes on the NAHC Tribal Consultation list that request notification in writing prior to a lead agency's release of a Notice of Preparation (NOP) for an EIR, a Mitigated Negative Declaration (MND), or Negative Declaration (ND). Once Native American tribes receive a project notification, they have 30 days to respond as to whether they wish to initiate consultation regarding the project and specifically consultation regarding mitigation for any potential project impacts.

### *Senate Bill 18*

Senate Bill (SB) 18 was signed into law in September 2004 and it requires local governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning.

### *Native American Historic Resource Protection Act*

Established in 2002, the Native American Historic Resource Protection Act, establishes a misdemeanor for unlawfully and maliciously excavating upon, removing, destroying, injuring, or defacing a Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources (CRHR). The focus of this legislation was to provide additional legal protection for Native American historical and cultural sites, art, and other cultural artifacts found at those sites. The Act also encourages collaborative relationships for the protection of Native American cultural resources between Native Americans and landowners. Funding and other state assistance should be encouraged for support of voluntary agreements to conserve, maintain, and provide physical access for Native Americans to these cultural resources.

### *California Health and Safety Code (Sections 7050.5, 7051, and 7054)*

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the [California Public Resources Code (PRC)]. These sections also address the disposition of Native American burials in archaeological sites and protect such remains from disturbance, vandalism, or inadvertent destruction. Procedures to be implemented are established for (1) the discovery of Native American skeletal remains during construction of a project; (2) the treatment of the remains prior to, during, and after evaluation; and (3) reburial.

Section 7050.5 of the California Health and Safety Code specifically provides for the disposition of accidentally discovered human remains. Section 7050.5 states that if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

***California Public Resources Code (Section 5097.98)***

Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the NAHC within 24 hours. When the NAHC receives this notification from a County Coroner, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land or his or her authorized representative, inspect the site of the remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. This regulation also requires that, upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations and all reasonable options regarding their preferences for treatment. This section of the PRC has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

## 4.16.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this EIR, are based on Appendix G of the State CEQA Guidelines, and will be used to determine the significance of potential cultural resources impacts. Impacts to tribal cultural resources would be significant if the Project would:

***Threshold 3.16-a*** ***Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); and/or***

***Threshold 3.16-b*** ***Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

## 4.16.4 IMPACT ANALYSIS

***Threshold 4.16-a*** ***Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?***

**No Impact.** A tribal cultural resource is considered a site, feature, place, cultural landscape, sacred place, or object which is of cultural value to a California Native American Tribe and is either eligible for the CRHR or a local register.

Psomas submitted a request to the SCCIC on July 24, 2020. As discussed in Section 3.2, Cultural Resources, of this EIR, based on the record searches and consultation with Native American tribes culturally affiliated with the area (see analysis under Threshold 3.16-b below), there are no known tribal cultural resources listed on or eligible for the CRHR or a local register within the Project Site. Therefore, the Project would have no impact related to this threshold, and no mitigation measures are either required or recommended.

***Threshold 4.16-b:*** ***Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

**Less Than Significant Impact.** In June 2022, the City sent letters to the ten tribal contacts on the City's tribal consultation list to offer them the opportunity to consult on the Project pursuant to AB 52 and SB 18. The two tribes to respond are discussed below.

Santa Ynez Band of Chumash

The Santa Ynez Band of Chumash Indians responded to the City by email on June 23, 2022 stating that they did not wish to engage in tribal consultation related to this Project.

Fernandeño Tataviam Band of Mission Indians

The Fernandeño Tataviam Band of Mission Indians responded to the City by email on June 7, 2022, in which they requested additional information which the City provided to the Tribe later that same day. Additional information was requested by the Tribe on June 7, 2022 which was provided to the Tribe on June 14, 2022. Meetings were held in July 2022 between the City and Tribe in

which the Project and mitigation measures were discussed. The City and Fernandeño Tataviam Band of Mission Indians concluded tribal consultation for this Project thereafter.

Conclusion

Tribal consultation was conducted for this Project consistent with the requirements of AB 52 and SB 18. Although consultation and records searches did not reveal the existence of known tribal cultural resources on the Project Site, unknown tribal cultural resources could be unexpectedly discovered during construction activities. Therefore, **COA CUL-1, COA CUL-2, and COA CUL-3** would be implemented as part of the Project to minimize potential impacts related to the unanticipated discovery of tribal cultural resources. With implementation of these conditions, the Project would result in less than significant impacts related to this threshold.

## 4.16.5 CUMULATIVE IMPACTS

There are no tribal cultural resources listed or determined eligible for listing, on the national, State, or local register of historical resources on the Project Site. However, should buried resources be identified during ground disturbance, then this could lead to the degradation of previously unknown tribal cultural resources. All projects are required to abide by standard regulatory requirements, which require that work be stopped and coroner consulted if suspected human remains are identified. For cumulative projects with archaeological and tribal cultural sensitivity, it is anticipated that the requirements for archaeological monitoring, procedures for stopping work and evaluating finds, and consultation with the tribes during grading, if needed, would be required by the applicable lead agency. Therefore, cumulative impacts related to tribal cultural resources are anticipated to be less than significant.

## 4.16.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA CUL-1** If any archaeological, paleontological, or historical finds are uncovered during grading or excavation operations, all grading or excavation shall immediately cease in the immediate area and the find must be left untouched. The applicant, in consultation with the project paleontologist or archeologist, shall assure the preservation of the site and immediately contact the Community Development Director by phone, in writing by email or hand delivered correspondence informing the Director of the find. In the absence of the Director, the applicant shall so inform the City Manager and Planning Manager. The applicant shall be required to obtain the services of a qualified paleontologist or archeologist, whichever is appropriate to recommend disposition of the site. The paleontologist or archeologist selected must be approved in writing by the Community Development Director. The applicant shall pay for all costs associated with the investigation and disposition of the find. *(Note: repeated from Section 4.4).*

**COA CUL-2** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento

within 48 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative shall then determine, in consultation with the property owner, the disposition of the human remains. *(Note: repeated from Section 4.4).*

**COA CUL-3** Prior to any ground disturbing activity, construction personnel associated with earth moving equipment, drilling, grading, and excavating, shall be provided with basic training conducted by a qualified archaeologist. Issues that shall be included in the basic training will be geared toward training the applicable construction crews in the identification of archaeological deposits, further described below. Training will include written notification of the restrictions regarding disturbance and/or removal of any portion of archaeological, paleontological, or historical deposits and the procedures to follow should a resource be identified. The construction contractor, or its designee, shall be responsible for implementation of this measure. A tribal monitor shall be provided an opportunity to attend the pre-construction briefing if requested. *(Note: repeated from Section 4.4).*

**Mitigation Measures**

No significant impacts pertaining to tribal cultural resources were identified; therefore, no mitigation measures are required.

## 4.16.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.16.8 REFERENCES

California, State of. 2022a (September 28, access date). California Code of Regulations (CCR). Sacramento, CA. https://oal.ca.gov/publications/ccr/

———.2022b (September 28, access date). California Public Resources Code. Sacramento, CA. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=2.&title=&part=&chapter=9.&article=6.

South Central Coastal Information Center. 2022 (May 11). Re: Records Search Results for the Psomas Project 3MOO010100. Fullerton, CA: SCCIC.

# 4.17 UTILITIES AND SERVICE SYSTEMS

## 4.17.1 EXISTING CONDITIONS

### Water

The Calleguas Municipal Water District (CMWD) provides water within its service area through the acquisition and distribution of imported water from the Metropolitan Water District (MWD) of Southern California and from local water supplies. MWD water is transported via the State Water Project from Northern California. The CMWD does not provide water directly to consumers. It distributes water on a wholesale basis to cities, local water agencies, and private and mutual water companies throughout southern Ventura County (CMWD 2021). These entities provide direct water service to residents and businesses. These entities include the Ventura County Water Works District No. 1 (VCWWD No. 1) which serves the Project Site. VCWWD No. 1 is a public water supplier with 11,426 water service connections (as of the end of fiscal year 2020) and a total 10,019 acre-feet (AF) of water supplied to customers in their water service area in fiscal year 2020 (VCWWD 2021).

The existing water system in the Project area includes a 14-inch water distribution main east of the Project Site in Moorpark Avenue, between Charles Street and High Street; a 16-inch water distribution main east of the Project Site in Moorpark Avenue, between High Street and Wicks Road; and a 6-inch water distribution main south of the Project Site in High Street. A 4-inch water line also exists in the Moorpark Civic Center area that serves the Moorpark City Library, City Hall, and Modular Buildings 1 through 3.

### Wastewater

The VCWWD No. 1 provides wastewater treatment and collection services to Moorpark and the surrounding areas, including the Project Site. VCWWD No. 1 operates and maintains local sewer collection pipelines and trunk sewers that feed into the Moorpark Wastewater Treatment Plant. It owns, operates and maintains the Moorpark Wastewater Treatment Plant (MWTP) located at 9550 Los Angeles Avenue in Moorpark.

Existing development on the Project Site is served by an 18-inch sewer main south of the Project Site in Poindexter Avenue to High Street; an 8-inch sewer main east of the Project Site in Moorpark Avenue, between High Street and Charles Street; and a 10-inch sewer main through the existing Moorpark Civic Center Campus, located near the intersection of Moorpark Avenue and Wicks Road, all of which convey wastewater to the Moorpark Wastewater Treatment Plant.

### Storm Water Drainage

The Walnut Canyon drainage channel becomes an underground culvert as it crosses the Project Site. Located within a 50-foot-wide easement, the channel exists as a reinforced concrete box under High Street (Moorpark Storm Drain Number 1), but reverts back to an open concrete channel past the terminus of West High Street. The concrete box parallels the railroad tracks, eventually tying into the Arroyo Las Posas to the southwest. The facility is owned and maintained by the Ventura County Watershed Protection District. Runoff from the southern portion of the Project Site flows south toward West High Street and into the same drainage channel. Storm water originating from the vacant lots south and west of the existing Civic Center primarily percolates into the ground.

## Electricity, Gas, and Telecommunications

Southern California Edison (SCE) currently provides electricity to the City of Moorpark, including the Project Site. The Southern California Gas Company (SCGC) currently provides natural gas service to the City of Moorpark, including the Project Site. AT&T and Spectrum currently provide telecommunications service to the City of Moorpark, including the Project Site. There are existing service connections for electricity, natural gas, and telecommunications throughout the site, serving the existing development.

## Landfills

Solid waste collection and disposal is provided for the City through private haulers. Waste Management serves the Project Site. After the waste is collected, it is separated into recyclable material, household hazardous waste, and other solid waste. The solid waste is then processed and consolidated for delivery to the Simi Valley Landfill and Recycling Center (SVLRC).

# 4.17.2 REGULATORY SETTING

## State

### *California Water Plan*

The California Water Plan is prepared by the California Department of Water Resources (DWR), most recently updated in 2018 (DWR 2018). The plan provides a framework for water managers, legislators, tribes, agencies, businesses, academia, stakeholders, and the public to consider options and make decisions regarding California's water future. The California Water Plan, which is updated every 5 years, presents basic data and information on California's water resources, including water supply evaluations and assessments of agricultural, urban, and environmental water uses, to quantify the gap between water supplies and uses. The California Water Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the State's water needs. The California Water Plan provides resource management strategies and recommendations to strengthen integrated regional water management. Resource management strategies include projects, programs, or policies that help local agencies and governments manage their water and related resources. Resource management strategies help regions meet future demands and sustain the environment, resources, and economy, involve communities in decision-making, and meet various goals. These strategies can reduce water demand, improve operational efficiency, increase water supply, improve water quality, practice resource stewardship, and improve flood management. Additionally, the California Water Plan includes a finance plan that identifies critical priorities for State investment in integrated water management activities.

### *California Water Code*

The California Water Code contains provisions that control almost every consideration of water and its use. Division 2 of the California Water Code provides that the SWRCB consider and act on all applications for permits to appropriate waters. Division 6 of the California Water Code controls conservation, development, and utilization of the State water resources, whereas Division 7 addresses water quality protection and management.

### *Urban Water Management Planning Act*

The California Urban Water Management Planning Act (California Water Code, Sections 10610–10656) requires urban water suppliers that provide over 3,000 acre-feet (AF) of water annually or serve 3,000 or more connections to analyze the reliability of their water sources over a 20-year planning horizon. The Act requires urban water suppliers to prepare and update Urban Water Management Plans (UWMPs) that analyze the availability of water supplies to meet demands during normal, single-dry, and multiple-dry years, to encourage water conservation programs and create long-term planning obligations.

### *Senate Bill 606 and Assembly Bill 1668*

In 2018, two laws were passed that built on California's ongoing efforts to make water conservation a way of life. They emphasized efficiency and stretching water supplies in cities and farms. The laws were jointly designed to overhaul California's approach to conserving water. The measures impose new and expanded requirements on State water agencies and local water supplies, and provide for greater State oversight of local water suppliers' water use, even in non-drought years. Assembly Bill (AB) 1668 and Senate Bill (SB) 606 required the State Water Resources Control Board, in coordination with the Department of Water Resources, to establish long-term urban water use efficiency standards.

### *Waste Discharge Requirements Program*

The Waste Discharge Requirements (WDR) Program is administered by the State and Regional Water Quality Control Boards. The WDR Program regulates all discharges of waste to land. Waste discharge requirements adopted under the WDR Program protect surface water by either prohibiting discharge of a pollutant to waters of the United States (U.S.) or prescribing requirements for discharge to surface waters that are not waters of the U.S., and they protect groundwater by prescribing waste containment, treatment, and control requirements. The WDR program is a mandated program issuing WDRs to regulate the discharge of municipal, industrial, commercial, and other wastes to land that will or have the potential to affect groundwater. Section 13260(a) of the California Water Code requires that any person discharging waste or proposing to discharge waste within any region, other than to a community wastewater system, that could affect the quality of the waters of the State, must file a report of waste discharge. All waste discharge requirements issued by the Regional Water Board include self-monitoring programs requiring the waste discharger to collect pertinent water quality data and to submit it to the Regional Water Quality Control Board (RWQCB) for evaluation of compliance with waste discharge requirements. WDRs are written for a specific discharger (individual WDRs) or to regulate a similar group of dischargers (general WDRs). In recent years, the Program staff has also used conditional waivers, which may be used to regulate those discharges that have the lowest threat to water quality.

### *California Building Code*

The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, is promulgated under the California Code of Regulations, Title 24 (Parts 1 through 12) and is administered by the California Building Standards Commission (CBSC 2018). The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The California Building Code establishes general standards for the design and construction of buildings, including provisions related to energy and water efficiency and conservation; material conservation and resource efficiency; and environmental quality. Mandatory measures include

storm water pollution prevention, water conservation, and recycling and/or salvage of at least 50 percent of nonhazardous construction and demolition wastes. The County of Ventura Code of Ordinances adopts the CALGreen Code by reference, with specific amendments.

**Local**

***Moorpark Municipal Code***

Title 8 of the City's Municipal Code (Chapter 8.44, Water Conservation) sets forth mandatory water conservation measures ranging from low water consumption features to bathroom water pipe sizing.

## 4.17.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential utilities and service systems impacts. Impacts to utilities and service systems would be significant if the Project would:

***Threshold 4.17-a*** ***Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects;[1]***

***Threshold 4.17-b*** ***Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.***

***Threshold 4.17-c*** ***Result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.***

***Threshold 4.17-d*** ***Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.***

***Threshold 4.17-e*** ***Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.***

## 4.17.4 ENVIRONMENTAL IMPACTS

***Threshold 4.17-a*** ***Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?***

[1] The Initial Study (provided in Appendix A, Notice of Preparation) concluded that all thresholds related to hydrology and water quality, including storm drainage capacity, would result in no impacts or less than significant impacts and were not carried forward into the Draft EIR.

***Threshold 4.17-c*** ***Would the Project 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.**

***Water and Wastewater***

Water and wastewater services are provided to the Project Site by VCWWD No. 1. The Project would generate an increase in water demand through the addition of approximately 75 residential units and other proposed land uses within the Project Site that would intensify development on the Project Site above existing conditions. The Project would involve the trenching and installation of water and sewer lines to connect to the existing water mains in roads adjacent to the Project Site. The impacts of these water-related improvements are disclosed and analyzed throughout this EIR and no other relocation or expansions of water or wastewater infrastructure is anticipated to be required to accommodate the Project. As required by **COA UTL-1,** prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from VCWWD No. 1 demonstrating their capacity to serve the Project for water and wastewater services.

***Storm Water Drainage***

As described in more detail in Section 4.9 of this EIR, Hydrology and Water Quality, the Project would have the potential to increase the volume and quantity of pollutants within storm water that flows from the Project Site during operation of the Project. However, for each phase of the Project, a Water Quality Management Plan (WQMP) would be prepared in accordance with **COA HWQ-2** and **COA HWQ-3** to identify general pollutants that may result from the uses and structures proposed during that phase and to select and implement appropriate operational water quality BMPs for that Project phase. The impacts of these storm water-related improvements are disclosed and analyzed in Section 4.9, Hydrology and Water Quality of this EIR and no other relocation or expansions of storm water infrastructure is anticipated to be required to accommodate the Project.

***Electricity, Natural Gas, and Telecommunications***

As discussed previously, portions of the Project Site are currently provided with electricity, natural gas, and telecommunication services. The Project would include the extension of existing distribution lines for dry utilities onsite and would be responsible to connect to existing distribution lines within adjacent right-of-way areas offsite, if necessary. As required by **COA UTL-2**, will serve letters or similar correspondence from dry utility providers will be provided to the City's Community Development Department to verify ability to serve each phase.

***Conclusion***

The impacts of utility connections that discussed above are disclosed in this EIR as part of the Project, and no other relocation or expansion of infrastructure is anticipated. Less than significant impacts would result related to these thresholds, and no mitigation measures are either required or recommended.

***Threshold 4.17-b Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

**Less Than Significant Impact.** As noted above, VCWWD No. 1 currently provides water to the Project Site. The Project would include the connection to existing mainlines within and adjacent to the Project Site; however, final utility design for each of the Project phases has not yet been completed. VCWWD No. 1's 2020 Urban Water Management Plan was prepared in compliance with California Water Code and it provides a detailed look at VCWWD No. 1's water system current and future water use, water sources, demand management measures, evaluation of multiple consecutive drought years, as part of the Drought Risk Assessment, and the preparation of a Water Shortage Contingency Plan. The UWMP concludes that the VCWWD No. 1 would have sufficient water supplies for the future and that VCWWD No. 1 does not anticipate water reliability issues. The UWMP was developed based on future population projections prepared by the Southern California Association of Governments (SCAG), which assumed a mix of zoning for the Project Site (SCAG 2020). Specifically, it assumed five zoning designations that regulates the Project Site including: Institutional (I), Old Town Commercial, Industrial Park, Limited Industrial, and Rural Exclusive.

The Project proposes a zone change, which would allow for a greater mix of land uses within the Project Site than is currently permitted, which may result in nominal increases in water usage above what was assumed in the UWMP. However, this changes in land uses and potential increase in density would have a negligible effect on City and regional water demand relative to the overall service area of the VCWWD No. 1. As required by **COA UTL-1,** prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from VCWWD No. 1 demonstrating their capacity to serve the Project for water and wastewater services. Furthermore, once a zone change is approved for the Project, the new zoning designations will be made available to SCAG, VCWWD No. 1, and other agencies so that the next iterations of their plans can be updated to account for the Project. Given that the UWMP is revisited annually and updated every two years, and due to the phased nature of the Project, the UWMP will be updated to assume the correct land uses by the time that any of these new uses are developed.

***Threshold 4.17-d Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

**Less Than Significant Impact.** The Project would generate solid waste during construction and operation. Simi Valley Landfill, which is permitted to receive 3,000 tons per day (tpd) and has an average daily tonnage of approximately 2,500 tons, would be utilized to meet the Project's operational solid waste disposal demand. The landfill has a design capacity of 43.5 million cubic yards (cy), and the estimated closure date of the landfill is 2063.

The Project involves demolition of existing buildings and paved surfaces within the Project Site, which would generate debris that would need to be removed from the Project Site.

Also, Project implementation would result in the development of 75 residential units as well as commercial and institutional land uses that would generate solid waste on an ongoing basis.

As required by **COA UTL-3**, prior to issuance of a building permit for each Project phase, the applicant shall submit a Construction and Demolition Materials Management Plan Estimate for

the review and approval of the City's Solid Waste Management staff and Building and Safety Division for recycling of waste materials consistent with City and state requirements.

Additionally, the Project would also be required to implement organic waste recycling programs consistent with the requirements of AB 1826 and SB 1383.

Therefore, the Project would not generate solid waste in excess of state or local standards, exceed the capacity of local infrastructure, or conflict with federal, State, or local management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

***Threshold 4.17-e Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

**Less Than Significant Impact.** During construction and operation, the Project would be required to comply with applicable federal, State, and local management and reduction laws and regulations regarding the proper disposal of solid waste. Regulations specifically applicable to the Project include the California Integrated Waste Management Act of 1989 (AB 939) and Section 4.408 of the CALGreen Code. Through compliance with existing regulations, the Project would result in less than significant impacts related to this threshold, and no mitigation measures are either required or recommended.

## 4.17.5 CUMULATIVE IMPACTS

The cumulative projects as well as the Project would collectively increase density within the Project vicinity, which would increase demand for water, wastewater, electricity, natural gas, and telecommunications utilities as well as solid waste services over baseline conditions. Similar to the proposed Project, all cumulative projects would be required to coordinate with utility providers to demonstrate their ability to serve each of the proposed developments. Also, each cumulative project would be responsible for extending utility lines from the nearest water, wastewater, electrical, and stormwater to provide service to each of these Project Sites. With implementation of conditions of approval, no cumulatively considerable impacts related to utilities would result from the project and other cumulative projects.

Cumulative impacts related to stormwater is discussed in Section 4.9.5, the Cumulative Impacts discussion of the Hydrology and Water Quality section of this EIR.

## 4.17.6 MITIGATION PROGRAM

**Conditions of Approval**

**COA HWQ-2** Prior to the issuance of any grading or building permits, the applicant shall submit for review and approval by the Community Development Department, a Water Quality Management Plan (WQMP) that must include the following minimum contents:

- Address Site Design Best Management Practices (BMPs) (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, and conserving natural areas;
- Incorporate applicable Routine Source Control BMPs; and

- Include an Operation and Maintenance (O&M) Plan that identifies the mechanism(s) by which long-term O&M of all structural BMPs will be provided. *(Note: repeated from Section 4.9).*

**COA HWQ-3** Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Community Development Department, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;
- Demonstrate that the applicant has complied with all non-structural BMPs described in the project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP; and
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants. *(Note: repeated from Section 4.9).*

**COA UTL-1** Prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from Ventura County Waterworks District No. 1 (VCWWD No. 1) demonstrating their capacity to serve the Project for water and wastewater services. The will-serve letter must be submitted to the Community Development Department for review prior to issuance of a building permit.

**COA UTL-2** Prior to issuance of a building permit for each new building within the Project Site, the applicant would be required to obtain a will-serve letter or equivalent from dry utility providers demonstrating their capacity to serve the Project for electricity, natural gas, and telecommunications if needed. The will-serve letters must be submitted to the Community Development Department for review prior to issuance of a building permit.

**COA UTL-3** Prior to issuance of a building permit for each new building within the Project Site, the applicant shall submit a Construction and Demolition Materials Management Plan Estimate for the review and approval of the City's Solid Waste Management staff and Building and Safety Division for recycling of waste materials consistent with applicable City and State requirements. The Plan must include estimated quantities for each type of material to be diverted or landfilled.

**COA UTL-4** Prior to issuance of certificate of occupancy for new structures within the Project Site, the applicant must submit a Final Report Construction and Demolition Waste Letter of Documentation (including premium gate tickets) to the Building and Safety Division, demonstrating compliance with the Construction and Demolition Materials Management Plan Estimate and indicating the total amount of construction and demolition waste diverted.

## Mitigation Measures

No significant impacts pertaining to utilities and service systems were identified; therefore, no mitigation measures are required.

## 4.17.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.17.8 REFERENCES

California, State of. 2022a (September 28, access date). California Code of Regulations (CCR). Sacramento, CA. https://oal.ca.gov/publications/ccr/

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# 4.18 WILDFIRE

## 4.18.1 EXISTING CONDITIONS

The Project Site can be separated into two sections: the eastern portion which contains existing buildings and associated development facilities (such as parking lots and landscaped areas) and the western portion which was previously subject to grading, but does not contain any structures or support facilities. The Project Site is bordered by commercial and residential development to the east, a United States (U.S.) Postal Service facility and a Metrolink rail yard to the south, undeveloped open space to the west, and an elementary school to the north. Existing vegetation types within the Project Site are described in Section 4.3.1, Biological Resources.

According to the Fire Hazard Severity Zones Viewer maintained by California Department of Forestry and Fire Protection (CAL FIRE), the Project Site as is the majority of the City are within a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2022a).

## 4.18.2 REGULATORY SETTING

### State

#### *California Public Resources Code*

California Public Resources Code Section 4291 sets forth requirements for defensible space, including clearing most flammable vegetation within 30 feet of buildings, and reducing flammable vegetation 30 feet to 100 feet from buildings (PRC 2022).

#### *California Building Standards Code*

New construction in any FHSZ must comply with California Building Standards Code (CBSC) Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure. CBSC Chapter 7A sets forth requirements pertaining to roofing; vents (covered with metal wire mesh or other materials with openings no larger than 0.125 inch); exterior coverings; floor projections; underfloor protection; exterior windows, skylights, and doors; decking; accessory structures; and use of ignition-resistant materials (CBSC 2020a).

#### *California Fire Code*

The 2019 California Fire Code, California Code of Regulations, Title 24, Part 9, effective January 1, 2020, is based on the 2018 International Fire Code. Typical fire safety requirements of the California Fire Code include requirements for the installation of fire sprinkler; building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures within wildfire hazard areas. In addition, the California Fire Code addresses fire flow requirements, fire hydrant spacing, and access road specifications (CBSC 2020b).

California Fire Code Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, sets forth requirements for hazardous vegetation and fuel management and defensible space and requires compliance with construction methods mandated in CBSC Chapter 7A (CBSC 2020b).

### *California Department of Forestry and Fire Prevention Fire Prevention Program*

The California Department of Forestry and Fire Protection's (CAL FIRE's) mission is to prevent wildfires in the State Responsibility Area (SRAs). CAL FIRE's Fire Prevention Program consists of various activities including wildland pre-fire engineering, vegetation management, fire planning, education, and law enforcement. Additionally, CAL FIRE prepares Fire Hazard Severity Zone (FHSZ) maps for SRAs and Local Responsibility Areas (LRAs) considering many factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area (CAL FIRE 2022b).

## Local

### *County of Ventura*

Multi-Jurisdictional Hazard Mitigation Plan

The County's hazard mitigation plan update for 2022 defines measures to reduce risks from natural disasters in the Ventura County planning area, which includes unincorporated areas, incorporated cities, and special purpose districts. The plan updates the County's previous plan, the 2015 Ventura County Multi-Hazard Mitigation Plan. (County of Ventura 2022).

Emergency Operations Plan

The County's Emergency Operations Plan provides the structure and processes that all key partner agencies within the county use to respond to emergencies. The County Emergency Operations Plan was adopted by the Board of Supervisors in March 2022.

### *City of Moorpark*

General Plan 2050

Applicable goals and policies from the Safety Element of the City's General Plan are listed below (City of Moorpark 2023).

**GOAL SE 1** An emergency management framework that effectively prepares and responds to natural and human-caused emergencies.

**SE 1.10** Ingress and egress: Require new development to have at least two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.

**GOAL SE 4** Minimized injury, loss of life, and damage to property from wildfire and structural fires.

**SE 4.2** California Building Standards Code and Fire Code: Continue to adopt and enforce the most recent version of the California Building Code and Fire Code, as well as California Fire Safe Standards for new and existing development.

**SE 4.5** Ventura County Strategic Fire Plan: The current version of the Ventura County Fire Department Strategic Fire Plan is hereby incorporated into this Safety Element, by reference, to ensure existing non-conforming development reduces fire hazards by implementing fire safe standards for roads and vegetation.

Municipal Code

Title 15 Buildings and Construction, Chapter 15.08.060 Building Code of the Moorpark Municipal Code adopts Chapter 36 of the California Building Code, which addresses fire hazard zone requirements. Certain locations within the incorporated areas of the City of Moorpark shall be classified as High Fire Hazard by the Ventura County Fire Protection District. The High Fire Hazard Area is defined as any area within 500 feet of uncultivated brush, grass, or forest-covered land wherein an authorized representative of said district determines that a potential fire hazard exists due to the presence of such flammable growth. The City's Municipal Code further provides construction requirements for the fire protection of buildings and structures erected in proximity to areas of the city where concentrations of highly flammable brush, grass, or other combustible growth combined with periods of hot, dry winds create a high fire hazard and where lives and property may thereby be endangered (City of Moorpark 2022b).

Emergency Operations Plan

The Emergency Management Division is responsible for the operation of the City's Emergency Operations Center (EOC). The EOC is the focal point for coordination of the City's emergency planning, training, response, and recovery efforts for emergencies and major disasters.

The Emergency Operations Center prepares for emergencies and major disasters such as fires, floods, earthquakes, and acts of terrorism. The EOC also prepares for major planned events in the city that require involvement by multiple city departments and integration with outside agencies, such as schools, special districts, other cities, the county, state, and federal agencies, as well as the private sector (City of Moorpark 2022c).

The City's Emergency Operations Plan (EOP) was most recently updated in 2022. The EOP establishes a comprehensive, all-hazards approach to managing disasters and emergencies across a spectrum of phases including preparedness, response, recovery, and mitigation. As indicated in the EOP, the City of Moorpark is part of the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) (City of Moorpark 2022b). The EOP is consistent with the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, described above.

Ventura County Strategic Fire Plan

Ventura County is one of six counties that maintains a contractual relationship with CAL FIRE. A Unit Plan that is part of the California Strategic Fire Plan is used within the Ventura County Fire Department. The State of California's Strategic 2018 Fire Plan (State Plan) creates a statewide framework for collaboratively reducing and preventing the impacts of fire through suppression and prevention efforts. The State Plan's vision is for a natural environment that is more fire resilient, buildings and infrastructure that are more fire-resistant, and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnerships.

The State Plan anticipates the trends in wildland fires will continue. The effects of climate change, prolonged drought, tree mortality, and development into the wildland urban interface will continue to increase the number and severity of wildland fires. The focus is on (1) fire prevention and suppression activities and (2) natural resources management, and the continued inclusive collaboration among local, state, federal, tribal, and private partners.

The Ventura County Fire Department seeks to achieve these same goals locally with a Unit Fire Plan that works with stakeholders and cooperators to create programs, policies, and procedures that will make the residents of Ventura County safer. Another significant element of this plan is to identify and evaluate wildland fire hazards to minimize the negative effects of wildland fire on the natural and human-made environments.

## 4.18.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria, included for analysis in this environmental impact report (EIR), are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and will be used to determine the significance of potential wildfire impacts. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, impacts to wildfire would be significant if the Project would:

***Threshold 4.18-a*** ***Substantially impair an adopted emergency response plan or emergency evacuation plan.***

***Threshold 4.18-b*** ***Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.***

***Threshold 4.18-c*** ***Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.***

***Threshold 4.18-d*** ***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.***

## 4.18.4 ENVIRONMENTAL IMPACTS

***Threshold 4.18-a*** ***If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

**Less Than Significant Impact.** According to the Fire Hazard Severity Zones Viewer maintained by CAL FIRE, the Project Site and much of the City is located within a VHFHSZ (CAL FIRE 2010, CAL FIRE 2022). Emergency response plans that are applicable to the Project include the County's Multi-Jurisdictional Hazard Mitigation Plan, the County's Emergency Operations Plan, and the City's Emergency Operations Plan. There are no additional emergency evacuation plans applicable to the Project. Project consistency with each of these plans is provided below.

**<u>County of Ventura Multi-Jurisdictional Hazard Mitigation Plan</u>**

Volume 1, Part 2 of the County's hazards mitigation plan provides risk assessments for various areas of the County relating to topics such as dam failure, drought, earthquake, flood, landslide, sea-level rise, coastal erosion, severe storms, severe weather, tsunami, wildfire, climate change, and other hazards of interest. Volume 1, Part 3 including a mitigation plan with a vision statement, goals, and objectives. None of these county-wide goals or objectives directly relate to the Project.

Volume 2 of the County's hazard mitigation plan contains a section directly relating to the City of Moorpark and its hazard vulnerabilities, capacity for responding and mitigation hazards, and providing a list of hazard-related action items. The plan identifies past natural hazard events within the City as including the COVID-19 pandemic, several fires (i.e., Maria Fire, Easy Fire, Thomas Fire, Guiberson Fire, and the Shekell Fire), an extreme heat event in July 2018, extreme winter storm events in February 2017 and January 2005, a flash flood in January 2008, a severe freeze event in January 2007. The plan identifies wildfire as the top hazard risk to the City of Moorpark, followed by landslides, earthquakes, dam failure, severe weather, and severe storms. A Hazard Mitigation Action Plan is identified in Volume 2, Section 4.8 of the County's Plan, which includes Action MPK-1 that reads that it is a goal for the City to, "Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas." The Project would include the demolition and replacement of existing City buildings in accordance with the latest building code requirements, which would help to achieve this action item. None of the other action items identified for the City of Moorpark are directly applicable to the project.

**County of Ventura Emergency Operations Plan**

The County's Emergency Operations Plan contains no particular goals, policies, or objectives that directly relate to the Project.

**City of Moorpark Emergency Operations Plan**

The City's Emergency Operations Plan identifies the Moorpark Community Center Citrus Room, within the Project Site, as the primary alternate City Hall in the event that the existing City Hall is damaged and unsafe to use for routine City government activities. The Project involves the eventual construction of a new City Hall building, demolition of the existing City Hall building, and demolition of the Moorpark Community Center building. Therefore, as the Project is implemented the City's Emergency Operations Plan will need to be updated to identify the new City Hall location as well as a new primary alternative City Hall in the event of an emergency. Similarly, the Active Adult Center within the Project Site is identified as an American Red Cross shelter during emergencies. The Active Adult Center would eventually be demolished as part of the Project; therefore, it is anticipated that a new primary location for the Care and Shelter Branch would be identified in future iterations of the City's Emergency Operations Plan and that the alternate shelter locations would be utilized. Also, the Project would construct several civic buildings that could likely be utilized as shelter locations. The Project would not otherwise conflict with the City's Emergency Operations Plan.

**Conclusion**

There are no designated evacuation routes within the plans mentioned above. As discussed above, the Project would not substantially conflict with any of the applicable emergency response or evacuation plans. The Project would result in less than significant impacts related to this threshold, and no mitigation is required.

***Threshold 4.18-b*** ***If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

**Less Than Significant Impact.** The Project Site is located within a VHFHSZ, and is partially developed with buildings and other development and contains scattered ornamental vegetation. The western portion of the Project Site is previously graded and currently vacant, with low herbaceous vegetation growth. As such, there exists a potential for wildfire risk and exposure of occupants of the Project Site to wildfire smoke in the event of wildfires nearby or further upwind.

There are no steep slopes on or near the Project Site, and no major topographic changes are proposed as part of the Project that would exacerbate existing fire risks.

According to a review of meteorological data, prevailing winds in Moorpark generally blow from the south and southwest (Willy Weather 2022). South and southwest of the Project Site are developed sites; therefore, it is unlikely that the development of the Project would be affected more than in existing conditions by wildfire smoke.

The Project would be constructed in compliance with the latest California Fire Code as well as the California Building Code, which contain regulations for safeguarding life and property from fire (ICC 2019; CBSC 2018). During design of Project structures, the establishing and ongoing maintenance of fuel modification zones may be required to minimize wildfire risk to Project buildings. With implementation of these regulatory requirements, the Project would have less than significant impacts related to this threshold, and no mitigation is required.

***Threshold 4.18-c*** ***If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

**Less Than Significant Impact.** As discussed previously, the Project Site is located within a VHFHSZ; however, the Project does not include any off-site infrastructure improvements that would have the potential to exacerbate fire risk temporarily or ongoing during operation. Minor improvements to High Street would occur as part of the Project, such as the modification of curbs, street parking, and street landscaping, but this work does not have the potential to exacerbate fire risks. As mentioned above, the Project may require the establishment and maintenance of fuel modification zones around proposed structures, which would result in ongoing less than significant impacts associated with vegetation clearing. Less than significant impacts would result from the Project relative to this threshold, and no mitigation is required.

***Threshold 4.18-d*** ***If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change?***

**Less Than Significant Impact.** As discussed previously, the Project is located within a VHFHSZ. Portions of the Project Site are within the 500-year floodplain, which is considered by the Federal Emergency Management Agency (FEMA) to be at minimal risk of flood loss. As discussed in Section 4.9, Hydrology and Water Quality, structures proposed as part of the Project would be required to be elevated outside of the 100-year floodplain, which would lessen Project impacts when compared to existing conditions. Furthermore, design of each Project phase would include drainage improvements to capture and convey stormwater, which would ensure that flooding would not occur.

The Project Site's susceptibility to landslides is discussed in more detail in Section 4.6, Geology and Soils, which concludes that the Project Site is not at substantial risk to landslides. According to the California Earthquake Hazards Zone Application (EQ Zapp) maintained by the California Geological Survey (CGS), the Project Site is not located within a zone of potential earthquake-induced landslides (CGS 2022a). Also, there are no recorded landslide incidents within or near the Project Site identified in the CGS Landslide Inventory (CGS 2022b).

For the reasons discussed above, the Project would have less than significant impacts related to this threshold, and no mitigation is required.

## 4.18.5 CUMULATIVE IMPACTS

As noted previously, the Project and much of the City are located within a VHFHSZ. Therefore, the Project in combination with other cumulative projects would collectively increase the number of buildings and occupants within VHFHSZ's. However, the Project and other cumulative projects would be required to comply with the City and/or County codes and requirements related to building construction, access, fire flow, and fuel modification, which would minimize the risk of wildfire hazards related to the Project and cumulative projects. Specifically, the Project would be constructed in compliance with the latest California Fire Code as well as the California Building Code, which contain regulations for safeguarding life and property from fire (ICC 2019; CBSC 2018). Therefore, with consideration of standard regulatory requirements, there would be no significant cumulative impacts related to wildfire.

## 4.18.6 MITIGATION PROGRAM

### Conditions of Approval

No conditions of approval are applicable to this resource topic.

### Mitigation Measures

No significant impacts pertaining to wildfire were identified; therefore, no mitigation measures are required.

## 4.18.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

## 4.18.8 REFERENCES

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# SECTION 5.0
# ALTERNATIVES TO THE PROJECT

## 5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) describe a range of reasonable alternatives to a proposed project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant environmental impacts identified for the Project. The Project has no significant environmental impacts, and therefore under CEQA Guidelines Section 15126.6(f), no alternatives other than the No Project Alternative are required to be discussed. Nevertheless, this section includes discussion of two alternatives in order to foster informed decisionmaking and public participation. EIRs are also required to evaluate the comparative merits of the alternatives that are carried forward for consideration. This chapter of the EIR describes and evaluates project alternatives as required in the CEQA Guidelines. This chapter also identifies the Environmentally Superior Project Alternative as required by CEQA Guidelines Section 15126.6(e)(2).

### 5.1.1 PROJECT OBJECTIVES

The City has identified the following objectives for the Project:

- To redevelop the Project Site to create a vibrant master-planned Civic Center Campus to serve current and future Moorpark residents;
- To promote the revitalization of the downtown area of Moorpark with new civic buildings and a mix of other uses within the Project Site that would complement current uses and future planned development in the area;
- To develop the Project Site in a manner that avoids significant impacts to cultural and historic resources, including the Tanner Building.

## 5.2 SELECTION OF ALTERNATIVES

The range of alternatives and methods for selection is governed by CEQA and applicable CEQA case law. As stated in the CEQA Guidelines Section 15126.6(a), the lead agency is responsible for selecting a range of alternatives and must disclose its reasoning for selecting those alternatives. This chapter includes the range of project alternatives that have been selected by the City as lead agency for examination, as well as its reasoning for selecting these alternatives.

As stated in Section 15126.6(a) of the CEQA Guidelines, there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. This rule is described in Section 15126.6(f) of the CEQA Guidelines and requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. As defined in Section 15126.6(f), the rule of reason limits alternatives analyzed to those that would avoid or substantially lessen one or more of the significant effects of a project. Of those alternatives, an EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. Other relevant provisions in the CEQA Guidelines state that EIRs do not need to consider every conceivable alternative to a project, nor are they required to consider alternatives that are infeasible.

### 5.2.1 ALTERNATIVE CONSIDERED BUT NOT CARRIED FORWARD

The CEQA Guidelines require that an EIR identify alternatives that were considered by the lead agency but rejected as infeasible along with a brief explanation of the reasons underlying this determination. Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are:

1. Failure to meet most of the basic project objectives,
2. Infeasibility, or
3. Inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6(c)).

In accordance with 15126.6(c) of the CEQA Guidelines, alternatives were considered by the City but rejected from further analysis due to one or more of the above reasons. A description of each alternative and the rationale for it being rejected from further consideration is provided below.

**Alternative Site**

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the Project Site. As stated in Section 15126.6(f)(2)(A), the first step in analyzing alternative sites is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered in the EIR. Given that there are no significant and unavoidable impacts associated with the Project, an alternative sites alternative would not substantially lessen or avoid the impacts of the Project; therefore, this alternative was omitted from further consideration.

### 5.2.2 ALTERNATIVES TO THE PROJECT

Pursuant to Section 15126.6 of the CEQA Guidelines, the City selected a reasonable range of alternatives to the Project that would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen one or more of the effects of the Project. The two alternatives carried forward for detailed consideration are described below in sufficient detail to allow for meaningful evaluation, analysis, and comparison of the alternatives with the Project.

**No Project Alternative**

As required by CEQA Guidelines Section 15126.6(e)(1), a No Project Alternative was considered. Under the No Project Alternative, the Project Site would continue to operate as the existing City Civic Center with none of the improvements that are proposed under the Project. In existing conditions, the Project Site contains a variety of existing land uses that would continue to operate under the No Project Alternative. The eastern portion of the Project Site contains the existing Civic Center, which is oriented toward Moorpark Avenue. The existing Civic Center consists of a city hall, a community center/active adult center, a city library, portable structures, and parking areas. The southern portion of the Project Site contains the United States (U.S.) Post Office and is generally located between West High Street to the north and the Union Pacific Railroad and Metrolink tracks to the south. The western portion of the Project Site is undeveloped, generally rectangular-shaped vacant land oriented in an east/west direction along the north side of West High Street. In conjunction with previous nearby residential development, the western portion of the Project Site has been subject to grading and is relatively flat with no distinguishing

topographical features. The northern portion of the Project Site is developed with the existing city hall buildings.

The No Project Alternative is economically, logistically, legally, and politically feasible as it involves the continued operation of existing uses within the Project Site; however, the No Project Alternative would not meet the project objectives that are outlined above in Section 5.1.1, Project Objectives. Specifically, the No Project Alternative would not achieve Objective #1, which is to redevelop the Project Site to create a vibrant master-planned Civic Center Campus. Instead, the No Project Alternative would maintain the existing facilities within the Project Site which have been determined to be in need of repair. Also, since it would not involve any improvements, the No Project Alternative would not help to revitalize the downtown area of Moorpark, which is identified as Objective #2. The No Project Alternative would also be inconsistent with Objective #3, which is to develop the Project Site in a manner that avoid significant impacts to cultural and historic resources, including the Tanner Building since this alternative would not involve any development.

***Comparison of the Effects of the No Project Alternative to the Project***

Aesthetics

The No Project Alternative would maintain the existing buildings, landscaping, and lighting within the Project Site. Therefore, the No Project Alternative does not have potential to result in a substantial adverse effect on a scenic vista or to substantially damage scenic resources. Furthermore, the No Project Alternative would not alter the visual character of the Project Site as it would not result in new buildings or other structures. Night lighting would remain the same as in existing conditions. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Agriculture and Forestry Resources

As described in Section 4.0.1, Effects Not Found To Be Significant, of this EIR, the Project Site contains no designated farmland as shown in the Farmland Mapping and Monitoring Program mapping, nor is the Project Site zoned for or used for agriculture or forestry purposes. Therefore, because this alternative would be located on the same site as the Project, the No Project Alternative would be consistent with the Project and would have no impacts related to agriculture and forestry resources. The No Project Alternative would have no impacts, consistent with the Project.

Air Quality

The No Project Alternative would maintain the existing land uses within the Project Site; therefore, the number of vehicle trips coming and going from the Project Site and resultant air quality emissions would be the same as in existing conditions. When compared to the Project, which would increase daily trips resulting from the Project Site, the No Project Alternative would result in fewer operational air quality emissions than the Project.

The No Project Alternative would not require any construction, which would avoid construction emissions, ground disturbance, and grading that would result under the Project. Therefore, the No Project Alternative would have fewer construction air quality emissions.

Biological Resources

Although heavily disturbed from previous grading and stockpiling activities, the western portion of the Project Site remains undeveloped and supports a Mediterranean grass grassland vegetation type. Various special status plant species have been recorded off-site in the greater vicinity of the Project Site, including Plummer's mariposa lily (*Calochortus plummerae*), southern tarplant (*Centromadia parryi* ssp. *australis)*, California Orcutt grass (*Orcuttia californica*), and Lyon's pentachaeta (*Pentachaeta lyonii*). Burrowing owl (*Athene cunicularia*) is a special status wildlife species that may occur on the western portion of the Project Site. White tailed kite (*Elanus leucurus*) is a California Fully Protected species and has potential to nest in the trees adjacent to the western portion of the Project Site. The No Project Alternative would not develop the western portion of the Project Site, which would thereby avoid potential impacts to the plant species noted above and to burrowing owl and white tailed kite. Also, indirect impacts that would result from construction activities within the Project Site such as impacts resulting from noise and vibration would be avoided by the No Project Alternative. Finally, the No Project Alternative would have no impacts related to nesting birds, which would be fewer impacts than the Project. Neither the Project nor the No Project Alternative would impact jurisdictional waters, and neither of these alternatives would conflict with any adopted plans or polices relating to biological resources. Therefore, overall the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Cultural Resources

The Project Site does not contain any historic built environment resources over 45 years old; however, the California Register of Historical Resources (CRHR)-listed Tanner Corner building is located adjacent to the Project Site at 601 Moorpark Avenue, which is an historical resource under CEQA. Given that the No Project Alternative would not include any construction activities near the Tanner Corner building, the No Project Alternative would not have any impacts related to this cultural resource. Specifically, the No Project Alternative would have fewer potential impacts related to vibration and aesthetic-compatibility with the Tanner Corner building. Also, the No Project Alternative would not involve ground disturbance so there would be no chance of uncovering unanticipated archaeological or historical resources and human remains like there is with the Project. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Energy

The Project Site is currently partially developed, and thus requires energy in baseline conditions for heating, lighting, and electronic devices. The No Project Alternative would not require any construction activities, and would maintain the number of buildings and other facilities requiring energy within the Project Site. Therefore, the No Project Alternative would have fewer impacts than the Project, which would increase energy demands above existing conditions due to the intensification of uses within the Project Site that would occur with the Project. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Geology and Soils

The No Project Alternative would occur on the same site as the Project. The Project Site contains no presence of active faulting and the Project Site does not occur within an Earthquake Fault Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. Like all of Southern California, the City of Moorpark is subject to ground shaking hazards associated with earthquake events in the region. Also, according to mapping prepared by the California

Department of Conservation, the Project Site is located within a liquefaction zone. There is no landslide, settlement, or subsidence hazards are known to be present at the Project Site. Given that the No Project Alternative would not develop any new structures within the Project Site, the No Project Alternative would not expose any new structures or people to geologic hazards. However, it is worth noting that the No Project Alternative would maintain buildings within the Project Site that were developed in the 1980's prior to current structural and seismic requirements were put in place. Therefore, although the No Project Alternative would not expose new structures or people to geologic hazards, this alternative would not result in the construction of new buildings with foundations and structures built to current code. Also, the No Project Alternative would not result in any of the temporary erosion potential during construction that the Project would result in. However, the No Project Alternative would not result in any of the operational water quality best management practices that would be implemented as part of the Project. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Greenhouse Gas Emissions

Neither the Project nor the No Project Alternative would conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The No Project Alternative would maintain the operation of existing uses within the Project Site; therefore, there would be no change in the number of vehicles trips, energy usage, and associated greenhouse gas emissions as in existing conditions. Since the Project would increase daily vehicle trips and would increase density of development within the Project Site, the Project would result in increased operational greenhouse gas emissions. Given that the No Project Alternative would involve no construction, the No Project Alternative would have fewer construction greenhouse gas emissions than the Project, which would involved phased construction activities. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Hazards and Hazardous Materials

Neither the Project nor the No Project Alternative would involve the routine use, transport, handling, or storage of hazardous materials on-site. Also, neither alternative would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, nor would either alternative occur on a Cortese List property or impair an adopted emergency response or evacuation plan.

Given the age of the existing facilities, it is possible asbestos and lead-based paint could be present in the building materials that would be removed during demolition, which would require specialized removal and disposal. Also, polychlorinated biphenyl (PCB)-containing lighting ballasts and mercury containing thermostats or fluorescent light tubes occur within the Project Site. The No Project Alternative would avoid impacts related to hazardous materials abatement that would occur under the Project.

The Project Site is located within a Very High Fire Hazard Severity Zone; therefore, both the Project and the No Project Alternative would both expose people and structures to potential wildfires and the effects from wildfire. The No Project Alternative would not build any new buildings or expose any new persons to wildfire above existing conditions; however, the No Project Alternative would also no involve the construction of new buildings in accordance with the latest building and fire codes which are more stringent than the requirements that were in place when the existing buildings were originally constructed.

Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Hydrology and Water Quality

Neither the Project nor the No Project Alternative would impair implementation of a water quality control plan or sustainable groundwater management plan. Also, neither the Project nor the No Project Alternative would substantially decrease groundwater supplies or interfere substantially with groundwater recharge, although the Project would result in an increase in impervious surface coverage and decrease in groundwater infiltration than the No Project Alternative would result in.

The No Project Alternative would not result in any temporary erosion or other stormwater impacts that construction of the Project would result in. However, the No Project Alternative would not result in any of the operational water quality best management practices that would be implemented as part of the Project.

Therefore, overall, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Land Use and Planning

Neither the Project nor the No Project Alternative would physically divide an established community. Both the Project and the No Project Alternative would be consistent with land use and zoning designations for the Project Site. Therefore, the No Project Alternative would have fewer land use and planning impacts than the Project.

Mineral Resources

The No Project Alternative would occur on the same site as the Project. Consistent with the Project, the No Project Alternative would not result in the loss of availability of a known mineral resource or of a locally-important mineral resource recovery site, given the Project Site is already developed and does not contain any known mineral resources. Therefore, the No Project Alternative would have no impacts, consistent with the findings for the Project.

Noise

The No Project Alternative would not require demolition or construction activities; therefore, the No Project Alternative would have fewer impacts related construction noise and vibration when compared to the Project. Similarly, given that the No Project Alternative would not develop structures in close proximity to the Tanner Corner building, there would be no vibratory impacts for the No Project Alternative, whereas the Project requires mitigation to avoid significant impacts to this structure.

During operations, the Project has the potential to result in greater sound levels than the No Project Alternative due to the greater intensity of development within the Project Site, as well as the development that would occur under the Project within areas that are not currently developed with any uses. Also, given there would be additional vehicle trips associated with the Project, the No Project Alternative would have fewer impacts related to operational traffic noise than the Project.

Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Population and Housing

Neither the Project nor the No Project Alternative would displace any existing people or housing. The Project would result in an increase of 75 residential units within the Project Site, which is not consistent with current plans' assumptions and the zoning for the Project Site that do not account for residential uses on the Project Site. Therefore, the No Project Alternative would have lesser impacts than the Project related to unplanned population growth.

Public Services

The Project would increase demand for public services through the intensification of development with a diversity of new land uses within the Project Site, which would not occur under the No Project Alternative. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Recreation

The Project would increase demand for parks and recreational facilities and the Project would impact a small park within the Project Site; however, the Project would also construct a larger park within the Project Site. In contrast, the No Project Alternative would maintain existing demand for parks and recreational facilities and would not impact the park within the Project Site. Therefore, the No Project Alternative would have fewer impacts than the Project.

Transportation

Neither the Project nor the No Project Alternative would conflict with a program plan, ordinance or policy addressing the circulation system. The Project would result in temporary impacts related to emergency access due to temporary lane closures during construction, which would not occur under the No Project Alternative. Also, the Project would result in an increase in vehicle miles traveled that would be avoided under the No Project Alternative. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Tribal Cultural Resources

The Project Site does not contain any known tribal cultural resources; however, there is potential for unknown tribal cultural resources to be encountered during ground disturbance within the Project Site. The No Project Alternative would not involve ground disturbance so there would be no chance of uncovering unknown tribal cultural resources like there is with the Project. Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Utilities and Service Systems

The Project would increase demand for utilities through the intensification of development with a diversity of new land uses within the Project Site, which would not occur under the No Project Alternative. Therefore, the No Project Alternative would have fewer impacts than the Project.

Wildfire

The Project Site is located within a Very High Fire Hazard Severity Zone; therefore, both the Project and the No Project Alternative would both expose people and structures to potential wildfires and the effects from wildfire. The No Project Alternative would not build any new buildings

or expose any new persons to wildfire above existing conditions; however, the No Project Alternative would also no involve the construction of new buildings in accordance with the latest building and fire codes which are more stringent than the requirements that were in place when the existing buildings were originally constructed.

Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

**No Commercial Alternative**

The No Commercial Alternative would consist of the phased development of a new City Civic Center within the Project Site, as described in Section 3.0 of this EIR, Project Description, with the exception that the No Commercial Alternative would not include the 13,000 square feet of commercial uses and the public park that are proposed as part of the Project in Phase 2. The same conditions of approval and mitigation measures as identified for the Project would be applicable to the No Commercial Alternative.

The No Commercial Alternative is feasible as it would involve the development of a new library, city hall, and residential uses, which would help the No Commercial Alternative to meet all of the project objectives that are outlined above in Section 5.1.1, Project Objectives.

***Comparison of the Effects of the No Commercial Alternative to the Project***

Aesthetics

The No Commercial Alternative would include similar development to the Project, with the exception of no development of commercial uses within the western portion of the Project Site. Therefore, the No Commercial Alternative would construct fewer structures that would have potential to impact scenic resources. Also, night lighting impacts of the No Commercial Alternative would be less than the Project given that the footprint of development would be less. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Agriculture and Forestry Resources

As described in Section 4.0.1, Effects Not Found To Be Significant, of this EIR, the Project Site contains no designated farmland as shown in the Farmland Mapping and Monitoring Program mapping, nor is the Project Site zoned for or used for agriculture or forestry purposes. Therefore, because this alternative would be located on the same site as the Project, the No Commercial Alternative would be consistent with the Project and would have no impacts related to agriculture and forestry resources. The No Commercial Alternative would have no impacts, consistent with the Project.

Air Quality

The No Commercial Alternative would include similar development to the Project, with the exception of no development of commercial uses within the western portion of the Project Site. Therefore, the number of vehicle trips coming and going from the Project Site and resultant air quality emissions would be less for the No Commercial Alternative than for the Project, which would develop up to 13,000 square feet of commercial uses in the western portion of the Project Site. When compared to the Project, which would increase daily trips resulting from the Project Site, the No Commercial Alternative would result in fewer operational air quality emissions as it

would still increase daily trips and associated vehicular emissions but at a lower rate than the Project.

The No Commercial Alternative would require less construction, which would minimize the amount of construction emissions, ground disturbance, and grading that would result when compared to the Project, which would conduct construction over a greater area and period of time. The No Commercial Alternative would have fewer construction air quality emissions than the Project.

Biological Resources

As noted above, the western portion of the Project Site is undeveloped and supports a Mediterranean grass grassland vegetation type with potential for Plummer's mariposa lily, southern tarplant, California Orcutt grass, Lyon's pentachaeta, burrowing owl, white tailed kite, and white tailed kite. Therefore, the No Commercial Alternative would reduce potential impacts to these plant and wildlife species. Also, indirect impacts that would result from construction activities within the Project Site such as impacts resulting from noise and vibration would be reduced by the No Commercial Alternative, which would be set back further from adjacent open space areas within and adjacent to the western portion of the Project Site. Finally, the No Commercial Alternative would have fewer impacts related to nesting birds since potential nesting vegetation within the western portion of the Project Site would not need to be removed under this alternative. Neither the Project nor the No Commercial Alternative would impact jurisdictional waters, and neither of these alternatives would conflict with any adopted plans or polices relating to biological resources. Therefore, overall the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Cultural Resources

The Project Site does not contain any historic built environment resources over 45 years old; however, the CRHR-listed Tanner Corner building is located adjacent to the Project Site at 601 Moorpark Avenue, which is an historical resource under CEQA. Given that the No Commercial Alternative would involve the same construction activities near the Tanner Corner building that are proposed under the Project, both alternatives would have the same impacts related to this cultural resource. The No Commercial Alternative would involve less ground disturbance so there would be less likelihood of uncovering unanticipated archaeological or historical resources and human remains as there would be with the Project. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Energy

The No Commercial Alternative would involve construction activities that would utilize energy, albeit less construction activities would be required for the No Commercial Alternative than for the Project. The No Commercial Alternative would increase operational energy usage above existing conditions; however, given that the No Commercial Alternative would develop 13,000 square feet less of commercial land uses than the Project, the No Commercial Alternative would require less operational energy than the Project. Therefore, for both construction and operations, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Geology and Soils

The No Commercial Alternative would occur on the same site as the Project. The Project Site contains no presence of active faulting and the Project Site does not occur within an Earthquake Fault Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. Like all of Southern California, the City of Moorpark is subject to ground shaking hazards associated with earthquake events in the region. Also, according to mapping prepared by the California Department of Conservation, the Project Site is located within a liquefaction zone. There is no landslide, settlement, or subsidence hazards are known to be present at the Project Site. Given that the No Commercial Alternative would develop fewer new structures within the Project Site, the No Commercial Alternative would result in less expose of new structures and people to geologic hazards. Also, the No Commercial Alternative would result in less temporary erosion potential during construction that the Project would result in given the western portion of the Project Site would not be developed under this alternative. However, the No Commercial Alternative would result in less operational water quality best management practices being implemented, since the western portion of the Project Site would not be redeveloped, so runoff would remain untreated from this portion of the Project Site as it is in existing conditions. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Greenhouse Gas Emissions

Neither the Project nor the No Commercial Alternative would conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. the No Commercial Alternative would result in similar development to the Project with the exception of 13,000 square feet less of commercial land uses. Therefore, the No Commercial Alternative would increase operational greenhouse gas emissions from trips and from energy usage of new land uses on the Project Site above existing conditions, but at a lesser rate than the Project. Given that the No Commercial Alternative would involve a lesser degree of construction, the No Commercial Alternative would have fewer construction greenhouse gas emissions than the Project, which would involve phased construction activities. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Hazards and Hazardous Materials

Neither the Project nor the No Commercial Alternative would involve the routine use, transport, handling, or storage of hazardous materials on-site. Also, neither alternative would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, nor would either alternative occur on a Cortese List property or impair an adopted emergency response or evacuation plan.

Given the age of the existing facilities, it is possible asbestos and lead-based paint could be present in the building materials that would be removed during demolition, which would require specialized removal and disposal. Also, PCB-containing lighting ballasts and mercury containing thermostats or fluorescent light tubes occur within the Project Site. The No Commercial Alternative would have the same amount of impacts related to hazardous materials abatement that would occur under the Project since both alternatives would remove the same number of structures and building materials.

The Project Site is located within a Very High Fire Hazard Severity Zone; therefore, both the Project and the No Commercial Alternative would expose people and structures to potential wildfires and the effects from wildfire, albeit the No Commercial Alternative would result in 13,000

square feet less of development. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Hydrology and Water Quality

Neither the Project nor the No Commercial Alternative would impair implementation of a water quality control plan or sustainable groundwater management plan. Also, neither the Project nor the No Commercial Alternative would substantially decrease groundwater supplies or interfere substantially with groundwater recharge, although the Project would result in a greater increase in impervious surface coverage and decrease in groundwater infiltration than the No Project Alternative would result in.

The No Commercial Alternative would result in fewer temporary erosion and other stormwater impacts that construction of the Project would result in. However, the No Commercial Alternative would result in fewer operational water quality best management practices being implemented than would be implemented under the Project given the smaller development footprint.

Therefore, overall, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Land Use and Planning

Neither the Project nor the No Commercial Alternative would physically divide an established community. Both the Project and the Commercial Alternative would be consistent with zoning and land use designations for the Project Site. Therefore, the No Commercial Alternative would have similar impacts as the Project related to this resource topic.

Mineral Resources

The No Commercial Alternative would occur on the same site as the Project. Consistent with the Project, the No Commercial Alternative would not result in the loss of availability of a known mineral resource or of a locally-important mineral resource recovery site, given the Project Site is already developed and does not contain any known mineral resources. Therefore, the No Commercial Alternative would have no impacts, consistent with the findings for the Project.

Noise

The No Commercial Alternative would require the same amount of demolition and a similar amount of construction activities as the Project. Therefore, the No Commercial Alternative would have fewer impacts related construction noise and vibration when compared to the Project. Similarly, given that the No Commercial Alternative would still develop the library and city hall buildings in proximity to the Tanner Corner building, there would be similar potential vibratory impacts for the No Commercial Alternative that there would also be for the Project.

During operations, the Project has the potential to result in greater sound levels than the No Project Alternative due to the greater intensity of development within the Project Site, as well as the development that would occur under the Project within areas that are not currently developed with any uses. Also, given there would be additional vehicle trips associated with the Project, the No Project Alternative would have fewer impacts related to operational traffic noise than the Project.

Therefore, the No Project Alternative would have fewer impacts than the Project related to this resource topic.

Population and Housing

Neither the Project nor the No Commercial Alternative would displace existing people or housing. The Project would result in an increase of 75 residential units within the Project Site, which is not consistent with current plans' assumptions and the zoning for the Project Site that do not account for residential uses on the Project Site. Similar to the Project, the No Commercial Alternative would also include development of 75 residential units within the Project Site. Therefore, the No Commercial Alternative would have the same impacts as the Project related to unplanned population growth.

Public Services

The Project would increase demand for public services through the intensification of development with a diversity of new land uses within the Project Site, which would occur to a lesser extent under the No Commercial Alternative. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Recreation

The Project would increase demand for parks and recreational facilities and the Project would impact a small park within the Project Site; however, the Project would also construct a larger park within the Project Site. Similarly, the No Commercial Alternative would increase demand for parks and recreational facilities through implementing similar development as what is proposed under the Project with the exception of the 13,000 square feet of commercial space and the public park which would not be developed. By not developing a public park on-site, the No Commercial Alternative would result in a greater impact related to recreation than the Project.

Transportation

Neither the Project nor the No Commercial Alternative would conflict with a program plan, ordinance or policy addressing the circulation system. The Project would result in temporary impacts related to emergency access due to temporary lane closures during construction, which would also occur under the No Commercial Alternative albeit to a lesser extent since less development would occur. Also, the Project would result in an increase in vehicle miles traveled that would occur to a lesser extent under the No Commercial Alternative. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Tribal Cultural Resources

The Project Site does not contain any known tribal cultural resources; however, there is potential for unknown tribal cultural resources to be encountered during ground disturbance within the Project Site. The No Commercial Alternative would involve a lesser degree of ground disturbance so there would be less chance of uncovering unknown tribal cultural resources as there is with the Project. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Utilities and Service Systems

The Project would increase demand for utilities through the intensification of development with a diversity of new land uses within the Project Site, which would occur to a lesser extent under the No Commercial Alternative. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

Wildfire

The Project Site is located within a Very High Fire Hazard Severity Zone; therefore, both the Project and the No Commercial Alternative would expose people and structures to potential wildfires and the effects from wildfire, albeit the No Commercial Alternative would result in 13,000 square feet less of development. Therefore, the No Commercial Alternative would have fewer impacts than the Project related to this resource topic.

## 5.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR.

The CEQA Guidelines also state that should it be determined that the "no project" alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

A comparative summary of the environmental impacts associated with each alternative is provided in Table 5-1, Comparison of Alternatives. As shown, the No Project Alternative would be the environmentally superior alternative, and the No Commercial Alternative would be the environmentally superior build alternative. Although the Project has no significant and unavoidable impacts, the No Project Alternative and the No Commercial Alternative would result in no new environmental impacts, and would avoid some of the Project's less than significant impacts. However, the No Project Alternative would not fully attain any of the basic objectives of the Project nor would the No Project Alternative achieve the underlying purpose of the Project.

## TABLE 5-1
## COMPARISON OF ALTERNATIVES

| Impact Area | Project | No Project Alternative | No Commercial Alternative |
|---|---|---|---|
| Aesthetics | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Agriculture | No Impacts | No Impacts | No Impacts |
| Air Quality | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Biological Resources | Less Than Significant Impact With Mitigation | Reduced Impacts | Reduced Impacts |
| Cultural Resources | Less Than Significant Impact With Mitigation | Reduced Impacts | Reduced Impacts |
| Energy | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Geology and Soils | Less Than Significant Impact With Mitigation | Reduced Impacts | Reduced Impacts |
| Greenhouse Gas Emissions | Less Than Significant Impact | Reduced Construction Impacts; Increased Operational Impacts | Reduced Impacts |
| Hazards and Hazardous Materials | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Hydrology and Water Quality | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Land Use and Planning | Less Than Significant Impact | Same Impacts | Same Impacts |
| Mineral Resources | No Impacts | No Impacts | No Impacts |
| Noise | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Population and Housing | Less Than Significant Impact | Reduced Impacts | Same Impacts |
| Public Services | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Recreation | Less Than Significant Impact | Reduced Impacts | Greater Impacts |
| Transportation | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Tribal Cultural Resources | Less Than Significant Impact With Mitigation | Reduced Impacts | Reduced Impacts |
| Utilities and Service Systems | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |
| Wildfire | Less Than Significant Impact | Reduced Impacts | Reduced Impacts |

# SECTION 6.0
# DOCUMENT PREPARERS AND CONTRIBUTORS

## 6.1 CITY OF MOORPARK

Jessica Sandifer.....Community Services Manager
Shanna Farley.....Principal Planner

## 6.2 PSOMAS

Jennifer Marks ..... QA/QC Manager
Sean Noonan, AICP.....Project Manager/Lead Preparer
Jordan Werkmeister.....Environmental Planner
Tin Cheung ..... Director of Air Quality, Climate Change, and Noise Services
Charles Cisneros .....Senior Archaeologist
Steve Norton .....Senior Biologist
Darlene Yellowhair..... Transportation Analyst
Scott Johnson ..... Transportation Analyst
Sheryl Kristal.....Senior Word Processor
Michael Deseo .....GIS Manager

## 6.3 SOUTH ENVIRONMENTAL

Samantha Murray .....Cultural Resources Director

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# APPENDIX A

# NOTICE OF PREPARATION

# NOTICE OF PREPARATION
# CIVIC CENTER MASTER PLAN PROJECT

**Date:** May 9, 2022
**To:** State Clearinghouse and Interested Parties
**From:** City of Moorpark Parks, Recreation, and Community Services Department
**Subject:** Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (EIR) for the Civic Center Master Plan Project

The City of Moorpark (City) is the lead agency and will prepare an Environmental Impact Report (EIR) for the Civic Center Master Plan Project (Project). The City is soliciting comments from reviewing agencies and the public regarding the scope and content of the EIR. For reviewing agencies, the City requests comments with respect to your agency's statutory responsibility as related to the Project in accordance with California Code of Regulations, Title 14, Section 15082(b). Your agency may need to use the EIR when considering relevant permits or other approvals for the Project. The City is also seeking the input of residents, property owners, and concerned citizens regarding environmental issues that should be addressed in the EIR. The project location, project description, and the potential environmental effects are described herein below.

**Comment Period:** Comments may be sent anytime during the 30-day Notice of Preparation (NOP) comment period. The NOP review and comment period begins on May 9, 2022 and ends on June 8, 2022. All comments must be received during the comment period and no later than 5:00 PM on June 8, 2022. Please include the name of a contact for your agency, if applicable.

All comments should be directed to:

City of Moorpark
Community Development Department
Attention: Shanna Farley, Principal Planner
799 Moorpark Avenue
Moorpark, California 93021

Comments may also be emailed to sfarley@moorparkca.gov.

**Scoping Meeting:** Oral comments may be provided at the Scoping Meeting to be held on Monday, May 23, 2022 from 5:00 PM to 6:30 PM in the Apricot Room / Council Chambers located at the Moorpark City Hall. Moorpark City Hall is located at 799 Moorpark Avenue, Moorpark, California 93021.

## PROJECT LOCATION

The Project site encompasses approximately 12.5 acres in the central, downtown area of the City of Moorpark in Ventura County, California. The Project site is located west of Moorpark Avenue/ Walnut Canyon Road (State Route [SR] 23). Portions of the Project site are located on the north and south sides of West High Street. The Project site currently contains a mix of land uses associated with the existing Civic Center, including city hall, a community center/active adult center, a city library, portable structures, parking areas, and vacant undeveloped areas within the western portion of the Project site. The location and limits of the Project site are depicted in Exhibit 1, Regional Location and Exhibit 2, Local Vicinity.

## PROJECT DESCRIPTION

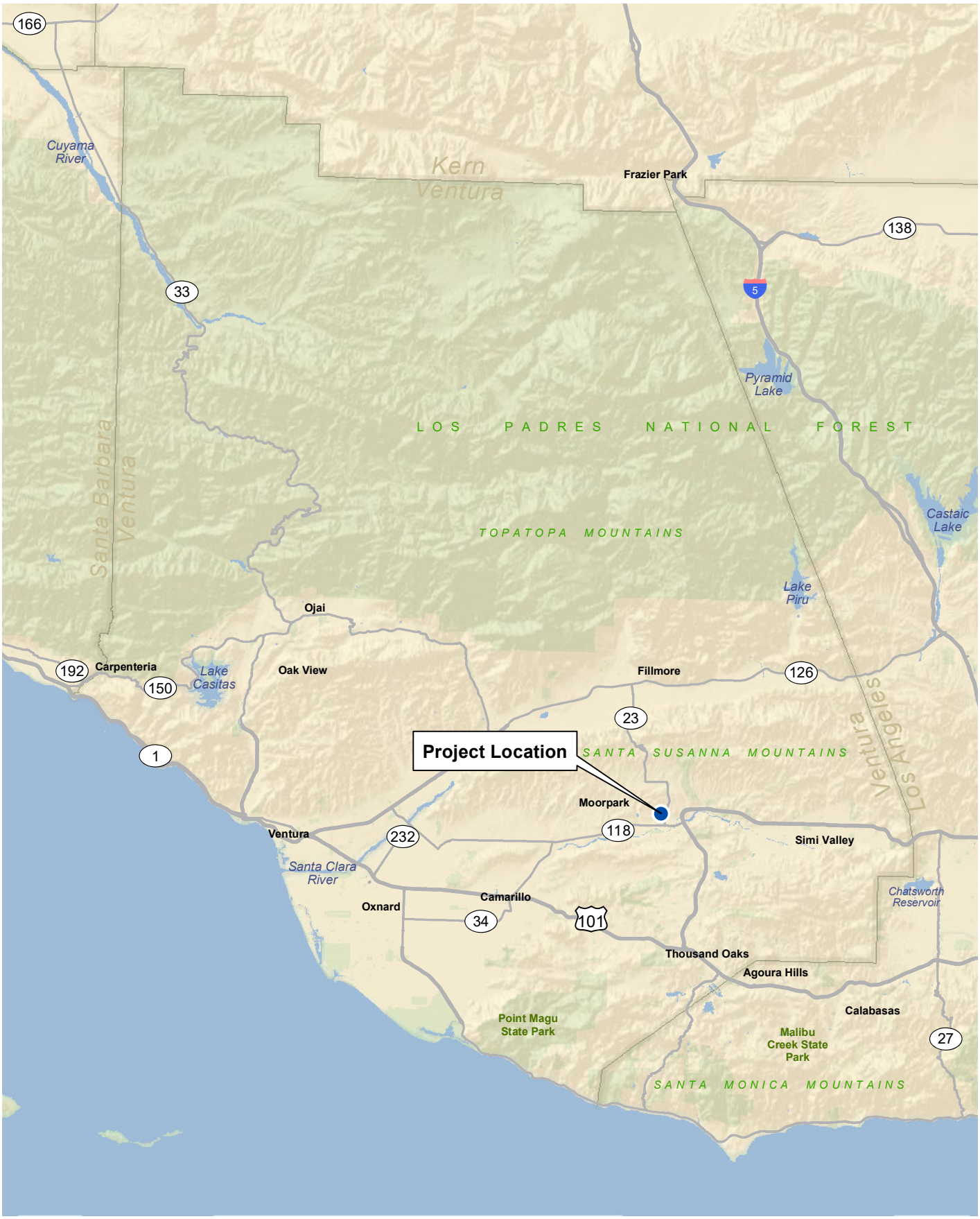
The Project would consist of the phased development of a new City Civic Center within the Project site. The Project would include the following phases:

- During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility.
- During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development.
- During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would include the removal of the existing city hall and community center/active adult center buildings.
- During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

## AREAS OF POTENTIAL IMPACT

The City has determined that an EIR is required for this Project. An Initial Study checklist is included as Appendix A, which provides the City's preliminary assessment of potential impacts associated with the Project. The EIR will provide detailed analysis of the following topical areas.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

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# Regional Location

**Exhibit 1**

*Civic Center Master Plan Project*

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Aerial Source: ESRI, Maxar 2018

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# Local Vicinity

## Exhibit 2

*Civic Center Master Plan Project*

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Feet

PSOMAS

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## APPENDIX A

## INITIAL STUDY

NOTE: The following is a sample form that may be tailored to satisfy individual agencies' needs and project circumstances. It may be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential impacts that are not listed on this form must also be considered. The sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

1. Project title: Civic Center Master Plan Project

2. Lead agency name and address:

City of Moorpark

799 Moorpark Avenue, Moorpark, California 93021

3. Contact person and phone number: Shanna Farley (805) 517-6236

4. Project location: Downtown area west of Moorpark Avenue and north of West High Street

5. Project sponsor's name and address:

City of Moorpark, 799 Moorpark Avenue, Moorpark, California 93021

6. General plan designation: Public/Institutional, Old Town Commercial (C-OT), Downtown Specific Plan, General Commercial (C-2), and Specific Plan 9 (SP-9)

7. Zoning: Institutional (I), Old Town Commercial (C-OT), Rural Exclusive (RE), Old Town Commercial (C-0T), Industrial Park (M-1), and Limited Industrial (M-2)

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The Project would consist of the phased development of a new City Civic Center within the Project site. The Project would include the following phases:

-During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility.

-During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development.

-During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would include the removal of the existing city hall and community center/active adult center buildings.

-During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

-North: Moorpark Avenue/Walnut Canyon Road borders the Project site to the north.

-South: A United States Post Office and the Union Pacific and Metrolink railroad tracks are located south of the Project site. Also, a commercial building is located on the northwestern corner of Moorpark Avenue at West High Street adjacent to the Project site to the south.

-East: Land uses east of Moorpark Avenue include residential, commercial/office, and retail uses.

-West: Land uses to the west include undeveloped parcels, the Boys & Girls Club, and Walnut Canyon School.

10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement.)

None

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The City of Moorpark will conduct tribal consultation pursuant to Assembly Bill 52 (AB 52)

and Senate Bill 18 (SB 18).

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

# Appendix A

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture / Forestry Resources | ☑ Air Quality |
| ☑ Biological Resources | ☑ Cultural Resources | ☐ Energy |
| ☐ Geology/Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology/Water Quality | ☑ Land Use / Planning | ☐ Mineral Resources |
| ☑ Noise | ☐ Population / Housing | ☐ Public Services |
| ☐ Recreation | ☑ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities / Service Systems | ☐ Wildfire | ☑ Mandatory Findings of Significance |

## 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 revisions in the 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.

Shanna Farley — *Signature*

May 9, 2022 — *Date*

Shanna Farley, Principal Planner

## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analyses Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS.** Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| 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) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☑ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☑ | ☐ |
| **II. AGRICULTURE AND FORESTRY RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| 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 non-agricultural use? | ☐ | ☐ | ☑ | ☐ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☑ | ☐ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (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 forest land or conversion of forest land 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 non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☑ | ☐ |
| **III. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| 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 non-attainment under an applicable federal or state ambient air quality standard? | ☑ | ☐ | ☐ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☑ | ☐ | ☐ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☑ | ☐ | ☐ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES.** Would the project: | | | | |
| 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 Wildlife or U.S. 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 Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☑ | ☐ |
| c) Have a substantial adverse effect on state or federally protected wetlands (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? | ☐ | ☐ | ☑ | ☐ |
| **V. CULTURAL RESOURCES.** Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? | ☑ | ☐ | ☐ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | ☐ | ☐ | ☑ | ☐ |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☐ | ☑ | ☐ |
| **VI. ENERGY.** Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☑ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☑ | ☐ |
| **VII. GEOLOGY AND SOILS.** Would the project: | | | | |
| a) Directly or indirectly cause 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? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☑ | ☐ | ☐ |
| 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? | ☐ | ☐ | ☑ | ☐ |

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| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 direct or indirect risks to life or property? | ☐ | ☑ | ☐ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☑ | ☐ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☑ | ☐ | ☐ |
| **VIII. GREENHOUSE GAS EMISSIONS.** Would the project: | | | | |
| 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? | ☐ | ☑ | ☐ | ☐ |
| **IX. HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| 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 reasonably 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 § 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 two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☑ | ☐ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☑ | ☐ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☑ | ☐ |
| **X. HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☑ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☑ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | ☐ | ☐ | ☑ | ☐ |

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| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| i) result in a substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☑ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | ☐ | ☐ | ☑ | ☐ |
| iii) 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; or | ☐ | ☐ | ☑ | ☐ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☑ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☑ | ☐ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☑ | ☐ |
| **XI. LAND USE AND PLANNING.** Would the project: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☑ | ☐ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☑ | ☐ | ☐ | ☐ |
| **XII. MINERAL RESOURCES.** Would the project: | | | | |
| 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? | ☐ | ☐ | ☑ | ☐ |
| **XIII. NOISE.** Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☑ | ☐ | ☐ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☑ | ☐ | ☐ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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? | ☐ | ☐ | ☑ | ☐ |
| **XIV. POPULATION AND HOUSING.** Would the project: | | | | |
| a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☑ | ☐ |
| **XV. PUBLIC SERVICES.** Would the project: | | | | |
| 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 any of the public services: | ☐ | ☐ | ☐ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Fire protection? | ☐ | ☐ | ☑ | ☐ |
| Police protection? | ☐ | ☐ | ☑ | ☐ |
| Schools? | ☐ | ☐ | ☑ | ☐ |
| Parks? | ☐ | ☐ | ☑ | ☐ |
| Other public facilities? | ☐ | ☐ | ☑ | ☐ |
| **XVI. RECREATION.** | | | | |
| a) Would the project 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) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☑ | ☐ |
| **XVII. TRANSPORTATION.** Would the project: | | | | |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☑ | ☐ | ☐ | ☐ |
| b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? | ☑ | ☐ | ☐ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☑ | ☐ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☑ | ☐ |
| **XVIII. TRIBAL CULTURAL RESOURCES.** | | | | |
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | ☐ | ☐ | ☐ | ☐ |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☑ | ☐ | ☐ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☑ | ☐ | ☐ |
| **XIX. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☑ | ☐ |

**All environmental resource topics and thresholds contained in this Initial Study Checklist will be fully evaluated in the forthcoming Environmental Impact Report (EIR).**

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☑ | ☐ |
| c) Result in a determination by the waste water 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? | ☐ | ☐ | ☑ | ☐ |
| d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☑ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☑ | ☐ |
| **XX. WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☑ | ☐ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☑ | ☐ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☑ | ☐ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☑ | ☐ |
| **XXI. MANDATORY FINDINGS OF SIGNIFICANCE.** | | | | |
| a) Does the project have the potential to substantially 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, substantially 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) Does the project 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) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☑ | ☐ | ☐ | ☐ |

# APPENDIX B

# NOTICE OF PREPARATION COMMENTS

# NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
**Laura Miranda**
*Luiseño*

VICE CHAIRPERSON
**Reginald Pagaling**
*Chumash*

PARLIAMENTARIAN
**Russell Attebery**
*Karuk*

SECRETARY
**Sara Dutschke**
*Miwok*

COMMISSIONER
**William Mungary**
*Paiute/White Mountain Apache*

COMMISSIONER
**Isaac Bojorquez**
*Ohlone-Costanoan*

COMMISSIONER
**Buffy McQuillen**
*Yokayo Pomo, Yuki, Nomlaki*

COMMISSIONER
**Wayne Nelson**
*Luiseño*

COMMISSIONER
**Stanley Rodriguez**
*Kumeyaay*

EXECUTIVE SECRETARY
**Raymond C. Hitchcock**
*Miwok/Nisenan*

**NAHC HEADQUARTERS**
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May 10, 2022

Shanna Farley
City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
May 13 2022
STATE OF CALIFORNIA

***Submitted via Electronic and USPS Mail***

**Re: 2022050175, Civic Center Master Plan Project, Ventura County**

Dear Ms. Farley:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws**.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

**1.** Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

**2.** Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

**3.** Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

**4.** Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

**5.** Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

**6.** Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.

**b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

**7.** Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

**a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

**b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

**8.** Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

**9.** Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

**10.** Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

**a.** Avoidance and preservation of the resources in place, including, but not limited to:

**i.** Planning and construction to avoid the resources and protect the cultural and natural context.

**ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

**b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

**i.** Protecting the cultural character and integrity of the resource.

**ii.** Protecting the traditional use of the resource.

**iii.** Protecting the confidentiality of the resource.

**c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

**d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).

**e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

**f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

**11.** Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

**a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

**b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

**c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

**1.** Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

**2.** No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

**3.** Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

**4.** Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

**a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or

**b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

**1.** Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

**a.** If part or all of the APE has been previously surveyed for cultural resources.

**b.** If any known cultural resources have already been recorded on or adjacent to the APE.

**c.** If the probability is low, moderate, or high that cultural resources are located in the APE.

**d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

**2.** If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

**a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
**b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

**3.** Contact the NAHC for:
**a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
**b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

**4.** Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
**a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
**b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
**c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
*Cultural Resources Analyst*
cc: State Clearinghouse

COUNTY of VENTURA

RESOURCE MANAGEMENT AGENCY
**CHARLES R. GENKEL**
**Environmental Health Director**

May 24, 2022

City of Moorpark, Community Development Department
ATTN: Shanna Farley, Principal Planner
799 Moorpark Avenue
Moorpark, CA 93021

**The City of Moorpark Civic Center Master Plan Project, Environmental Document Review – Notice of Preparation of an Environmental Impact Report, (RMA REF # 22-009)**

Ventura County Environmental Health Division (Division) staff reviewed the information submitted for the subject project.

The Division provides the following comments:

1. The proposed residential development may include construction of a community recreation area with swimming pool. If a pool is proposed, the builder/applicant shall submit plans for the public swimming pool to the Community Services Section of this Division and obtain plan approval prior to beginning any construction of the community swimming pool and auxiliary structures.

   A Permit to Operate from this Division would also be required prior to use inauguration of a community swimming pool.

   https://vcrma.org/recreational-health-public-pools-and-spas

2. Project includes the potential construction of commercial food facilities. Food facilities are subject to plan review and permitting by this Division. The applicant/food facility operator must submit plans to this Division's Community Services Section and obtain plan approval prior to beginning any construction of any food facility.

   A Permit to Operate from this Division is also required prior to beginning any retail food operations.

   https://vcrma.org/consumer-food-protection



HALL OF ADMINISTRATION #1730
805-654-2813 • FAX 805-654-2480 • 800 South Victoria Avenue, Ventura, CA 93009 • vcrma.org

3. Final project may include commercial business tenants that handle, store, or transport hazardous materials, or they may generate hazardous waste. Hazardous materials and/or hazardous wastes at or above the reportable thresholds must be reported to this Division's Certified Unified Program Agency (CUPA). Contact the CUPA for reporting and/or permitting requirements.

https://vcrma.org/cupa

If you have any questions, please contact me at 805/ 654-2830 or Ashley.Kennedy@ventura.org.

Ashley Kennedy, R.E.H.S.
Land Use Section
Environmental Health Division

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 269-1124
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

*Making Conservation a California Way of Life*

Governor's Office of Planning & Research

June 02 2022

STATE CLEARINGHOUSE

June 2, 2022

Shanna Farley, Principal Planner
Community Development Department
City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021

RE: Civic Center Master Plan Project
SCH # 2022050175
Vic. LA-05/PM R49.06
GTS # VEN-2022-00486-NOP

Dear Shanna Farley:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced NOP. The Project would consist of the phased development of a new City Civic Center within the Project site. The Project would include the following phases:

• During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility.

• During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park as part of that development.

• During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would include the removal of the existing city hall and community center/active adult center buildings.

• During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Senate Bill 743 (2013) has codified into CEQA law and mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. You may reference the Governor's Office of Planning and Research (OPR) for more information:

http://opr.ca.gov/ceqa/updates/guidelines/

As a reminder, VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020, which is the statewide implementation date.

Caltrans is aware of challenges that the region faces in identifying viable solutions to alleviating congestion on State and Local facilities. With limited room to expand vehicular capacity, this development should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

Caltrans supports the implementation of complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Please note the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing. Overall, the environmental report should ensure all modes are served well by planning and development activities. This includes reducing single occupancy vehicle trips, ensuring safety, reducing vehicle miles traveled, supporting accessibility, and reducing greenhouse gas emissions. The project location is next to SR-23 and many pedestrian will be walking to the Civic Center, please include a pedestrian/bicycle safety analysis for SR-23 and Charles Street/driveway and SR-23 and High Street.

We encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). This reference is available online at:

http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf

You can also refer to the 2010 *Quantifying Greenhouse Gas Mitigation Measures* report by the California Air Pollution Control Officers Association (CAPCOA), which is available online at:

http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Also, Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), dated May 20, 2020 and the Caltrans Interim Land Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance, prepared in On December 18, 2020. You can review these resources at the following links:

https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf

https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-12-22-updated-interim-ldigr-safety-review-guidance-a11y.pdf

Caltrans encourages lead agencies to prepare traffic safety impact analysis for this development in the California Environmental Quality Act (CEQA) review process using Caltrans guidelines above on the State facilities so that, through partnerships and collaboration, California can reach zero fatalities and serious injuries by 2050.

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # VEN-2022-00486AL-NOP.

Sincerely,

Miya Edmonson

MIYA EDMONSON
LDR/CEQA Branch Chief

email: State Clearinghouse

Ventura County
Air Pollution
Control District

4567 Telephone Rd
Ventura, California 93003

tel 805/303-4005
fax 805/456-7797
www.vcapcd.org

Ali Reza Ghasemi, PE
Interim
Air Pollution Control Officer

# VENTURA COUNTY
# AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Shanna Farley, Principal Planner, City of Moorpark

DATE: June 7, 2022

FROM: Nicole Collazo, Air Quality Specialist, Planning Division

SUBJECT: Notice of Preparation of Draft Program Environmental Impact Report for City of Moorpark Civic Center Master Plan Project (RMA 22-009)

Air Pollution Control District (APCD) staff have reviewed the subject Notice of Preparation (NOP) of a draft program environmental impact report (EIR), which will identify any potential environmental impacts for the construction and upgrade of the City of Moorpark's (City) existing Civic Center. The project is located west of Moorpark Avenue/Walnut Canyon Road (State Route 23) and some portions on the north and south sides of West High Street. The Lead Agency is the City of Moorpark.

## GENERAL COMMENTS

The air quality assessment should consider consistency with the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP presents Ventura County's strategy (including related mandated elements) to attain the 2008 federal 8-hour ozone standard by 2020, as required by the federal Clean Air Act Amendments of 1990 and applicable U.S. EPA clean air regulations. The 2016 AQMP uses an updated 2012 emissions inventory as baseline for forecasting data, SCAG RTP 2016 data, and CARB's EMFAC2014 emission factors for mobile sources. The AQMP can be downloaded from our website at http://www.vcapcd.org/AQMP-2016.htm. We note a newer emissions model (EMFAC2017) is now available and is being used by CARB and recently approved by EPA. Methods for consistency with the AQMP are outlined in Chapter 4 of the Ventura County Air Quality Assessment Guidelines, 2003 (AQAG).

The AQAG can also be used to evaluate all potential air quality impacts. The AQAG are also downloadable from our website here: http://www.vcapcd.org/environmental-review.htm. Specifically, the air quality assessment should attempt to quantify and discuss reactive organic compound, nitrogen oxide emissions from operational mobile, energy, and area sources. Construction emissions will not be included in the determination thresholds, but quantification is still recommended as emission reduction measures are still recommended for the reduction of fugitive dust, diesel particulate matter, and NOx from heavy-duty construction equipment if it exceeds the recommended air quality significance determination thresholds for ROG and NOx for that area (25 lbs./day). We note that the AQAG has not been updated since 2003, and greater

reduction measures are recommended for construction mitigation, such as using newer, cleaner Tier 3 or Tier 4 off-road diesel equipment and/or using on-road construction vehicles of year 2010 model or greater, using architectural coatings with a VOC content of less than 50 g/L, if construction emissions exceed 25 lbs./day for either ozone precursor pollutant. Current air quality determinations follow the same significance determination methodology outline in the AQAG, but use different tools (CalEEMod vs. URBEMIS, CO Hotspots analysis no longer required, etc.).

In addition, should a Valley Fever impact be determined, the AQAG contains recommended measures to reduce exposure of the Valley Fever fungal spores to construction workers, nearby residential communities and other sensitive receptor locations such as Walnut Canyon School, Boys and Girls Club, Chaparral Middle School, Moorpark Library, and Pondexter Park (AQAG Section 7.4.2).

There are several demolition activities proposed as part of the project (Phase 1, Phase 3) which may have the potential to emit asbestos, a toxic air contaminant, into the atmosphere. We note that all demolition activities must be in compliance with APCD Rule 62.7 and this should be discussed in the toxic impacts section of the draft program EIR (CEQA Guidelines Appendix G, Item III.c).

When quantifying the project's operational air emissions, the estimation of mobile emissions emitted should use project information such as traffic data from the project's traffic study. Other assumptions, such as the percentage of electric and/or diesel vehicles in the City's fleet mix, and the net increase in daily trips from existing baseline, should also be incorporated into the estimates.

We would like the City to be informed about our Incentive Programs, specifically the Electric Vehicle Incentive Program in which grant money is awarded to EV infrastructure costs provided the funded EV charging stations are available for public use. For more information, please see APCD's Incentive Programs page at http://www.vcapcd.org/grant_programs.htm or contact Mr. Danny McQuillan at danny@vcapcd.org.

Lastly, EIR's air quality impact section should address the following criteria, obtained from the most recent update to the State CEQA Guidelines, Appendix G:

- Conflict with or obstruct implementation of the applicable air quality management plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors (schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences) to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

Thank you for the opportunity to comment on the NOP. If you have any questions, you may contact me at nicole@vcapcd.org.

## Ciuffetelli, Anthony

**From:** Husted, Dawn
**Sent:** Tuesday, June 7, 2022 3:00 PM
**To:** Ciuffetelli, Anthony
**Cc:** CEQA
**Subject:** RE: Outside Environmental Document Review RMA# 22-009; Comments due 06/07/2022
**Attachments:** Location Map.pdf

Hi Anthony,

We have the following conditions for project

**WATERSHED PROTECTION CONDITIONS:**

1. **Encroachment Permit:** Project proponent shall obtain an Encroachment Permit from the Ventura County Watershed Protection District to perform any work within and/or utilize the District's Right of Way. Project findings will be required to comply with the Ventura County Watershed Protection District hydrology data and the 2017 Hydrology Manual and follow the WP "Guide for Hydrology and Hydraulic Study Report" found at following website: http://pwaportal.ventura.org/WPD/onestop/guidelines/Guide%20for%20Hydra.pdf
   Additionally, the design must meet the requirements of the City and WP.

2. Please submit a complete Drainage Report that, at a minimum, includes the following items:
   - Sign and Seal from Licensed Engineer
   - Figures/Hydrology Maps
   - Hydrologic and Hydraulic Calculations
   - Stormwater Calculations
   - Mitigation Measures
   - Offsite Flows
   - Hydrology Maps
   - Stormwater Quality Treatment Devices
   - FEMA Maps
   - Storm Drainage Plan (showing outlets and complete storm drain network)

Location map is also attached.

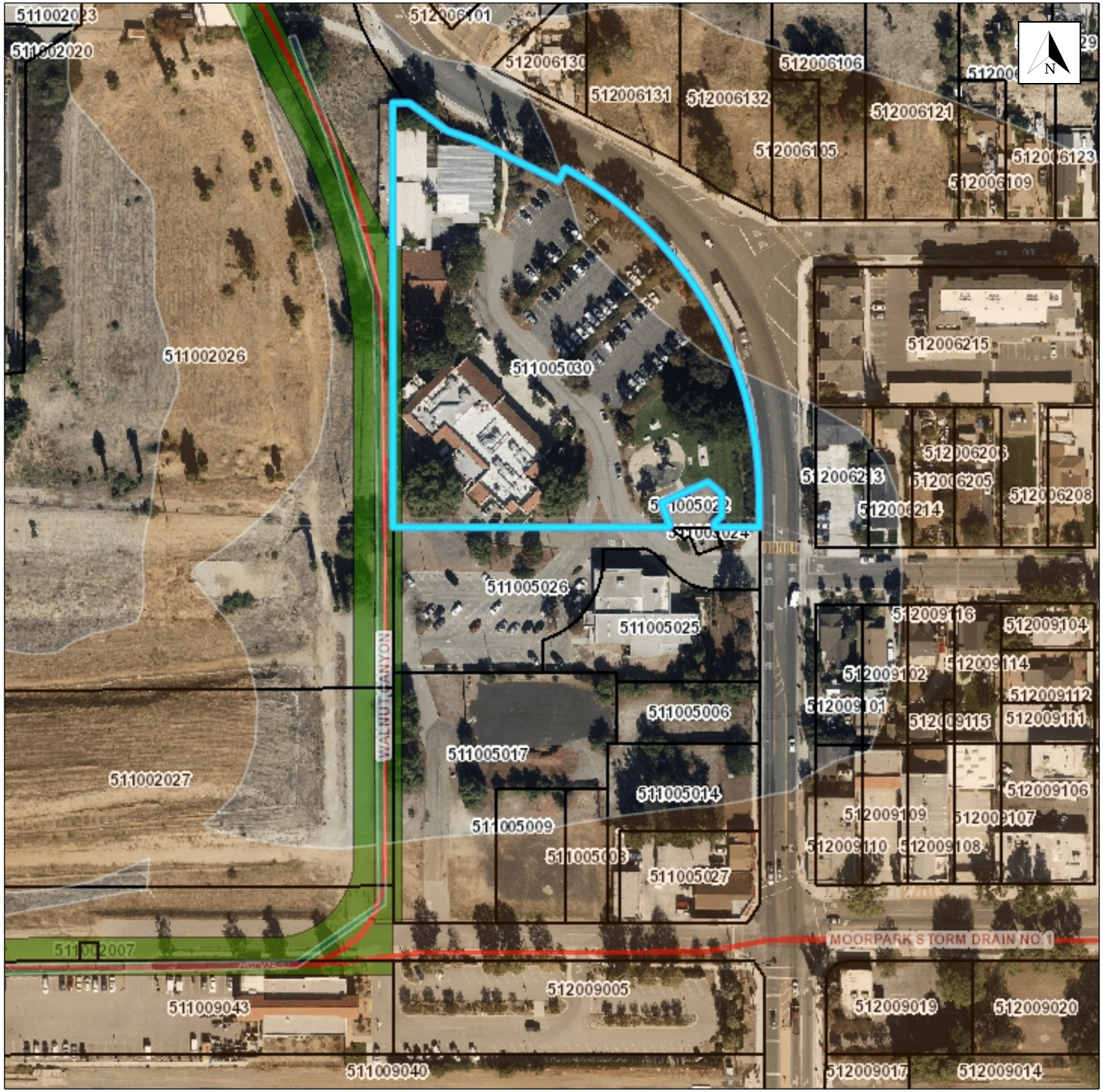
Please let us know if you have any questions.

Thank you,

Dawn Husted
*Management Assistant II*
**Watershed Protection – Planning & Permits**

PUBLIC WORKS VENTURA COUNTY

800 S. Victoria Ave. / #1610
Ventura, CA 93009
P: 805.662-6882
VCPWA Online | Facebook | Twitter




# Ventura County Public Works Agency

PUBLIC WORKS
VENTURA COUNTY

## Legend

- Cross-Sections
- Flood Hazard Boundaries
  - Limit Lines
  - SFHA / Flood Zone Boundary
- Flood Hazard Zones
  - 1% Annual Chance Flood Hazard
  - Regulatory Floodway
  - Special Floodway
  - Area of Undetermined Flood Hazard
  - 0.2% Annual Chance Flood Hazard
  - Future Conditions 1% Annual Chance Flooc
  - Area with Reduced Risk Due to Levee
  - Area with Risk Due to Levee
- 1:6000
- Redline Channels
- Right of Way
  - Fee Parcel
  - Easement Parcel
  - Quit Claim
  - Parcel X
  - Access/Road Easement
  - Flowage Easement
  - Slope Easement
  - Maintenance Easement
  - Temp Easement
- Parcels

0 188.08 Distance Feet

1: 2,257

Disclaimer: The information contained on this web site and in this application was created by the Ventura County Geographical Information System (GIS), which is designed and operated solely for the convenience of the County and related contract entities. The County does not warrant the accuracy of this information, and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.

## Sean Noonan

**From:** Shanna Farley <SFarley@moorparkca.gov>
**Sent:** Tuesday, June 7, 2022 9:57 AM
**To:** 'S Praetorius'
**Subject:** RE: Comments for NOP Civic Center Plan

Good Morning Shannon,

Thank you for submitting your comments for the Notice of Preparation. We will include your comments as we prepare the EIR for the project. We hope that you continue to participate in this process as the document and eventual development plans are presented. This is the first step in the process and you will have various options to review the project.

Thank you,
Shanna

**Shanna Farley**
**Principal Planner**
Community Development Department
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021
(805) 517-6236 | sfarley@moorparkca.gov
www.moorparkca.gov

---

**From:** S Praetorius <praetorius1980@gmail.com>
**Sent:** Tuesday, June 07, 2022 9:49 AM
**To:** Shanna Farley <SFarley@moorparkca.gov>
**Subject:** Comments for NOP Civic Center Plan

Dear City of Moorpark,

Thank you for inviting public comments on the environmental impact of the Civic Center Plan.

In reading through the NOP, there are many noted potential environmental impacts. Most severely impacted would be fish and wildlife species in the area. Not to mention the human inhabitants of the surrounding location and the school nearby.

Such wonderful work is being done in Ventura County and Los Angeles County to help local animal species and to protect flora from encroachment by building and commerce. This plan and the others proposed seem to fly in the face of the work in the area. Mitigation efforts wouldn't be useful for animal, fish and plant species in the area.

More effort by the City of Moorpark needs to be made in the conservation of our local species. The documents make it clear that the city is willing to build no matter what. This is a bad decision that will impact the future generations that will live in the area and of course, the animals, fish and plant species that call this place home.

Sincerely,

Shannon Praetorius

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

***GAVIN NEWSOM, Governor***
***CHARLTON H. BONHAM, Director***

June 8, 2022

Ms. Shanna Farley
City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021
SFarley@moorparkca.gov

**Subject: Notice of Preparation of a Draft Environmental Impact Report for Civic Center Master Plan Project, SCH No. 2022050175; City of Moorpark, Ventura County**

Dear Ms. Farley:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the City of Moorpark (City) for the Civic Center Master Plan (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

**CDFW's Role**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust for the people of the state [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, [§ 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). CDFW is also directed to provide biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq*.). To the extent implementation of the Project as proposed may result in "take" of any species protected under the California Endangered Species Act (CESA; Fish & Game Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & Game Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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**Project Description and Summary**

**Objective:** The Project proposes the phased development of a new City Civic Center within the Project site. Development would include the construction of a new 18,000 square foot library with outdoor plaza, a 13,000 square foot commercial area with the development of a public park, a residential area with 75 units, and a new 22,000 square foot city hall. Demolition of the existing library, community center, and city hall will be executed as part of the Project plans.

**Location:** The Project site encompasses approximately 12.5 acres in City of Moorpark in Ventura County, California. The Project site currently contains a mix of land uses associated with the existing structures, parking areas, and vacant undeveloped areas within the Project site. A storm drain runs through a subterranean culvert along the west side of land parcels 511050305 and 5110050265. This drainage also runs between land parcels 5110020275 and 5110050175, eventually discharging into Arroyo Las Posas via Walnut Creek. The Project site is in close proximity to the Santa Monica-Sierra Madre wildlife corridor and Essential Connectivity Areas to the east of the development.

**Comments and Recommendations**

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. The DEIR should provide adequate and complete disclosure of the Project's potential impacts on biological resources. [Pub. Resources Code, § 21061; CEQA Guidelines, §§ 15003(i), 15151].

**COMMENTS AND RECOMMENDATIONS**

**Specific Comments**

1) Sensitive Bird Species. A review of the California Natural Diversity Database (CNDDB) indicates nearby occurrences of special status bird species such as coastal California gnatcatcher (*Polioptila californica californica*; Endangered Species Act (ESA) listed threatened; California Species of Special Concern (SSC)), least Bell's vireo (*Vireo bellii pusillus*; ESA and ESA-listed endangered), yellow warbler (*Setophaga petechia*; SSC), willow flycatcher (*Emipidonax trailii*; ESA-listed endangered), white-tailed kite (*Elanus leucurus*; ESA-listed) ,and yellow-breasted chat (*Icteria virens*; SSC). Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs, or nestlings, or otherwise lead to nest abandonment in trees and shrubs directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.

    a. CDFW recommends that measures be taken, primarily, to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the MBTA).

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b. Proposed Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season (February 15 through August 31 and as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working onsite, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly
other factors.

2) Loss of Bird and Raptor Nesting Habitat. The biggest threat to birds is habitat loss and conversion of natural vegetation into another land use such as development (e.g., commercial, residential, industrial). Urban forests and street trees, both native and some non-native species, provide habitat for a high diversity of birds (Wood and Esaian 2020). Several recent Projects are already in progress which will result in the removal of native, protected, and non-native trees. These projects include but are not limited to; Hitch Rach, Beltramo Ranch, and Everette Street Terrace. Some species of raptors have adapted to and exploited urban areas for breeding and nesting (Cooper et al. 2020). For example, raptors (Accipitridae, Falconidae) such as red-tailed hawks (Buteo jamaicensis) and Cooper's hawks (Accipiter cooperii) can nest successfully in urban sites. Red-tailed hawks commonly nest in ornamental vegetation such as eucalyptus (Cooper et al. 2020). According to eBird, there are multiple observations of red-tailed hawks and Copper's hawks throughout the City.

a. CDFW recommends the DEIR provide measures where future development facilitated by the Project avoids removal of any native trees, large and dense-canopied native and non-native trees, and trees occurring in high density (Wood and Esaian 2020). CDFW also recommends avoiding impacts to understory vegetation (e.g., ground cover, subshrubs, shrubs, and trees.

b. If impacts to trees cannot be avoided, trees should be replaced to compensate for the temporal or permanent loss habitat within a project site (See General Comment 4-C). Depending on the status of the bird or raptor species impacted, replacement habitat acres should increase with the occurrence of a California Species of Special Concern. Replacement habitat acres should further increase with the occurrence of a CESA-listed threatened or endangered species.

c. CDFW recommends planting native tree species preferred by birds. This includes coast live oak (Quercus agrifolia) and California sycamore (Platanus racemosa) (Wood and Esaian 2020). CDFW recommends Audubon Society's Plants for Birds for more information on selecting native plants and trees beneficial to birds (Audubon Society 2022).

3) Tree Disease Management Plan. Project activities may include tree removal and new trees as a part of landscaping activities. This may have the potential to spread tree pests and diseases throughout the Project site and into adjacent habitat not currently exposed to these

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stressors. Pests and diseases include (but not limited to): sudden oak death (*Phytophthora ramorum*), thousand canker fungus (*Geosmithia morbida*), Polyphagous shot hole borer (*Euwallacea* spp.), and goldspotted oak borer (*Agrilus auroguttatus*) (Phytosphere Research 2012; TCD 2020; UCANR 2020; UCIPM 2013). This could result in expediting the loss of native trees and woodlands. CDFW recommends the DEIR include an infectious tree disease management plan or a list of preventative measures, developed in consultation with an arborist, to describe how it will be implemented to avoid or reduce the spread of tree insect pests and diseases.

4) Landscaping. Habitat loss and invasive plants are a leading cause of native biodiversity loss. CDFW recommends that the DEIR stipulate that no invasive plant material should be used. Furthermore, we recommend using native, locally appropriate plant species for landscaping on the Project site. A list of invasive/exotic plants that should be avoided as well as suggestions for suitable landscape plants can be found at https://www.cal-ipc.org/solutions/prevention/landscaping/.

**General Comments**

1) Disclosure. A DEIR should provide an adequate, complete, and detailed disclosure about the effect which a proposed project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, §15151). Adequate disclosure is necessary so CDFW may provide comments on the appropriateness of proposed avoidance, minimization, or mitigation measures, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

2) Biological Baseline Assessment. CDFW recommends providing a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area, with emphasis upon identifying endangered, threatened, sensitive, regionally, and locally unique species and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends avoiding any sensitive natural communities found on or adjacent to the Project. The DEIR should include the following information:

   a. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity. https://www.wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities;

   b. A complete floristic assessment within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018);

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c. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. The Manual of California Vegetation (MCV), second edition, should also be used to inform this mapping and assessment (Sawyer, 2008). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

A complete, recent, assessment of the biological resources associated with each habitat type onsite and within adjacent areas that could also be affected by the Project. CDFW's CNDDB in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at https://wildlife.ca.gov/Data/CNDDB/Submitting-Data;

d. The DEIR should provide columns for each element and approximate acres potentially impacted by critical habitat type. CDFW recommends using "None" or the number zero to indicate no impacts and, provide a brief discussion why there would be no impacts to demonstrate that impacts were evaluated;

e. A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species onsite and within the area of potential effect, including California SSC and California Fully Protected Species (Fish & Game Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the United States Fish and Wildlife Service (USFWS);

f. A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to two years as long as there was not a prevailing drought during the time of the botanical survey. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases; and

g. Presence/absence determinations of wildlife and rare plants in the Project area, specifically areas that would be impacted due to Project implementation (e.g., existing facilities), should be determined based on recent surveys. CDFW recommends the DEIR provide any recent survey data.

3) Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures [CEQA Guidelines, §§ 15002(a)(3), 15021]. Pursuant to CEQA Guidelines section 15126.4, an environmental impact report shall describe feasible measures which could mitigate for impacts below a significant level under

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CEQA.

a. Level of Detail. Mitigation measures must be feasible, effective, implemented, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, §§ 15126.4, 15041). A public agency shall provide the measures that are fully enforceable through permit conditions, agreements, or other measures (Pub. Resources Code, § 21081.6). CDFW recommends that the City prepare mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear in order for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). Adequate disclosure is necessary so CDFW may provide comments on the adequacy and feasibility of proposed mitigation measures.

b. Disclosure of Impacts. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the Project as proposed, the environmental document should include a discussion of the effects of proposed mitigation measures [CEQA Guidelines, § 15126.4(a)(1)]. In that regard, the environmental document should provide an adequate, complete, and detailed disclosure about a project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.

4) Biological Direct, Indirect, and Cumulative Impacts. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR:

a. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The latter subject should address Project-related changes on drainage patterns and downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and, post-Project fate of runoff from the Project site. Mitigation measures proposed to alleviate such Project impacts should be included;

b. A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (NCCP, Fish & Game Code, § 2800 et. seq.). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

c. A discussion regarding impacts to loss of bird nesting habitat. Several proposed projects in the area (Hitch Ranch, Beltramo Ranch, and Everette St. Terrace) will include removal of both native and non-native tress which could be utilized by passerine birds and raptors. The Project should analyze the cumulative impact, if any, in regard to

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loss of potential nesting habitat;

d. An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR; and,

e. A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

5) CESA. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or CESA-listed plant species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Project or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

6) Moving out of Harm's Way. The proposed Project may result in impacting habitats on and/or adjacent to the Project site that may support wildlife. To avoid direct mortality, CDFW recommends that a qualified biological monitor approved by CDFW be on-site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. If the Project requires species to be removed, disturbed, or otherwise handled, we recommend that the DEIR clearly identify that the designated entity shall obtain all appropriate state and federal permits.

7) Jurisdictional Waters. CDFW is concerned that project activities may result in direct and indirect impacts to the unnamed drainage which traverses the Project site and/or downstream waters. The drainage is within close proximity to the Walnut Canyon channel, a concrete-lined channel that drains into Arroyo Las Posas Creek. The proposed Project may diminish on-site and downstream water quality, alter the hydrologic and geomorphic processes, and/or impact specially listed fish present downstream. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the

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natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream or use material from a streambed. For any such activities, the project applicant (or "entity") must provide written notification to CDFW pursuant to Fish and Game Code Section 1600 *et seq*. CDFW's issuance of a Lake and Streambed Alteration Agreement (LSAA) for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the Environmental Impact Report of the local jurisdiction (Lead Agency) for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSAA. Please visit CDFW's Lake and Streambed Alteration Program webpage at https://wildlife.ca.gov/Conservation/Environmental-Review/LSA for information about LSA notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS). In the event the Project area may support aquatic, riparian, and wetland habitats; a preliminary delineation of the streams and their associated riparian habitats should be included in the DEIR. The delineation should be conducted pursuant to the USFWS wetland definition adopted by CDFW (Cowardin et al. 1970). Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.

a. In Project areas which may support ephemeral or episodic streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of these resources and help maintain natural sedimentation processes; therefore, CDFW recommends effective setbacks be established to maintain appropriately sized vegetated buffer areas adjoining ephemeral drainages.

b. Project-related changes in upstream and downstream drainage patterns, runoff, and sedimentation should be included and evaluated in the DEIR.

8) Project Description and Alternatives. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:

a. A complete discussion of the purpose and need for, and description of, the proposed Project, including all staging areas and access routes to the construction and staging areas; and,

b. A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. The alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas.

**Conclusion**

We appreciate the opportunity to comment on the NOP to assist the City in identifying and mitigating Project impacts on biological resources. If you have any questions or comments

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regarding this letter, please contact Angela Castanon, Environmental Scientist, at Angela.Castanon@wildlife.ca.gov.

Sincerely,

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Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW
Steve Gibson, Los Alamitos – Steve.Gibson@wildlife.ca.gov
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**References:**

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**June 8, 2022**

Ms. Shanna Farley, Principal Planner
City of Moorpark, Community Development Department
799 Moorpark Avenue
Moorpark Avenue, California 93021
E-mail: sfarley@moorparkca.gov

**RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Civic Center Master Plan Project [SCAG NO. IGR10632]**

Dear Ms. Farley,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Civic Center Master Plan Project ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is responsible for providing informational resources to regionally significant plans, projects, and programs per the California Environmental Quality Act (CEQA) to facilitate the consistency of these projects with SCAG's adopted regional plans, to be determined by the lead agencies.[1]

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies. Finally, SCAG is the authorized regional agency for Intergovernmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Civic Center Master Plan Project in Ventura County. The proposed project consists of a phased development of a new City Civic Center with an 18,000 square foot (SF) library, 5,085 SF of office space, 13,000 SF of commercial use, 75 dwelling units, and a 22,000 SF city hall on 12.5 acres.

**When available, please email environmental documentation to IGR@scag.ca.gov providing, at a minimum, the full public comment period for review.**

If you have any questions regarding the attached comments, please contact the Intergovernmental Review (IGR) Program, attn.: Anita Au, Senior Regional Planner, at (213) 236-1874 or IGR@scag.ca.gov. Thank you.

Sincerely,

Frank Wen, Ph.D.
Manager, Planning Strategy Department

[1] Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2020 RTP/SCS (Connect SoCal) for the purpose of determining consistency for CEQA.

**COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CIVIC CENTER MASTER PLAN PROJECT [SCAG NO. IGR10632]**

**CONSISTENCY WITH CONNECT SOCAL**

SCAG provides informational resources to facilitate the consistency of the proposed project with the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with Connect SoCal.

**CONNECT SOCAL GOALS**

The SCAG Regional Council fully adopted Connect SoCal in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

| SCAG CONNECT SOCAL GOALS | |
|---|---|
| Goal #1: | *Encourage regional economic prosperity and global competitiveness* |
| Goal #2: | *Improve mobility, accessibility, reliability and travel safety for people and goods* |
| Goal #3: | *Enhance the preservation, security, and resilience of the regional transportation system* |
| Goal #4: | *Increase person and goods movement and travel choices within the transportation system* |
| Goal #5: | *Reduce greenhouse gas emissions and improve air quality* |
| Goal #6: | *Support healthy and equitable communities* |
| Goal #7: | *Adapt to a changing climate and support an integrated regional development pattern and transportation network* |
| Goal #8: | *Leverage new transportation technologies and data-driven solutions that result in more efficient travel* |
| Goal #9: | *Encourage development of diverse housing types in areas that are supported by multiple transportation options* |
| Goal #10: | *Promote conservation of natural and agricultural lands and restoration of habitats* |

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

| SCAG CONNECT SOCAL GOALS | | |
|---|---|---|
| | Goal | Analysis |
| Goal #1: | *Encourage regional economic prosperity and global competitiveness* | *Consistent: Statement as to why;*<br>*Not-Consistent: Statement as to why;*<br>*Or*<br>*Not Applicable: Statement as to why;*<br>*DEIR page number reference* |
| Goal #2: | *Improve mobility, accessibility, reliability and travel safety for people and goods* | *Consistent: Statement as to why;*<br>*Not-Consistent: Statement as to why;*<br>*Or*<br>*Not Applicable: Statement as to why;*<br>*DEIR page number reference* |
| etc. | | etc. |

**Connect SoCal Strategies**

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. Of particular note are multiple strategies included in Chapter 3 of Connect SoCal intended to support implementation of the regional Sustainable Communities Strategy (SCS) framed within the context of focusing growth near destinations and mobility options; promoting diverse housing choices; leveraging technology innovations; supporting implementation of sustainability policies; and promoting a Green Region. To view Connect SoCal and the accompanying technical reports, please visit the Connect SoCal webpage. Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

**DEMOGRAPHICS AND GROWTH FORECASTS**

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG's 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California's GHG reduction target, approved by the California Air Resources Board (CARB) in accordance with state planning law. Connect SoCal's Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect

SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the Connect SoCal Demographics and Growth Forecast Technical Report. The growth forecasts for the region and applicable jurisdictions are below.

| | Adopted SCAG Region Wide Forecasts | | | | Adopted City of Moorpark Forecasts | | | |
|---|---|---|---|---|---|---|---|---|
| | **Year 2020** | **Year 2030** | **Year 2035** | **Year 2045** | **Year 2020** | **Year 2030** | **Year 2035** | **Year 2045** |
| Population | 19,517,731 | 20,821,171 | 21,443,006 | 22,503,899 | 39,579 | 41,079 | 41,546 | 42,198 |
| Households | 6,333,458 | 6,902,821 | 7,170,110 | 7,633,451 | 11,755 | 12,545 | 12,767 | 13,021 |
| Employment | 8,695,427 | 9,303,627 | 9,566,384 | 10,048,822 | 12,214 | 13,314 | 13,768 | 15,037 |

**MITIGATION MEASURES**

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for Connect SoCal for guidance, as appropriate. SCAG's Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the PEIR webpage and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

# NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
**Laura Miranda**
*Luiseño*

VICE CHAIRPERSON
**Reginald Pagaling**
*Chumash*

PARLIAMENTARIAN
**Russell Attebery**
*Karuk*

SECRETARY
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*Miwok*

COMMISSIONER
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COMMISSIONER
**Stanley Rodriguez**
*Kumeyaay*

EXECUTIVE SECRETARY
**Raymond C. Hitchcock**
*Miwok/Nisenan*

**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 9, 2022

Shanna Farley
City of Moorpark

Via Email to: sfarley@moorparkca.gov

**Re: Native American Consultation, Pursuant to Senate Bill 18 (SB18), Government Codes §65352.3 and §65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2, Civic Center Master Plan Project, Ventura County**

Dear Ms. Farley:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties or projects.

Government Codes §65352.3 and §65352.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

Public Resources Codes §21080.3.1 and §21080.3.2 requires public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to tribal cultural resources as defined, for California Environmental Quality Act (CEQA) projects.

The law does not preclude local governments and agencies from initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

Best practice for the AB52 process and in accordance with Public Resources Code §21080.3.1(d), is to do the following:

*Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.*

The NAHC also recommends, but does not require that lead agencies include in their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential affect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

    - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE, such as known archaeological sites;
    - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
    - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and
    - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The result of the Sacred Lands File (SFL) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event, that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address:

Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
*Cultural Resources Analyst*

Attachment

**Native American Heritage Commission**
**Tribal Consultation List**
**Ventura County**
**6/9/2022**

***Barbareno/Ventureno Band of Mission Indians***
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com
Chumash

***Chumash Council of Bakersfield***
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net
Chumash

***Coastal Band of the Chumash Nation***
Mariza Sullivan, Chairperson
P. O. Box 4464
Santa Barbara, CA, 93140
Phone: (805) 665 - 0486
cbcntribalchair@gmail.com
Chumash

***Gabrieleno/Tongva San Gabriel Band of Mission Indians***
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com
Gabrieleno

***Gabrielino /Tongva Nation***
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com
Gabrielino

***Northern Chumash Tribal Council***
Violet Walker, Chairperson
P.O. Box 6533
Los Osos, CA, 93412
Phone: (760) 549 - 3532
violetsagewalker@gmail.com
Chumash

***San Luis Obispo County Chumash Council***
1030 Ritchie Road
Grover Beach, CA, 93433
Chumash

***Santa Ynez Band of Chumash Indians***
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org
Chumash

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Sections 65352.3, 65352.4 et seq. and Public Resources Code Sections 21080.3.1 for the proposed Civic Center Master Plan Project, Ventura County.

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# AIR QUALITY

# Moorpark Civic Center v2 Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Moorpark Civic Center v2 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 10.4 |
| Location | 34.28621681966558, -118.88306916802793 |
| County | Ventura |
| City | Moorpark |
| Air District | Ventura County APCD |
| Air Basin | South Central Coast |
| TAZ | 3524 |
| EDFZ | 8 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Library | 18.0 | 1000sqft | 0.41 | 18,000 | 10.0 | — | — | — |
| Office Park | 13.0 | 1000sqft | 0.30 | 13,000 | 10.0 | — | — | — |
| Apartments Low Rise | 75.0 | Dwelling Unit | 4.69 | 79,500 | 10.0 | — | 226 | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 22.0 | 1000sqft | 0.51 | 22,000 | 10.0 | — | — | — |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 12.5 | 7.49 | 88.7 | 0.25 | 0.18 | 11.0 | 11.2 | 0.17 | 1.93 | 2.11 | 27,235 | 12.2 | 0.96 | 27,853 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 11.7 | 8.23 | 78.1 | 0.24 | 0.18 | 11.0 | 11.2 | 0.17 | 1.93 | 2.10 | 26,315 | 12.3 | 1.02 | 26,926 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 10.5 | 6.82 | 67.4 | 0.20 | 0.16 | 9.06 | 9.21 | 0.15 | 1.59 | 1.74 | 22,134 | 12.1 | 0.84 | 22,696 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.92 | 1.24 | 12.3 | 0.04 | 0.03 | 1.65 | 1.68 | 0.03 | 0.29 | 0.32 | 3,664 | 2.01 | 0.14 | 3,758 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 8.67 | 6.63 | 81.6 | 0.25 | 0.11 | 11.0 | 11.1 | 0.11 | 1.93 | 2.04 | 25,301 | 0.76 | 0.90 | 25,613 |
| Area | 3.79 | 0.06 | 6.58 | < 0.005 | < 0.005 | — | < 0.005 | 0.01 | — | 0.01 | 20.9 | < 0.005 | < 0.005 | 20.9 |
| Energy | 0.05 | 0.80 | 0.53 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 1,752 | 0.18 | 0.01 | 1,761 |
| Water | — | — | — | — | — | — | — | — | — | — | 68.4 | 1.99 | 0.05 | 132 |
| Waste | — | — | — | — | — | — | — | — | — | — | 93.0 | 9.29 | 0.00 | 325 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.72 |
| Total | 12.5 | 7.49 | 88.7 | 0.25 | 0.18 | 11.0 | 11.2 | 0.17 | 1.93 | 2.11 | 27,235 | 12.2 | 0.96 | 27,853 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 8.65 | 7.43 | 77.6 | 0.24 | 0.11 | 11.0 | 11.1 | 0.11 | 1.93 | 2.04 | 24,402 | 0.80 | 0.95 | 24,707 |
| Area | 3.04 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 0.05 | 0.80 | 0.53 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 1,752 | 0.18 | 0.01 | 1,761 |
| Water | — | — | — | — | — | — | — | — | — | — | 68.4 | 1.99 | 0.05 | 132 |
| Waste | — | — | — | — | — | — | — | — | — | — | 93.0 | 9.29 | 0.00 | 325 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.72 |
| Total | 11.7 | 8.23 | 78.1 | 0.24 | 0.18 | 11.0 | 11.2 | 0.17 | 1.93 | 2.10 | 26,315 | 12.3 | 1.02 | 26,926 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 7.07 | 5.99 | 63.6 | 0.20 | 0.09 | 9.06 | 9.15 | 0.09 | 1.59 | 1.68 | 20,210 | 0.65 | 0.78 | 20,466 |
| Area | 3.41 | 0.03 | 3.25 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 10.3 | < 0.005 | < 0.005 | 10.3 |
| Energy | 0.05 | 0.80 | 0.53 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 1,752 | 0.18 | 0.01 | 1,761 |
| Water | — | — | — | — | — | — | — | — | — | — | 68.4 | 1.99 | 0.05 | 132 |
| Waste | — | — | — | — | — | — | — | — | — | — | 93.0 | 9.29 | 0.00 | 325 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.72 |
| Total | 10.5 | 6.82 | 67.4 | 0.20 | 0.16 | 9.06 | 9.21 | 0.15 | 1.59 | 1.74 | 22,134 | 12.1 | 0.84 | 22,696 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.29 | 1.09 | 11.6 | 0.04 | 0.02 | 1.65 | 1.67 | 0.02 | 0.29 | 0.31 | 3,346 | 0.11 | 0.13 | 3,388 |
| Area | 0.62 | 0.01 | 0.59 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.70 | < 0.005 | < 0.005 | 1.71 |
| Energy | 0.01 | 0.15 | 0.10 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 290 | 0.03 | < 0.005 | 292 |
| Water | — | — | — | — | — | — | — | — | — | — | 11.3 | 0.33 | 0.01 | 21.9 |
| Waste | — | — | — | — | — | — | — | — | — | — | 15.4 | 1.54 | 0.00 | 53.8 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.12 |
| Total | 1.92 | 1.24 | 12.3 | 0.04 | 0.03 | 1.65 | 1.68 | 0.03 | 0.29 | 0.32 | 3,664 | 2.01 | 0.14 | 3,758 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 4.59 | 3.57 | 44.1 | 0.14 | 0.06 | 0.93 | 0.99 | 0.06 | 0.29 | 0.34 | 13,745 | 0.41 | 0.48 | 13,914 |
| Office Park | 1.18 | 0.92 | 11.4 | 0.03 | 0.02 | 0.24 | 0.25 | 0.01 | 0.07 | 0.09 | 3,538 | 0.11 | 0.12 | 3,581 |
| Apartments Low Rise | 1.42 | 0.98 | 11.8 | 0.04 | 0.02 | 0.24 | 0.26 | 0.02 | 0.07 | 0.09 | 3,565 | 0.11 | 0.13 | 3,610 |
| Government (Civic Center) | 1.49 | 1.16 | 14.3 | 0.04 | 0.02 | 0.30 | 0.32 | 0.02 | 0.09 | 0.11 | 4,453 | 0.13 | 0.16 | 4,508 |
| Total | 8.67 | 6.63 | 81.6 | 0.25 | 0.11 | 1.71 | 1.82 | 0.11 | 0.52 | 0.63 | 25,301 | 0.76 | 0.90 | 25,613 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 4.57 | 4.00 | 41.9 | 0.13 | 0.06 | 0.93 | 0.99 | 0.06 | 0.29 | 0.34 | 13,256 | 0.43 | 0.52 | 13,421 |
| Office Park | 1.18 | 1.03 | 10.8 | 0.03 | 0.02 | 0.24 | 0.25 | 0.01 | 0.07 | 0.09 | 3,412 | 0.11 | 0.13 | 3,454 |
| Apartments Low Rise | 1.42 | 1.10 | 11.4 | 0.03 | 0.02 | 0.24 | 0.26 | 0.02 | 0.07 | 0.09 | 3,439 | 0.12 | 0.14 | 3,484 |
| Government (Civic Center) | 1.48 | 1.30 | 13.6 | 0.04 | 0.02 | 0.30 | 0.32 | 0.02 | 0.09 | 0.11 | 4,295 | 0.14 | 0.17 | 4,348 |
| Total | 8.65 | 7.43 | 77.6 | 0.24 | 0.11 | 1.71 | 1.82 | 0.11 | 0.52 | 0.63 | 24,402 | 0.80 | 0.95 | 24,707 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 0.71 | 0.62 | 6.55 | 0.02 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | 1,900 | 0.06 | 0.07 | 1,924 |
| Office Park | 0.16 | 0.14 | 1.46 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 423 | 0.01 | 0.02 | 429 |
| Apartments Low Rise | 0.23 | 0.18 | 1.84 | 0.01 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | 512 | 0.02 | 0.02 | 519 |
| Government (Civic Center) | 0.19 | 0.17 | 1.76 | 0.01 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | 511 | 0.02 | 0.02 | 517 |
| Total | 1.29 | 1.09 | 11.6 | 0.04 | 0.02 | 0.26 | 0.27 | 0.02 | 0.08 | 0.09 | 3,346 | 0.11 | 0.13 | 3,388 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 120 | 0.02 | < 0.005 | 121 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Office Park | — | — | — | — | — | — | — | — | — | — | 164 | 0.02 | < 0.005 | 165 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 210 | 0.03 | < 0.005 | 212 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 278 | 0.04 | < 0.005 | 280 |
| Total | — | — | — | — | — | — | — | — | — | — | 771 | 0.10 | 0.01 | 777 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 120 | 0.02 | < 0.005 | 121 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 164 | 0.02 | < 0.005 | 165 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 210 | 0.03 | < 0.005 | 212 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 278 | 0.04 | < 0.005 | 280 |
| Total | — | — | — | — | — | — | — | — | — | — | 771 | 0.10 | 0.01 | 777 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 19.8 | < 0.005 | < 0.005 | 20.0 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 27.2 | < 0.005 | < 0.005 | 27.4 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 34.8 | < 0.005 | < 0.005 | 35.0 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 46.0 | 0.01 | < 0.005 | 46.3 |
| Total | — | — | — | — | — | — | — | — | — | — | 128 | 0.02 | < 0.005 | 129 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 246 | 0.02 | < 0.005 | 247 |
| Office Park | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 111 | 0.01 | < 0.005 | 111 |
| Apartments Low Rise | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 437 | 0.04 | < 0.005 | 438 |
| Government (Civic Center) | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 187 | 0.02 | < 0.005 | 188 |
| Total | 0.05 | 0.80 | 0.53 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 981 | 0.09 | < 0.005 | 983 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 246 | 0.02 | < 0.005 | 247 |
| Office Park | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 111 | 0.01 | < 0.005 | 111 |
| Apartments Low Rise | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 437 | 0.04 | < 0.005 | 438 |
| Government (Civic Center) | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 187 | 0.02 | < 0.005 | 188 |
| Total | 0.05 | 0.80 | 0.53 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 981 | 0.09 | < 0.005 | 983 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 40.7 | < 0.005 | < 0.005 | 40.8 |
| Office Park | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 18.3 | < 0.005 | < 0.005 | 18.4 |
| Apartments Low Rise | < 0.005 | 0.06 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 72.3 | 0.01 | < 0.005 | 72.5 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 31.0 | < 0.005 | < 0.005 | 31.1 |
| Total | 0.01 | 0.15 | 0.10 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 162 | 0.01 | < 0.005 | 163 |

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 2.84 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.20 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.75 | 0.06 | 6.58 | < 0.005 | < 0.005 | — | < 0.005 | 0.01 | — | 0.01 | 20.9 | < 0.005 | < 0.005 | 20.9 |
| Total | 3.79 | 0.06 | 6.58 | < 0.005 | < 0.005 | — | < 0.005 | 0.01 | — | 0.01 | 20.9 | < 0.005 | < 0.005 | 20.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 2.84 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.20 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 3.04 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 0.52 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.07 | 0.01 | 0.59 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.70 | < 0.005 | < 0.005 | 1.71 |
| Total | 0.62 | 0.01 | 0.59 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.70 | < 0.005 | < 0.005 | 1.71 |

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 3.82 | 0.11 | < 0.005 | 7.39 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 15.7 | 0.46 | 0.01 | 30.3 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 19.3 | 0.56 | 0.01 | 37.3 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 29.6 | 0.86 | 0.02 | 57.3 |
| Total | — | — | — | — | — | — | — | — | — | — | 68.4 | 1.99 | 0.05 | 132 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 3.82 | 0.11 | < 0.005 | 7.39 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Office Park | — | — | — | — | — | — | — | — | — | — | 15.7 | 0.46 | 0.01 | 30.3 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 19.3 | 0.56 | 0.01 | 37.3 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 29.6 | 0.86 | 0.02 | 57.3 |
| Total | — | — | — | — | — | — | — | — | — | — | 68.4 | 1.99 | 0.05 | 132 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 0.63 | 0.02 | < 0.005 | 1.22 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 2.59 | 0.08 | < 0.005 | 5.02 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 3.19 | 0.09 | < 0.005 | 6.18 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 4.91 | 0.14 | < 0.005 | 9.49 |
| Total | — | — | — | — | — | — | — | — | — | — | 11.3 | 0.33 | 0.01 | 21.9 |

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.89 | 0.00 | 31.3 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.65 | 0.00 | 22.8 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.99 | 0.00 | 34.7 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government | — | — | — | — | — | — | — | — | — | — | 67.6 | 6.75 | 0.00 | 236 |
| Total | — | — | — | — | — | — | — | — | — | — | 93.0 | 9.29 | 0.00 | 325 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.89 | 0.00 | 31.3 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.65 | 0.00 | 22.8 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.99 | 0.00 | 34.7 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 67.6 | 6.75 | 0.00 | 236 |
| Total | — | — | — | — | — | — | — | — | — | — | 93.0 | 9.29 | 0.00 | 325 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | 1.48 | 0.15 | 0.00 | 5.17 |
| Office Park | — | — | — | — | — | — | — | — | — | — | 1.08 | 0.11 | 0.00 | 3.77 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | 1.64 | 0.16 | 0.00 | 5.75 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 11.2 | 1.12 | 0.00 | 39.1 |
| Total | — | — | — | — | — | — | — | — | — | — | 15.4 | 1.54 | 0.00 | 53.8 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.72 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.72 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.12 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Library | 1,297 | 1,442 | 758 | 452,795 | 19,599 | 21,786 | 11,449 | 6,842,638 |
| Office Park | 371 | 54.7 | 25.2 | 100,899 | 5,607 | 827 | 381 | 1,524,786 |
| Apartments Low Rise | 430 | 479 | 369 | 156,233 | 5,053 | 5,626 | 4,338 | 1,836,832 |
| Government (Civic Center) | 467 | 0.00 | 0.00 | 121,769 | 7,058 | 0.00 | 0.00 | 1,840,176 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Apartments Low Rise | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 0 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 0 |
| No Fireplaces | 75 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |

| | |
|---|---|
| Pellet Wood Stoves | 0 |

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 160987.5 | 53,663 | 79,500 | 26,500 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Library | 167,381 | 261 | 0.0330 | 0.0040 | 767,695 |
| Office Park | 229,683 | 261 | 0.0330 | 0.0040 | 345,164 |
| Apartments Low Rise | 293,878 | 261 | 0.0330 | 0.0040 | 1,362,885 |
| Government (Civic Center) | 388,694 | 261 | 0.0330 | 0.0040 | 584,123 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Library | 563,200 | 129 |

| | | |
|---|---|---|
| Office Park | 2,310,539 | 129 |
| Apartments Low Rise | 2,842,757 | 158 |
| Government (Civic Center) | 4,370,513 | 129 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Library | 16.6 | 0.00 |
| Office Park | 12.1 | 0.00 |
| Apartments Low Rise | 18.4 | 0.00 |
| Government (Civic Center) | 125 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |
| Office Park | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Office Park | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Apartments Low Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Apartments Low Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|
| — | — |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 14.1 | annual days of extreme heat |
| Extreme Precipitation | 5.10 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 36.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5).  Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 1 | 1 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |

| | | | | |
|---|---|---|---|---|
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 52.1 |
| AQ-PM | 37.9 |
| AQ-DPM | 12.2 |
| Drinking Water | 53.9 |
| Lead Risk Housing | 15.0 |
| Pesticides | 80.3 |
| Toxic Releases | 18.8 |
| Traffic | 8.89 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 0.00 |

| | |
|---|---|
| Haz Waste Facilities/Generators | 19.2 |
| Impaired Water Bodies | 90.1 |
| Solid Waste | 53.4 |
| Sensitive Population | — |
| Asthma | 26.1 |
| Cardio-vascular | 61.7 |
| Low Birth Weights | 22.1 |
| Socioeconomic Factor Indicators | — |
| Education | 32.9 |
| Housing | — |
| Linguistic | 13.3 |
| Poverty | 16.3 |
| Unemployment | 39.2 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 76.70986783 |
| Employed | 25.29192865 |
| Education | — |
| Bachelor's or higher | 73.18105993 |
| High school enrollment | 100 |
| Preschool enrollment | 95.7141024 |
| Transportation | — |
| Auto Access | 75.69613756 |
| Active commuting | 20.17194919 |

| | |
|---|---|
| Social | — |
| 2-parent households | 92.08263827 |
| Voting | 79.81521879 |
| Neighborhood | — |
| Alcohol availability | 97.0101373 |
| Park access | 6.582830746 |
| Retail density | 12.07493905 |
| Supermarket access | 35.21108687 |
| Tree canopy | 54.67727448 |
| Housing | — |
| Homeownership | 88.91312717 |
| Housing habitability | 98.7937893 |
| Low-inc homeowner severe housing cost burden | 94.73886822 |
| Low-inc renter severe housing cost burden | 99.08892596 |
| Uncrowded housing | 51.23829077 |
| Health Outcomes | — |
| Insured adults | 59.36096497 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 70.3 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 50.6 |
| Cognitively Disabled | 46.5 |

| | |
|---|---|
| Physically  Disabled | 30.9 |
| Heart Attack ER Admissions | 52.2 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 91.0 |
| SLR Inundation Area | 0.0 |
| Children | 89.4 |
| Elderly | 43.9 |
| English Speaking | 77.4 |
| Foreign-born | 37.1 |
| Outdoor Workers | 98.2 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 95.1 |
| Traffic Density | 17.2 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 38.7 |
| Other Decision Support | — |

| | |
|---|---|
| 2016 Voting | 84.5 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 21.0 |
| Healthy Places Index Score for Project Location (b) | 94.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

This table summarizes the points earned for each health and equity measure category, and the total possible points for each category. If N/A is selected for any measure(s), the total possible points in that category are reduced accordingly. The points for each category are then weighted on a 15-point scale to determine the score per category and a total weighted score.

| Category | Number of Applicable Measures | Total Points Earned by Applicable Measures | Max Possible Points | Weighted Score |
|---|---|---|---|---|
| Community-Centered Development | 5.00 | 0.00 | 25.0 | 0.00 |
| Inclusive Engagement | 6.00 | 0.00 | 30.0 | 0.00 |
| Accountability | 5.00 | 0.00 | 25.0 | 0.00 |
| Construction Equity | 6.00 | 0.00 | 30.0 | 0.00 |
| Public Health and Air Quality | 4.00 | 0.00 | 20.0 | 0.00 |
| Inclusive Economics & Prosperity | 4.00 | 0.00 | 20.0 | 0.00 |
| Inclusive Communities | 8.00 | 0.00 | 40.0 | 0.00 |
| Total | 38.0 | 0.00 | 190 | 0.00 |

Based on the weighted score of 0 out of a total 190 possible points, your project qualifies for the Acorn equity award level.

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Construction: Paving | Project Plans |
| Operations: Vehicle Data | CalEEMod adjustment Sheet |

# Moorpark Existing Detailed Report

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8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Moorpark Existing |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 10.4 |
| Location | Moorpark, CA 93021, USA |
| County | Ventura |
| City | Moorpark |
| Air District | Ventura County APCD |
| Air Basin | South Central Coast |
| TAZ | 3524 |
| EDFZ | 8 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 27.0 | 1000sqft | 1.12 | 27,000 | 21,780 | — | — | — |
| Library | 8.00 | 1000sqft | 0.18 | 8,000 | 0.00 | — | — | — |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 5.03 | 5.45 | 3.13 | 35.3 | 0.10 | 0.07 | 4.28 | 4.35 | 0.07 | 0.75 | 0.82 | 97.7 | 10,677 | 10,775 | 10.2 | 0.41 | 10.1 | 11,162 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.76 | 5.18 | 3.46 | 32.8 | 0.10 | 0.07 | 4.28 | 4.35 | 0.06 | 0.75 | 0.82 | 97.7 | 10,323 | 10,420 | 10.2 | 0.43 | 0.36 | 10,805 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.79 | 4.29 | 2.69 | 26.0 | 0.07 | 0.06 | 3.32 | 3.38 | 0.06 | 0.58 | 0.64 | 97.7 | 8,221 | 8,319 | 10.1 | 0.34 | 3.45 | 8,677 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.69 | 0.78 | 0.49 | 4.74 | 0.01 | 0.01 | 0.61 | 0.62 | 0.01 | 0.11 | 0.12 | 16.2 | 1,361 | 1,377 | 1.68 | 0.06 | 0.57 | 1,437 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 4.73 | 4.39 | 2.83 | 33.5 | 0.10 | 0.05 | 4.28 | 4.32 | 0.04 | 0.75 | 0.79 | — | 9,910 | 9,910 | 0.34 | 0.37 | 10.0 | 10,040 |
| Area | 0.27 | 1.04 | 0.01 | 1.52 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 6.26 | 6.26 | < 0.005 | < 0.005 | — | 6.44 |
| Energy | 0.03 | 0.02 | 0.28 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 733 | 733 | 0.08 | 0.01 | — | 737 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 10.8 | 28.4 | 39.1 | 1.11 | 0.03 | — | 74.7 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 86.9 | 0.00 | 86.9 | 8.69 | 0.00 | — | 304 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | 5.03 | 5.45 | 3.13 | 35.3 | 0.10 | 0.07 | 4.28 | 4.35 | 0.07 | 0.75 | 0.82 | 97.7 | 10,677 | 10,775 | 10.2 | 0.41 | 10.1 | 11,162 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 4.73 | 4.38 | 3.17 | 32.5 | 0.09 | 0.05 | 4.28 | 4.32 | 0.04 | 0.75 | 0.79 | — | 9,561 | 9,561 | 0.36 | 0.40 | 0.26 | 9,689 |
| Area | — | 0.79 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.03 | 0.02 | 0.28 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 733 | 733 | 0.08 | 0.01 | — | 737 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 10.8 | 28.4 | 39.1 | 1.11 | 0.03 | — | 74.7 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 86.9 | 0.00 | 86.9 | 8.69 | 0.00 | — | 304 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | 4.76 | 5.18 | 3.46 | 32.8 | 0.10 | 0.07 | 4.28 | 4.35 | 0.06 | 0.75 | 0.82 | 97.7 | 10,323 | 10,420 | 10.2 | 0.43 | 0.36 | 10,805 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 3.63 | 3.36 | 2.40 | 25.0 | 0.07 | 0.04 | 3.32 | 3.35 | 0.03 | 0.58 | 0.62 | — | 7,457 | 7,457 | 0.27 | 0.30 | 3.35 | 7,558 |
| Area | 0.13 | 0.92 | 0.01 | 0.75 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.09 | 3.09 | < 0.005 | < 0.005 | — | 3.18 |
| Energy | 0.03 | 0.02 | 0.28 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 733 | 733 | 0.08 | 0.01 | — | 737 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 10.8 | 28.4 | 39.1 | 1.11 | 0.03 | — | 74.7 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 86.9 | 0.00 | 86.9 | 8.69 | 0.00 | — | 304 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | 3.79 | 4.29 | 2.69 | 26.0 | 0.07 | 0.06 | 3.32 | 3.38 | 0.06 | 0.58 | 0.64 | 97.7 | 8,221 | 8,319 | 10.1 | 0.34 | 3.45 | 8,677 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.66 | 0.61 | 0.44 | 4.56 | 0.01 | 0.01 | 0.61 | 0.61 | 0.01 | 0.11 | 0.11 | — | 1,235 | 1,235 | 0.04 | 0.05 | 0.55 | 1,251 |
| Area | 0.02 | 0.17 | < 0.005 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.51 | 0.51 | < 0.005 | < 0.005 | — | 0.53 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.01 | < 0.005 | 0.05 | 0.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 121 | 121 | 0.01 | < 0.005 | — | 122 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.78 | 4.70 | 6.48 | 0.18 | < 0.005 | — | 12.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 14.4 | 0.00 | 14.4 | 1.44 | 0.00 | — | 50.3 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |
| Total | 0.69 | 0.78 | 0.49 | 4.74 | 0.01 | 0.01 | 0.61 | 0.62 | 0.01 | 0.11 | 0.12 | 16.2 | 1,361 | 1,377 | 1.68 | 0.06 | 0.57 | 1,437 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 2.75 | 2.55 | 1.64 | 19.5 | 0.06 | 0.03 | 0.39 | 0.41 | 0.02 | 0.12 | 0.14 | — | 5,763 | 5,763 | 0.20 | 0.22 | 5.82 | 5,839 |
| Library | 1.98 | 1.84 | 1.18 | 14.0 | 0.04 | 0.02 | 0.28 | 0.30 | 0.02 | 0.09 | 0.10 | — | 4,147 | 4,147 | 0.14 | 0.16 | 4.19 | 4,201 |
| Total | 4.73 | 4.39 | 2.83 | 33.5 | 0.10 | 0.05 | 0.66 | 0.71 | 0.04 | 0.20 | 0.25 | — | 9,910 | 9,910 | 0.34 | 0.37 | 10.0 | 10,040 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 2.75 | 2.54 | 1.84 | 18.9 | 0.05 | 0.03 | 0.39 | 0.41 | 0.02 | 0.12 | 0.14 | — | 5,560 | 5,560 | 0.21 | 0.23 | 0.15 | 5,635 |
| Library | 1.98 | 1.83 | 1.33 | 13.6 | 0.04 | 0.02 | 0.28 | 0.30 | 0.02 | 0.09 | 0.10 | — | 4,001 | 4,001 | 0.15 | 0.17 | 0.11 | 4,055 |
| Total | 4.73 | 4.38 | 3.17 | 32.5 | 0.09 | 0.05 | 0.66 | 0.71 | 0.04 | 0.20 | 0.25 | — | 9,561 | 9,561 | 0.36 | 0.40 | 0.26 | 9,689 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.35 | 0.33 | 0.23 | 2.44 | 0.01 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.02 | 0.02 | — | 661 | 661 | 0.02 | 0.03 | 0.30 | 670 |
| Library | 0.31 | 0.28 | 0.20 | 2.12 | 0.01 | < 0.005 | 0.04 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 573 | 573 | 0.02 | 0.02 | 0.26 | 581 |
| Total | 0.66 | 0.61 | 0.44 | 4.56 | 0.01 | 0.01 | 0.09 | 0.10 | 0.01 | 0.03 | 0.03 | — | 1,235 | 1,235 | 0.04 | 0.05 | 0.55 | 1,251 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | 341 | 341 | 0.04 | 0.01 | — | 343 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | 53.2 | 53.2 | 0.01 | < 0.005 | — | 53.6 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 394 | 394 | 0.05 | 0.01 | — | 397 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | 341 | 341 | 0.04 | 0.01 | — | 343 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | 53.2 | 53.2 | 0.01 | < 0.005 | — | 53.6 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 394 | 394 | 0.05 | 0.01 | — | 397 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | 56.4 | 56.4 | 0.01 | < 0.005 | — | 56.9 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | 8.80 | 8.80 | < 0.005 | < 0.005 | — | 8.87 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 65.2 | 65.2 | 0.01 | < 0.005 | — | 65.7 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 230 | 230 | 0.02 | < 0.005 | — | 230 |
| Library | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 109 | 109 | 0.01 | < 0.005 | — | 110 |
| Total | 0.03 | 0.02 | 0.28 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 339 | 339 | 0.03 | < 0.005 | — | 340 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 230 | 230 | 0.02 | < 0.005 | — | 230 |
| Library | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 109 | 109 | 0.01 | < 0.005 | — | 110 |
| Total | 0.03 | 0.02 | 0.28 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 339 | 339 | 0.03 | < 0.005 | — | 340 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | < 0.005 | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 38.0 | 38.0 | < 0.005 | < 0.005 | — | 38.1 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 18.1 | 18.1 | < 0.005 | < 0.005 | — | 18.2 |
| Total | 0.01 | < 0.005 | 0.05 | 0.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 56.1 | 56.1 | < 0.005 | < 0.005 | — | 56.3 |

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.75 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.27 | 0.25 | 0.01 | 1.52 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 6.26 | 6.26 | < 0.005 | < 0.005 | — | 6.44 |
| Total | 0.27 | 1.04 | 0.01 | 1.52 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 6.26 | 6.26 | < 0.005 | < 0.005 | — | 6.44 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.75 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | 0.79 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consum Products | — | 0.14 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.02 | 0.02 | < 0.005 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.51 | 0.51 | < 0.005 | < 0.005 | — | 0.53 |
| Total | 0.02 | 0.17 | < 0.005 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.51 | 0.51 | < 0.005 | < 0.005 | — | 0.53 |

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 10.3 | 27.2 | 37.4 | 1.06 | 0.03 | — | 71.5 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 0.48 | 1.22 | 1.70 | 0.05 | < 0.005 | — | 3.28 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10.8 | 28.4 | 39.1 | 1.11 | 0.03 | — | 74.7 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 10.3 | 27.2 | 37.4 | 1.06 | 0.03 | — | 71.5 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 0.48 | 1.22 | 1.70 | 0.05 | < 0.005 | — | 3.28 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | 10.8 | 28.4 | 39.1 | 1.11 | 0.03 | — | 74.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 1.70 | 4.50 | 6.20 | 0.18 | < 0.005 | — | 11.8 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 0.08 | 0.20 | 0.28 | 0.01 | < 0.005 | — | 0.54 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.78 | 4.70 | 6.48 | 0.18 | < 0.005 | — | 12.4 |

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 82.9 | 0.00 | 82.9 | 8.29 | 0.00 | — | 290 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 3.97 | 0.00 | 3.97 | 0.40 | 0.00 | — | 13.9 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 86.9 | 0.00 | 86.9 | 8.69 | 0.00 | — | 304 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 82.9 | 0.00 | 82.9 | 8.29 | 0.00 | — | 290 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 3.97 | 0.00 | 3.97 | 0.40 | 0.00 | — | 13.9 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 86.9 | 0.00 | 86.9 | 8.69 | 0.00 | — | 304 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 13.7 | 0.00 | 13.7 | 1.37 | 0.00 | — | 48.0 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.00 | 0.66 | 0.07 | 0.00 | — | 2.30 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 14.4 | 0.00 | 14.4 | 1.44 | 0.00 | — | 50.3 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequest | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 890 | 0.00 | 0.00 | 232,156 | 9,067 | 0.00 | 0.00 | 2,363,815 |
| Library | 576 | 641 | 337 | 201,242 | 5,869 | 6,524 | 3,428 | 2,049,054 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 0 | 0.00 | 52,500 | 17,500 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 477,034 | 261 | 0.0330 | 0.0040 | 716,878 |
| Library | 74,391 | 261 | 0.0330 | 0.0040 | 341,198 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 5,363,812 | 281,562 |
| Library | 250,311 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 154 | 0.00 |
| Library | 7.37 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|
| — | — |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|

| | | |
|---|---|---|
| Temperature and Extreme Heat | 14.1 | annual days of extreme heat |
| Extreme Precipitation | 5.10 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 36.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 1 | 1 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 59.9 |
| AQ-PM | 39.5 |
| AQ-DPM | 31.1 |
| Drinking Water | 64.2 |
| Lead Risk Housing | 15.2 |

| | |
|---|---|
| Pesticides | 84.3 |
| Toxic Releases | 19.4 |
| Traffic | 67.7 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 2.72 |
| Haz Waste Facilities/Generators | 55.4 |
| Impaired Water Bodies | 98.1 |
| Solid Waste | 72.4 |
| Sensitive Population | — |
| Asthma | 19.6 |
| Cardio-vascular | 45.9 |
| Low Birth Weights | 23.7 |
| Socioeconomic Factor Indicators | — |
| Education | 21.4 |
| Housing | 3.89 |
| Linguistic | 23.8 |
| Poverty | 7.83 |
| Unemployment | 22.6 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 84.46041319 |
| Employed | 90.79943539 |
| Median HI | — |

| | |
|---|---|
| Education | — |
| Bachelor's or higher | 77.58244578 |
| High school enrollment | 100 |
| Preschool enrollment | 84.21660465 |
| Transportation | — |
| Auto Access | 38.0341332 |
| Active commuting | 21.85294495 |
| Social | — |
| 2-parent households | 97.9468754 |
| Voting | 87.27062749 |
| Neighborhood | — |
| Alcohol availability | 82.11215193 |
| Park access | 33.28628256 |
| Retail density | 16.52765302 |
| Supermarket access | 30.23225972 |
| Tree canopy | 54.83125882 |
| Housing | — |
| Homeownership | 86.71885025 |
| Housing habitability | 73.55318876 |
| Low-inc homeowner severe housing cost burden | 97.6774028 |
| Low-inc renter severe housing cost burden | 68.90799435 |
| Uncrowded housing | 35.53188759 |
| Health Outcomes | — |
| Insured adults | 81.62453484 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 71.7 |
| High Blood Pressure | 0.0 |

| | |
|---|---|
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 77.2 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 85.5 |
| Heart Attack ER Admissions | 55.1 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 85.8 |
| SLR Inundation Area | 0.0 |
| Children | 51.6 |
| Elderly | 40.9 |
| English Speaking | 47.3 |
| Foreign-born | 51.7 |
| Outdoor Workers | 63.3 |

| | |
|---|---|
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 81.9 |
| Traffic Density | 59.7 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 33.0 |
| Other Decision Support | — |
| 2016 Voting | 89.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0 |
| Healthy Places Index Score for Project Location (b) | 92.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

| Screen | Justification |
| --- | --- |
| Land Use | Accounts for Park (acreage of park from recreation section, building sf from traffic study) |
| Operations: Vehicle Data | traffic |

# Moorpark Phase 1.0 Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Moorpark Phase 1.0 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 10.4 |
| Location | Moorpark, CA 93021, USA |
| County | Ventura |
| City | Moorpark |
| Air District | Ventura County APCD |
| Air Basin | South Central Coast |
| TAZ | 3524 |
| EDFZ | 8 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Library | 18.0 | 1000sqft | 0.61 | 18,000 | 10,000 | — | — | — |
| Parking Lot | 20.0 | 1000sqft | 0.46 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 2.17 | 1.83 | 17.6 | 17.9 | 0.03 | 0.83 | 7.21 | 8.05 | 0.77 | 3.46 | 4.22 | — | 2,991 | 2,991 | 0.12 | 0.08 | 1.51 | 3,018 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.48 | 9.32 | 9.99 | 10.7 | 0.02 | 0.41 | 0.16 | 0.54 | 0.38 | 0.04 | 0.41 | — | 1,995 | 1,995 | 0.08 | 0.03 | 0.02 | 2,007 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.84 | 0.70 | 5.87 | 6.21 | 0.01 | 0.25 | 0.21 | 0.45 | 0.23 | 0.07 | 0.30 | — | 1,129 | 1,129 | 0.05 | 0.02 | 0.19 | 1,137 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.15 | 0.13 | 1.07 | 1.13 | < 0.005 | 0.04 | 0.04 | 0.08 | 0.04 | 0.01 | 0.05 | — | 187 | 187 | 0.01 | < 0.005 | 0.03 | 188 |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 2.17 | 1.83 | 17.6 | 17.9 | 0.03 | 0.83 | 7.21 | 8.05 | 0.77 | 3.46 | 4.22 | — | 2,991 | 2,991 | 0.12 | 0.08 | 1.51 | 3,018 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 1.48 | 1.23 | 9.99 | 10.7 | 0.02 | 0.41 | 0.12 | 0.54 | 0.38 | 0.03 | 0.41 | — | 1,995 | 1,995 | 0.08 | 0.03 | 0.02 | 2,007 |
| 2024 | 1.41 | 9.32 | 9.61 | 10.6 | 0.02 | 0.37 | 0.16 | 0.50 | 0.34 | 0.04 | 0.37 | — | 1,992 | 1,992 | 0.08 | 0.03 | 0.02 | 2,004 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.84 | 0.70 | 5.87 | 6.21 | 0.01 | 0.25 | 0.21 | 0.45 | 0.23 | 0.07 | 0.30 | — | 1,129 | 1,129 | 0.05 | 0.02 | 0.19 | 1,137 |
| 2024 | 0.14 | 0.38 | 0.99 | 1.15 | < 0.005 | 0.04 | 0.02 | 0.05 | 0.04 | < 0.005 | 0.04 | — | 207 | 207 | 0.01 | < 0.005 | 0.04 | 209 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.15 | 0.13 | 1.07 | 1.13 | < 0.005 | 0.04 | 0.04 | 0.08 | 0.04 | 0.01 | 0.05 | — | 187 | 187 | 0.01 | < 0.005 | 0.03 | 188 |
| 2024 | 0.03 | 0.07 | 0.18 | 0.21 | < 0.005 | 0.01 | < 0.005 | 0.01 | 0.01 | < 0.005 | 0.01 | — | 34.3 | 34.3 | < 0.005 | < 0.005 | 0.01 | 34.5 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.61 | 1.97 | 0.52 | 3.48 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 10.0 | 500 | 510 | 1.10 | 0.03 | 0.07 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.43 | 1.80 | 0.56 | 3.56 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 10.0 | 499 | 509 | 1.12 | 0.04 | 0.07 | 548 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.37 | 0.76 | 0.28 | 1.17 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 10.0 | 443 | 453 | 1.06 | 0.01 | 0.07 | 483 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 0.07 | 0.14 | 0.05 | 0.21 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | 1.66 | 73.3 | 75.0 | 0.17 | < 0.005 | 0.01 | 79.9 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.45 | 1.42 | 0.31 | 2.52 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 70.1 | 70.1 | 0.06 | 0.03 | 0.00 | 80.2 |
| Area | 0.14 | 0.54 | 0.01 | 0.78 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.22 | 3.22 | < 0.005 | < 0.005 | — | 3.23 |
| Energy | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 423 | 423 | 0.04 | < 0.005 | — | 424 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Total | 1.61 | 1.97 | 0.52 | 3.48 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 10.0 | 500 | 510 | 1.10 | 0.03 | 0.07 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.41 | 1.38 | 0.35 | 3.38 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 71.8 | 71.8 | 0.07 | 0.03 | 0.00 | 83.0 |
| Area | — | 0.41 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 423 | 423 | 0.04 | < 0.005 | — | 424 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Total | 1.43 | 1.80 | 0.56 | 3.56 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 10.0 | 499 | 509 | 1.12 | 0.04 | 0.07 | 548 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.28 | 0.27 | 0.07 | 0.61 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 14.3 | 14.3 | 0.01 | 0.01 | 0.00 | 16.4 |
| Area | 0.07 | 0.48 | < 0.005 | 0.39 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.59 | 1.59 | < 0.005 | < 0.005 | — | 1.59 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 423 | 423 | 0.04 | < 0.005 | — | 424 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Total | 0.37 | 0.76 | 0.28 | 1.17 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 10.0 | 443 | 453 | 1.06 | 0.01 | 0.07 | 483 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.05 | 0.05 | 0.01 | 0.11 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 2.36 | 2.36 | < 0.005 | < 0.005 | 0.00 | 2.71 |
| Area | 0.01 | 0.09 | < 0.005 | 0.07 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.26 | 0.26 | < 0.005 | < 0.005 | — | 0.26 |
| Energy | < 0.005 | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 70.0 | 70.0 | 0.01 | < 0.005 | — | 70.3 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.18 | 0.71 | 0.89 | 0.02 | < 0.005 | — | 1.49 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1.48 | 0.00 | 1.48 | 0.15 | 0.00 | — | 5.17 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | 0.07 | 0.14 | 0.05 | 0.21 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | 1.66 | 73.3 | 75.0 | 0.17 | < 0.005 | 0.01 | 79.9 |

# 3. Construction Emissions Details

## 3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.07 | 1.74 | 17.0 | 16.9 | 0.02 | 0.76 | — | 0.76 | 0.70 | — | 0.70 | — | 2,494 | 2,494 | 0.10 | 0.02 | — | 2,502 |
| Demolition | — | — | — | — | — | — | 0.39 | 0.39 | — | 0.06 | 0.06 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 0.10 | 0.93 | 0.93 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 137 | 137 | 0.01 | < 0.005 | — | 137 |
| Demolition | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.17 | 0.17 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 22.6 | 22.6 | < 0.005 | < 0.005 | — | 22.7 |
| Demolition | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.07 | 0.91 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 174 | 174 | 0.01 | 0.01 | 0.80 | 177 |
| Vendor | 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 | 0.00 |
| Hauling | 0.01 | 0.01 | 0.45 | 0.10 | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 324 | 324 | 0.01 | 0.05 | 0.71 | 340 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.05 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 9.17 | 9.17 | < 0.005 | < 0.005 | 0.02 | 9.30 |
| Vendor | 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 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 17.7 | 17.7 | < 0.005 | < 0.005 | 0.02 | 18.6 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.52 | 1.52 | < 0.005 | < 0.005 | < 0.005 | 1.54 |
| Vendor | 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 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 2.94 | 2.94 | < 0.005 | < 0.005 | < 0.005 | 3.08 |

## 3.3. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.84 | 1.54 | 15.1 | 13.7 | 0.02 | 0.72 | — | 0.72 | 0.66 | — | 0.66 | — | 2,063 | 2,063 | 0.08 | 0.02 | — | 2,070 |
| Dust From Material Movement | — | — | — | — | — | — | 6.26 | 6.26 | — | 3.00 | 3.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.08 | 0.07 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 11.3 | 11.3 | < 0.005 | < 0.005 | — | 11.3 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | 0.02 | 0.02 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.87 | 1.87 | < 0.005 | < 0.005 | — | 1.88 |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.04 | 0.54 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 104 | 104 | < 0.005 | < 0.005 | 0.48 | 106 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.55 | 0.55 | < 0.005 | < 0.005 | < 0.005 | 0.56 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.09 | 0.09 | < 0.005 | < 0.005 | < 0.005 | 0.09 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.5. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.12 | 1.78 | 17.5 | 16.3 | 0.02 | 0.83 | — | 0.83 | 0.77 | — | 0.77 | — | 2,453 | 2,453 | 0.10 | 0.02 | — | 2,462 |
| Dust From Material Movement | — | — | — | — | — | — | 7.08 | 7.08 | — | 3.42 | 3.42 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.19 | 0.18 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 26.9 | 26.9 | < 0.005 | < 0.005 | — | 27.0 |
| Dust From Material Movement | — | — | — | — | — | — | 0.08 | 0.08 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 4.45 | 4.45 | < 0.005 | < 0.005 | — | 4.47 |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.05 | 0.73 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 139 | 139 | 0.01 | < 0.005 | 0.64 | 141 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.47 | 1.47 | < 0.005 | < 0.005 | < 0.005 | 1.49 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.24 | 0.24 | < 0.005 | < 0.005 | < 0.005 | 0.25 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.7. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.43 | 1.19 | 9.81 | 10.2 | 0.02 | 0.41 | — | 0.41 | 0.38 | — | 0.38 | — | 1,801 | 1,801 | 0.07 | 0.01 | — | 1,807 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.43 | 1.19 | 9.81 | 10.2 | 0.02 | 0.41 | — | 0.41 | 0.38 | — | 0.38 | — | 1,801 | 1,801 | 0.07 | 0.01 | — | 1,807 |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67 | 0.55 | 4.55 | 4.72 | 0.01 | 0.19 | — | 0.19 | 0.17 | — | 0.17 | — | 835 | 835 | 0.03 | 0.01 | — | 838 |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.83 | 0.86 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 138 | 138 | 0.01 | < 0.005 | — | 139 |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.04 | 0.55 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 105 | 105 | < 0.005 | < 0.005 | 0.49 | 107 |
| Vendor | < 0.005 | < 0.005 | 0.13 | 0.04 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 93.6 | 93.6 | < 0.005 | 0.01 | 0.26 | 98.0 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.05 | 0.50 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 100 | 100 | 0.01 | < 0.005 | 0.01 | 102 |
| Vendor | < 0.005 | < 0.005 | 0.13 | 0.04 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 93.6 | 93.6 | < 0.005 | 0.01 | 0.01 | 97.8 |
| Hauling | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.23 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 47.0 | 47.0 | < 0.005 | < 0.005 | 0.10 | 47.6 |
| Vendor | < 0.005 | < 0.005 | 0.06 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 43.4 | 43.4 | < 0.005 | 0.01 | 0.05 | 45.4 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 7.77 | 7.77 | < 0.005 | < 0.005 | 0.02 | 7.88 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.19 | 7.19 | < 0.005 | < 0.005 | 0.01 | 7.52 |
| Hauling | 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 | 0.00 |

## 3.9. Building Construction (2024) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.36 | 1.13 | 9.44 | 10.1 | 0.02 | 0.37 | — | 0.37 | 0.34 | — | 0.34 | — | 1,801 | 1,801 | 0.07 | 0.01 | — | 1,807 |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.81 | 0.87 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 155 | 155 | 0.01 | < 0.005 | — | 156 |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.02 | 0.02 | 0.15 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 25.7 | 25.7 | < 0.005 | < 0.005 | — | 25.8 |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.03 | 0.04 | 0.46 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 98.5 | 98.5 | < 0.005 | < 0.005 | 0.01 | 99.8 |
| Vendor | < 0.005 | < 0.005 | 0.12 | 0.04 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 92.4 | 92.4 | < 0.005 | 0.01 | 0.01 | 96.6 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 8.55 | 8.55 | < 0.005 | < 0.005 | 0.02 | 8.67 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.96 | 7.96 | < 0.005 | < 0.005 | 0.01 | 8.33 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.42 | 1.42 | < 0.005 | < 0.005 | < 0.005 | 1.44 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 1.32 | 1.32 | < 0.005 | < 0.005 | < 0.005 | 1.38 |
| Hauling | 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 | 0.00 |

## 3.11. Paving (2024) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.63 | 0.53 | 4.90 | 6.53 | 0.01 | 0.23 | — | 0.23 | 0.21 | — | 0.21 | — | 992 | 992 | 0.04 | 0.01 | — | 995 |
| Paving | — | 0.12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.01 | 0.13 | 0.18 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 27.2 | 27.2 | < 0.005 | < 0.005 | — | 27.3 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 4.50 | 4.50 | < 0.005 | < 0.005 | — | 4.51 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.05 | 0.07 | 0.76 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 163 | 163 | 0.01 | 0.01 | 0.02 | 165 |
| Vendor | 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 | 0.00 |

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| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 4.50 | 4.50 | < 0.005 | < 0.005 | 0.01 | 4.56 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.74 | 0.74 | < 0.005 | < 0.005 | < 0.005 | 0.76 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.13. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 0.14 | 0.91 | 1.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | — | 9.18 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.66 | 3.66 | < 0.005 | < 0.005 | — | 3.67 |
| Architectural Coatings | — | 0.25 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.61 | 0.61 | < 0.005 | < 0.005 | — | 0.61 |
| Architectural Coatings | — | 0.05 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 19.7 | 19.7 | < 0.005 | < 0.005 | < 0.005 | 20.0 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.54 | 0.54 | < 0.005 | < 0.005 | < 0.005 | 0.55 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.09 | 0.09 | < 0.005 | < 0.005 | < 0.005 | 0.09 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | 160 | 160 | 0.02 | < 0.005 | — | 161 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 16.7 | 16.7 | < 0.005 | < 0.005 | — | 16.8 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 177 | 177 | 0.02 | < 0.005 | — | 178 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | 160 | 160 | 0.02 | < 0.005 | — | 161 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 16.7 | 16.7 | < 0.005 | < 0.005 | — | 16.8 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 177 | 177 | 0.02 | < 0.005 | — | 178 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | — | — | — | — | — | — | — | — | — | — | — | — | 26.5 | 26.5 | < 0.005 | < 0.005 | — | 26.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 2.77 | 2.77 | < 0.005 | < 0.005 | — | 2.79 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 29.2 | 29.2 | < 0.005 | < 0.005 | — | 29.4 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 246 | 246 | 0.02 | < 0.005 | — | 247 |
| Parking Lot | 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 |
| Total | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 246 | 246 | 0.02 | < 0.005 | — | 247 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 246 | 246 | 0.02 | < 0.005 | — | 247 |
| Parking Lot | 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 |
| Total | 0.02 | 0.01 | 0.21 | 0.17 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 246 | 246 | 0.02 | < 0.005 | — | 247 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | < 0.005 | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 40.7 | 40.7 | < 0.005 | < 0.005 | — | 40.8 |
| Parking Lot | 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 |
| Total | < 0.005 | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 40.7 | 40.7 | < 0.005 | < 0.005 | — | 40.8 |

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.39 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.14 | 0.13 | 0.01 | 0.78 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.22 | 3.22 | < 0.005 | < 0.005 | — | 3.23 |
| Total | 0.14 | 0.54 | 0.01 | 0.78 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.22 | 3.22 | < 0.005 | < 0.005 | — | 3.23 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 9.21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.39 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | 9.59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.05 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.07 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landsca Equipment | 0.01 | 0.01 | < 0.005 | 0.07 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.26 | 0.26 | < 0.005 | < 0.005 | — | 0.26 |
| Total | 0.01 | 0.13 | < 0.005 | 0.07 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.26 | 0.26 | < 0.005 | < 0.005 | — | 0.26 |

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 4.32 | 5.40 | 0.11 | < 0.005 | — | 8.97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | 0.18 | 0.71 | 0.89 | 0.02 | < 0.005 | — | 1.49 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.18 | 0.71 | 0.89 | 0.02 | < 0.005 | — | 1.49 |

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 8.93 | 0.00 | 8.93 | 0.89 | 0.00 | — | 31.3 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | 1.48 | 0.00 | 1.48 | 0.15 | 0.00 | — | 5.17 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.48 | 0.00 | 1.48 | 0.15 | 0.00 | — | 5.17 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.07 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Remove | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 4/1/2023 | 4/29/2023 | 5.00 | 20.0 | — |
| Site Preparation | Site Preparation | 4/30/2023 | 5/2/2023 | 5.00 | 2.00 | — |
| Grading | Grading | 5/3/2023 | 5/8/2023 | 5.00 | 4.00 | — |
| Building Construction | Building Construction | 5/9/2023 | 2/13/2024 | 5.00 | 200 | — |
| Paving | Paving | 2/14/2024 | 2/28/2024 | 5.00 | 10.0 | — |
| Architectural Coating | Architectural Coating | 2/29/2024 | 3/14/2024 | 5.00 | 10.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.00 | 8.00 | 33.0 | 0.73 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 8.00 | 84.0 | 0.37 |
| Site Preparation | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 7.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 6.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 1.00 | 6.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 6.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Average | 3.00 | 8.00 | 46.0 | 0.45 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 1.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Average | 1.00 | 6.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 1.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 18.5 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 10.2 | HHDT,MHDT |
| Demolition | Hauling | 4.50 | 20.0 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 7.50 | 18.5 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 10.2 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 10.0 | 18.5 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 10.2 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 7.56 | 18.5 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 2.95 | 10.2 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 12.5 | 18.5 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10.2 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |

| | | | | |
|---|---|---|---|---|
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 1.51 | 18.5 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10.2 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 0.00 | 0.00 | 27,900 | 9,300 | 1,200 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 7,800 | — |
| Site Preparation | — | — | 1.88 | 0.00 | — |
| Grading | — | — | 4.00 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Library | 0.00 | 0% |
| Parking Lot | 0.46 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2023 | 0.00 | 349 | 0.03 | < 0.005 |
| 2024 | 0.00 | 349 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 401 | 80.0 | 80.0 | 29,316 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 0 | 0.00 | 27,900 | 9,300 | 1,200 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Library | 167,381 | 349 | 0.0330 | 0.0040 | 767,695 |
| Parking Lot | 17,520 | 349 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Library | 563,200 | 129,276 |
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Library | 16.6 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|
| — | — |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 14.1 | annual days of extreme heat |
| Extreme Precipitation | 5.10 | annual days with precipitation above 20 mm |

| | | |
|---|---|---|
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 36.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 1 | 1 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 59.9 |
| AQ-PM | 39.5 |
| AQ-DPM | 31.1 |
| Drinking Water | 64.2 |
| Lead Risk Housing | 15.2 |
| Pesticides | 84.3 |
| Toxic Releases | 19.4 |

| | |
|---|---|
| Traffic | 67.7 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 2.72 |
| Haz Waste Facilities/Generators | 55.4 |
| Impaired Water Bodies | 98.1 |
| Solid Waste | 72.4 |
| Sensitive Population | — |
| Asthma | 19.6 |
| Cardio-vascular | 45.9 |
| Low Birth Weights | 23.7 |
| Socioeconomic Factor Indicators | — |
| Education | 21.4 |
| Housing | 3.89 |
| Linguistic | 23.8 |
| Poverty | 7.83 |
| Unemployment | 22.6 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 84.46041319 |
| Employed | 90.79943539 |
| Education | — |
| Bachelor's or higher | 77.58244578 |
| High school enrollment | 100 |

| | |
|---|---|
| Preschool enrollment | 84.21660465 |
| Transportation | — |
| Auto Access | 38.0341332 |
| Active commuting | 21.85294495 |
| Social | — |
| 2-parent households | 97.9468754 |
| Voting | 87.27062749 |
| Neighborhood | — |
| Alcohol availability | 82.11215193 |
| Park access | 33.28628256 |
| Retail density | 16.52765302 |
| Supermarket access | 30.23225972 |
| Tree canopy | 54.83125882 |
| Housing | — |
| Homeownership | 86.71885025 |
| Housing habitability | 73.55318876 |
| Low-inc homeowner severe housing cost burden | 97.6774028 |
| Low-inc renter severe housing cost burden | 68.90799435 |
| Uncrowded housing | 35.53188759 |
| Health Outcomes | — |
| Insured adults | 81.62453484 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 71.7 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |

| | |
|---|---|
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 77.2 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 85.5 |
| Heart Attack ER Admissions | 55.1 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 85.8 |
| SLR Inundation Area | 0.0 |
| Children | 51.6 |
| Elderly | 40.9 |
| English Speaking | 47.3 |
| Foreign-born | 51.7 |
| Outdoor Workers | 63.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 81.9 |
| Traffic Density | 59.7 |

| | |
|---|---|
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 33.0 |
| Other Decision Support | — |
| 2016 Voting | 89.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0 |
| Healthy Places Index Score for Project Location (b) | 92.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Land Use | Addition of landscaping |

# Phase 2.0 Moorpark Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Phase 2.0 Moorpark |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 10.4 |
| Location | Moorpark, CA 93021, USA |
| County | Ventura |
| City | Moorpark |
| Air District | Ventura County APCD |
| Air Basin | South Central Coast |
| TAZ | 3524 |
| EDFZ | 8 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Office Park | 13.0 | 1000sqft | 0.30 | 13,000 | 1,000 | — | — | — |
| Parking Lot | 40.0 | 1000sqft | 0.92 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.06 | 0.05 | 0.09 | 0.69 | < 0.005 | < 0.005 | 7.21 | 7.21 | < 0.005 | 3.46 | 3.46 | — | 161 | 161 | < 0.005 | 0.01 | 0.56 | 163 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.05 | 7.70 | 0.10 | 0.58 | < 0.005 | < 0.005 | 0.16 | 0.16 | < 0.005 | 0.04 | 0.04 | — | 151 | 151 | < 0.005 | 0.01 | 0.01 | 153 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.01 | 0.22 | 0.05 | 0.15 | < 0.005 | < 0.005 | 0.16 | 0.16 | < 0.005 | 0.06 | 0.06 | — | 63.7 | 63.7 | < 0.005 | 0.01 | 0.08 | 65.5 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | < 0.005 | 0.04 | 0.01 | 0.03 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 10.5 | 10.5 | < 0.005 | < 0.005 | 0.01 | 10.8 |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 0.06 | 0.05 | 0.09 | 0.69 | < 0.005 | < 0.005 | 7.21 | 7.21 | < 0.005 | 3.46 | 3.46 | — | 161 | 161 | < 0.005 | 0.01 | 0.56 | 163 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 0.02 | 0.02 | 0.10 | 0.23 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 115 | 115 | < 0.005 | 0.01 | 0.01 | 118 |
| 2028 | 0.05 | 7.70 | 0.09 | 0.58 | < 0.005 | < 0.005 | 0.16 | 0.16 | < 0.005 | 0.04 | 0.04 | — | 151 | 151 | < 0.005 | 0.01 | 0.01 | 153 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 0.01 | 0.01 | 0.05 | 0.15 | < 0.005 | < 0.005 | 0.16 | 0.16 | < 0.005 | 0.06 | 0.06 | — | 63.7 | 63.7 | < 0.005 | 0.01 | 0.08 | 65.5 |
| 2028 | < 0.005 | 0.22 | 0.01 | 0.04 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 14.1 | 14.1 | < 0.005 | < 0.005 | 0.02 | 14.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | < 0.005 | < 0.005 | 0.01 | 0.03 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 10.5 | 10.5 | < 0.005 | < 0.005 | 0.01 | 10.8 |
| 2028 | < 0.005 | 0.04 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 2.34 | 2.34 | < 0.005 | < 0.005 | < 0.005 | 2.40 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 2.14 | 2.39 | 0.55 | 4.15 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 10.9 | 426 | 437 | 1.22 | 0.06 | 0.03 | 485 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 2.01 | 2.26 | 0.60 | 4.76 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 10.9 | 426 | 437 | 1.24 | 0.06 | 0.03 | 487 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.34 | 0.63 | 0.16 | 0.96 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 10.9 | 329 | 339 | 1.15 | 0.02 | 0.03 | 375 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 0.06 | 0.11 | 0.03 | 0.18 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | 1.81 | 54.4 | 56.2 | 0.19 | < 0.005 | 0.01 | 62.0 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.03 | 1.99 | 0.45 | 3.51 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 113 | 113 | 0.08 | 0.04 | 0.00 | 128 |
| Area | 0.10 | 0.40 | < 0.005 | 0.57 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.33 | 2.33 | < 0.005 | < 0.005 | — | 2.33 |
| Energy | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 300 | 300 | 0.03 | < 0.005 | — | 302 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | 2.14 | 2.39 | 0.55 | 4.15 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 10.9 | 426 | 437 | 1.22 | 0.06 | 0.03 | 485 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.00 | 1.95 | 0.51 | 4.68 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 115 | 115 | 0.10 | 0.05 | 0.00 | 132 |
| Area | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 300 | 300 | 0.03 | < 0.005 | — | 302 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | 2.01 | 2.26 | 0.60 | 4.76 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 10.9 | 426 | 437 | 1.24 | 0.06 | 0.03 | 487 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.28 | 0.28 | 0.07 | 0.60 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 16.3 | 16.3 | 0.01 | 0.01 | 0.00 | 18.6 |
| Area | 0.05 | 0.35 | < 0.005 | 0.28 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.15 | 1.15 | < 0.005 | < 0.005 | — | 1.15 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 300 | 300 | 0.03 | < 0.005 | — | 302 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | 0.34 | 0.63 | 0.16 | 0.96 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 10.9 | 329 | 339 | 1.15 | 0.02 | 0.03 | 375 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.05 | 0.05 | 0.01 | 0.11 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 2.70 | 2.70 | < 0.005 | < 0.005 | 0.00 | 3.08 |
| Area | 0.01 | 0.06 | < 0.005 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.19 | 0.19 | < 0.005 | < 0.005 | — | 0.19 |
| Energy | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 49.6 | 49.6 | 0.01 | < 0.005 | — | 49.9 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.73 | 1.87 | 2.60 | 0.08 | < 0.005 | — | 5.03 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 0.00 | 1.08 | 0.11 | 0.00 | — | 3.77 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | 0.06 | 0.11 | 0.03 | 0.18 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | 1.81 | 54.4 | 56.2 | 0.19 | < 0.005 | 0.01 | 62.0 |

# 3. Construction Emissions Details

## 3.1. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.05 | 0.69 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 161 | 161 | < 0.005 | 0.01 | 0.56 | 163 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 8.49 | 8.49 | < 0.005 | < 0.005 | 0.01 | 8.61 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.41 | 1.41 | < 0.005 | < 0.005 | < 0.005 | 1.43 |
| Vendor | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 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 | 0.00 |

## 3.3. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 6.26 | 6.26 | — | 3.00 | 3.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | 0.02 | 0.02 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.03 | 0.41 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 96.6 | 96.6 | < 0.005 | < 0.005 | 0.33 | 98.0 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.51 | 0.51 | < 0.005 | < 0.005 | < 0.005 | 0.52 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.08 | 0.08 | < 0.005 | < 0.005 | < 0.005 | 0.09 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.5. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 7.08 | 7.08 | — | 3.42 | 3.42 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.08 | 0.08 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.04 | 0.55 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 129 | 129 | < 0.005 | < 0.005 | 0.45 | 131 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.36 | 1.36 | < 0.005 | < 0.005 | < 0.005 | 1.38 |
| Vendor | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.22 | 0.22 | < 0.005 | < 0.005 | < 0.005 | 0.23 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.02 | 0.02 | 0.02 | 0.23 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 53.6 | 53.6 | < 0.005 | < 0.005 | 0.19 | 54.4 |
| Vendor | < 0.005 | < 0.005 | 0.07 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 63.3 | 63.3 | < 0.005 | 0.01 | 0.15 | 66.3 |
| Hauling | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.21 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 51.2 | 51.2 | < 0.005 | < 0.005 | < 0.005 | 51.8 |
| Vendor | < 0.005 | < 0.005 | 0.08 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 63.3 | 63.3 | < 0.005 | 0.01 | < 0.005 | 66.2 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.10 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 23.9 | 23.9 | < 0.005 | < 0.005 | 0.04 | 24.3 |
| Vendor | < 0.005 | < 0.005 | 0.04 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 29.4 | 29.4 | < 0.005 | < 0.005 | 0.03 | 30.7 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 3.96 | 3.96 | < 0.005 | < 0.005 | 0.01 | 4.02 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 4.86 | 4.86 | < 0.005 | < 0.005 | < 0.005 | 5.09 |
| Hauling | 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 | 0.00 |

## 3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.19 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 50.3 | 50.3 | < 0.005 | < 0.005 | < 0.005 | 50.9 |
| Vendor | < 0.005 | < 0.005 | 0.07 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 61.8 | 61.8 | < 0.005 | 0.01 | < 0.005 | 64.5 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 4.36 | 4.36 | < 0.005 | < 0.005 | 0.01 | 4.42 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 5.32 | 5.32 | < 0.005 | < 0.005 | < 0.005 | 5.56 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.72 | 0.72 | < 0.005 | < 0.005 | < 0.005 | 0.73 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.88 | 0.88 | < 0.005 | < 0.005 | < 0.005 | 0.92 |
| Hauling | 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 | 0.00 |

## 3.11. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Paving | — | 0.24 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Paving | — | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.05 | 0.58 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 151 | 151 | < 0.005 | 0.01 | 0.01 | 153 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 4.17 | 4.17 | < 0.005 | < 0.005 | 0.01 | 4.22 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.69 | 0.69 | < 0.005 | < 0.005 | < 0.005 | 0.70 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.13. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 7.70 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 10.1 | 10.1 | < 0.005 | < 0.005 | < 0.005 | 10.2 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.28 | 0.28 | < 0.005 | < 0.005 | < 0.005 | 0.28 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.05 | 0.05 | < 0.005 | < 0.005 | < 0.005 | 0.05 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | 164 | 164 | 0.02 | < 0.005 | — | 165 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 25.0 | 25.0 | < 0.005 | < 0.005 | — | 25.2 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 189 | 189 | 0.02 | < 0.005 | — | 191 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | 164 | 164 | 0.02 | < 0.005 | — | 165 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 25.0 | 25.0 | < 0.005 | < 0.005 | — | 25.2 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 189 | 189 | 0.02 | < 0.005 | — | 191 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | 27.2 | 27.2 | < 0.005 | < 0.005 | — | 27.4 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 4.14 | 4.14 | < 0.005 | < 0.005 | — | 4.18 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 31.3 | 31.3 | < 0.005 | < 0.005 | — | 31.6 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 111 | 111 | 0.01 | < 0.005 | — | 111 |
| Parking Lot | 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 |
| Total | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 111 | 111 | 0.01 | < 0.005 | — | 111 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 111 | 111 | 0.01 | < 0.005 | — | 111 |
| Parking Lot | 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 |
| Total | 0.01 | 0.01 | 0.09 | 0.08 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 111 | 111 | 0.01 | < 0.005 | — | 111 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 18.3 | 18.3 | < 0.005 | < 0.005 | — | 18.4 |
| Parking Lot | 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 |
| Total | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 18.3 | 18.3 | < 0.005 | < 0.005 | — | 18.4 |

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.28 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.10 | 0.09 | < 0.005 | 0.57 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.33 | 2.33 | < 0.005 | < 0.005 | — | 2.33 |
| Total | 0.10 | 0.40 | < 0.005 | 0.57 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.33 | 2.33 | < 0.005 | < 0.005 | — | 2.33 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 7.72 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.28 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | 8.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.05 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.01 | 0.01 | < 0.005 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.19 | 0.19 | < 0.005 | < 0.005 | — | 0.19 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 0.01 | 0.10 | < 0.005 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.19 | 0.19 | < 0.005 | < 0.005 | — | 0.19 |

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 4.43 | 11.3 | 15.7 | 0.46 | 0.01 | — | 30.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | 0.73 | 1.87 | 2.60 | 0.08 | < 0.005 | — | 5.03 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.73 | 1.87 | 2.60 | 0.08 | < 0.005 | — | 5.03 |

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 6.52 | 0.00 | 6.52 | 0.65 | 0.00 | — | 22.8 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 0.00 | 1.08 | 0.11 | 0.00 | — | 3.77 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.08 | 0.00 | 1.08 | 0.11 | 0.00 | — | 3.77 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.03 | 0.03 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Office Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipme Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 4/1/2027 | 4/29/2027 | 5.00 | 20.0 | — |
| Site Preparation | Site Preparation | 4/30/2027 | 5/2/2027 | 5.00 | 2.00 | — |

| | | | | | | |
|---|---|---|---|---|---|---|
| Grading | Grading | 5/3/2027 | 5/8/2027 | 5.00 | 4.00 | — |
| Building Construction | Building Construction | 5/9/2027 | 2/13/2028 | 5.00 | 200 | — |
| Paving | Paving | 2/14/2028 | 2/28/2028 | 5.00 | 10.0 | — |
| Architectural Coating | Architectural Coating | 2/29/2028 | 3/14/2028 | 5.00 | 10.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.00 | 8.00 | 33.0 | 0.73 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 8.00 | 84.0 | 0.37 |
| Site Preparation | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 7.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 6.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 1.00 | 6.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 6.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Average | 3.00 | 8.00 | 46.0 | 0.45 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 1.00 | 6.00 | 10.0 | 0.56 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Pavers | Diesel | Average | 1.00 | 6.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 1.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 18.5 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 10.2 | HHDT,MHDT |
| Demolition | Hauling | 0.00 | 20.0 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 7.50 | 18.5 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 10.2 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 10.0 | 18.5 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 10.2 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 4.16 | 18.5 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Building Construction | Vendor | 2.13 | 10.2 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 12.5 | 18.5 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10.2 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 0.83 | 18.5 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10.2 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 0.00 | 0.00 | 21,300 | 7,100 | 2,400 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | — | — |
| Site Preparation | — | — | 1.88 | 0.00 | — |
| Grading | — | — | 4.00 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.92 |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Office Park | 0.00 | 0% |
| Parking Lot | 0.92 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2027 | 0.00 | 532 | 0.03 | < 0.005 |
| 2028 | 0.00 | 532 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 708 | 142 | 142 | 36,917 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 0 | 0.00 | 21,300 | 7,100 | 2,400 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Office Park | 229,683 | 261 | 0.0330 | 0.0040 | 345,164 |
| Parking Lot | 35,040 | 261 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Office Park | 2,310,539 | 12,928 |

| | | |
|---|---|---|
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Office Park | 12.1 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Office Park | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Office Park | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|
| — | — |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 14.1 | annual days of extreme heat |
| Extreme Precipitation | 5.10 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 36.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 1 | 1 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 59.9 |

| | |
|---|---|
| AQ-PM | 39.5 |
| AQ-DPM | 31.1 |
| Drinking Water | 64.2 |
| Lead Risk Housing | 15.2 |
| Pesticides | 84.3 |
| Toxic Releases | 19.4 |
| Traffic | 67.7 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 2.72 |
| Haz Waste Facilities/Generators | 55.4 |
| Impaired Water Bodies | 98.1 |
| Solid Waste | 72.4 |
| Sensitive Population | — |
| Asthma | 19.6 |
| Cardio-vascular | 45.9 |
| Low Birth Weights | 23.7 |
| Socioeconomic Factor Indicators | — |
| Education | 21.4 |
| Housing | 3.89 |
| Linguistic | 23.8 |
| Poverty | 7.83 |
| Unemployment | 22.6 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|

| | |
|---|---|
| Economic | — |
| Above Poverty | 84.46041319 |
| Employed | 90.79943539 |
| Education | — |
| Bachelor's or higher | 77.58244578 |
| High school enrollment | 100 |
| Preschool enrollment | 84.21660465 |
| Transportation | — |
| Auto Access | 38.0341332 |
| Active commuting | 21.85294495 |
| Social | — |
| 2-parent households | 97.9468754 |
| Voting | 87.27062749 |
| Neighborhood | — |
| Alcohol availability | 82.11215193 |
| Park access | 33.28628256 |
| Retail density | 16.52765302 |
| Supermarket access | 30.23225972 |
| Tree canopy | 54.83125882 |
| Housing | — |
| Homeownership | 86.71885025 |
| Housing habitability | 73.55318876 |
| Low-inc homeowner severe housing cost burden | 97.6774028 |
| Low-inc renter severe housing cost burden | 68.90799435 |
| Uncrowded housing | 35.53188759 |
| Health Outcomes | — |
| Insured adults | 81.62453484 |

| | |
|---|---|
| Arthritis | 0.0 |
| Asthma ER Admissions | 71.7 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 77.2 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 85.5 |
| Heart Attack ER Admissions | 55.1 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 85.8 |
| SLR Inundation Area | 0.0 |
| Children | 51.6 |
| Elderly | 40.9 |

| | |
|---|---|
| English Speaking | 47.3 |
| Foreign-born | 51.7 |
| Outdoor Workers | 63.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 81.9 |
| Traffic Density | 59.7 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 33.0 |
| Other Decision Support | — |
| 2016 Voting | 89.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0 |
| Healthy Places Index Score for Project Location (b) | 92.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

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# Phase 3.0 Moorpark Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Phase 3.0 Moorpark |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 10.4 |
| Location | Moorpark, CA 93021, USA |
| County | Ventura |
| City | Moorpark |
| Air District | Ventura County APCD |
| Air Basin | South Central Coast |
| TAZ | 3524 |
| EDFZ | 8 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 75.0 | Dwelling Unit | 4.69 | 79,500 | 0.00 | — | 226 | — |
| Parking Lot | 100 | 1000sqft | 2.30 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.33 | 21.7 | 8.79 | 15.4 | 0.03 | 0.26 | 0.77 | 1.04 | 0.24 | 0.18 | 0.43 | — | 3,276 | 3,276 | 0.11 | 0.08 | 2.13 | 3,303 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.81 | 21.7 | 24.1 | 29.0 | 0.05 | 0.94 | 7.89 | 8.84 | 0.84 | 3.99 | 4.83 | — | 5,500 | 5,500 | 0.22 | 0.18 | 0.06 | 5,521 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.93 | 1.61 | 7.42 | 11.5 | 0.02 | 0.25 | 0.89 | 1.14 | 0.23 | 0.30 | 0.53 | — | 2,430 | 2,430 | 0.08 | 0.06 | 0.59 | 2,450 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.17 | 0.29 | 1.35 | 2.10 | < 0.005 | 0.05 | 0.16 | 0.21 | 0.04 | 0.06 | 0.10 | — | 402 | 402 | 0.01 | 0.01 | 0.10 | 406 |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2030 | 1.33 | 1.12 | 8.79 | 15.4 | 0.03 | 0.26 | 0.77 | 1.04 | 0.24 | 0.18 | 0.43 | — | 3,276 | 3,276 | 0.11 | 0.08 | 2.13 | 3,303 |
| 2031 | 0.15 | 21.7 | 0.80 | 1.56 | < 0.005 | 0.01 | 0.14 | 0.15 | 0.01 | 0.03 | 0.04 | — | 263 | 263 | 0.01 | < 0.005 | 0.31 | 264 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2030 | 1.81 | 1.52 | 24.1 | 29.0 | 0.05 | 0.94 | 7.89 | 8.84 | 0.84 | 3.99 | 4.83 | — | 5,500 | 5,500 | 0.22 | 0.18 | 0.06 | 5,521 |
| 2031 | 1.29 | 21.7 | 8.52 | 15.0 | 0.03 | 0.25 | 0.77 | 1.02 | 0.23 | 0.18 | 0.41 | — | 3,229 | 3,229 | 0.11 | 0.08 | 0.05 | 3,255 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2030 | 0.93 | 0.79 | 7.42 | 11.5 | 0.02 | 0.25 | 0.89 | 1.14 | 0.23 | 0.30 | 0.53 | — | 2,430 | 2,430 | 0.08 | 0.06 | 0.59 | 2,450 |
| 2031 | 0.13 | 1.61 | 0.91 | 1.59 | < 0.005 | 0.03 | 0.07 | 0.09 | 0.02 | 0.02 | 0.04 | — | 306 | 306 | 0.01 | 0.01 | 0.07 | 308 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2030 | 0.17 | 0.14 | 1.35 | 2.10 | < 0.005 | 0.05 | 0.16 | 0.21 | 0.04 | 0.06 | 0.10 | — | 402 | 402 | 0.01 | 0.01 | 0.10 | 406 |
| 2031 | 0.02 | 0.29 | 0.17 | 0.29 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | 0.01 | — | 50.7 | 50.7 | < 0.005 | < 0.005 | 0.01 | 51.0 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.76 | 3.55 | 0.69 | 6.74 | < 0.005 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 15.4 | 813 | 828 | 1.68 | 0.05 | 0.57 | 885 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.36 | 3.17 | 0.69 | 3.23 | < 0.005 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 15.4 | 803 | 818 | 1.69 | 0.05 | 0.57 | 877 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.42 | 2.24 | 0.41 | 2.65 | < 0.005 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 15.4 | 740 | 755 | 1.63 | 0.02 | 0.57 | 804 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.08 | 0.41 | 0.07 | 0.48 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 2.55 | 123 | 125 | 0.27 | < 0.005 | 0.09 | 133 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.33 | 1.31 | 0.31 | 2.32 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 78.3 | 78.3 | 0.05 | 0.03 | 0.00 | 88.6 |
| Area | 0.39 | 2.22 | 0.04 | 4.27 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 11.4 | 11.4 | < 0.005 | < 0.005 | — | 11.4 |
| Energy | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 709 | 709 | 0.07 | 0.01 | — | 713 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Total | 1.76 | 3.55 | 0.69 | 6.74 | < 0.005 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 15.4 | 813 | 828 | 1.68 | 0.05 | 0.57 | 885 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.32 | 1.29 | 0.34 | 3.08 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 79.8 | 79.8 | 0.06 | 0.03 | 0.00 | 91.4 |
| Area | 0.00 | 1.86 | 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 |
| Energy | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 709 | 709 | 0.07 | 0.01 | — | 713 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Total | 1.36 | 3.17 | 0.69 | 3.23 | < 0.005 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 15.4 | 803 | 818 | 1.69 | 0.05 | 0.57 | 877 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 0.19 | 0.18 | 0.05 | 0.40 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 11.3 | 11.3 | 0.01 | < 0.005 | 0.00 | 12.9 |
| Area | 0.19 | 2.04 | 0.02 | 2.11 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 5.61 | 5.61 | < 0.005 | < 0.005 | — | 5.63 |
| Energy | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 709 | 709 | 0.07 | 0.01 | — | 713 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Total | 0.42 | 2.24 | 0.41 | 2.65 | < 0.005 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 15.4 | 740 | 755 | 1.63 | 0.02 | 0.57 | 804 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.03 | 0.03 | 0.01 | 0.07 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 1.87 | 1.87 | < 0.005 | < 0.005 | 0.00 | 2.14 |
| Area | 0.03 | 0.37 | < 0.005 | 0.38 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 0.93 | 0.93 | < 0.005 | < 0.005 | — | 0.93 |
| Energy | 0.01 | < 0.005 | 0.06 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 117 | 117 | 0.01 | < 0.005 | — | 118 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.90 | 2.29 | 3.19 | 0.09 | < 0.005 | — | 6.18 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1.64 | 0.00 | 1.64 | 0.16 | 0.00 | — | 5.75 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Total | 0.08 | 0.41 | 0.07 | 0.48 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 2.55 | 123 | 125 | 0.27 | < 0.005 | 0.09 | 133 |

# 3. Construction Emissions Details

## 3.1. Demolition (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.72 | 0.72 | 17.3 | 18.2 | 0.03 | 0.79 | — | 0.79 | 0.71 | — | 0.71 | — | 3,426 | 3,426 | 0.14 | 0.03 | — | 3,438 |
| Demolition | — | — | — | — | — | — | 0.87 | 0.87 | — | 0.13 | 0.13 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.04 | 0.95 | 1.00 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 188 | 188 | 0.01 | < 0.005 | — | 188 |
| Demolition | — | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.17 | 0.18 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31.1 | 31.1 | < 0.005 | < 0.005 | — | 31.2 |
| Demolition | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.05 | 0.61 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 175 | 175 | < 0.005 | 0.01 | 0.01 | 177 |
| Vendor | 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 | 0.00 |
| Hauling | 0.03 | 0.02 | 1.21 | 0.33 | 0.01 | 0.01 | 0.08 | 0.09 | 0.01 | 0.03 | 0.04 | — | 959 | 959 | 0.02 | 0.15 | 0.04 | 1,004 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 9.67 | 9.67 | < 0.005 | < 0.005 | 0.01 | 9.80 |
| Vendor | 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 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.07 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 52.5 | 52.5 | < 0.005 | 0.01 | 0.04 | 55.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.60 | 1.60 | < 0.005 | < 0.005 | < 0.005 | 1.62 |
| Vendor | 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 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.69 | 8.69 | < 0.005 | < 0.005 | 0.01 | 9.11 |

## 3.3. Site Preparation (2030) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.90 | 0.90 | 24.0 | 28.3 | 0.05 | 0.94 | — | 0.94 | 0.84 | — | 0.84 | — | 5,296 | 5,296 | 0.21 | 0.04 | — | 5,314 |
| Dust From Material Movement | — | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.66 | 0.78 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 145 | 145 | 0.01 | < 0.005 | — | 146 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.12 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 24.0 | 24.0 | < 0.005 | < 0.005 | — | 24.1 |
| Dust From Material Movement | — | — | — | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.06 | 0.72 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 204 | 204 | < 0.005 | 0.01 | 0.01 | 207 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 5.64 | 5.64 | < 0.005 | < 0.005 | 0.01 | 5.72 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.93 | 0.93 | < 0.005 | < 0.005 | < 0.005 | 0.95 |
| Vendor | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 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 | 0.00 |

## 3.5. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.76 | 1.48 | 12.6 | 17.3 | 0.03 | 0.51 | — | 0.51 | 0.47 | — | 0.47 | — | 2,959 | 2,959 | 0.12 | 0.02 | — | 2,969 |
| Dust From Material Movement | — | — | — | — | — | — | 2.76 | 2.76 | — | 1.34 | 1.34 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.08 | 0.69 | 0.95 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 162 | 162 | 0.01 | < 0.005 | — | 163 |
| Dust From Material Movement | — | — | — | — | — | — | 0.15 | 0.15 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.01 | 0.13 | 0.17 | < 0.005 | 0.01 | — | 0.01 | < 0.005 | — | < 0.005 | — | 26.8 | 26.8 | < 0.005 | < 0.005 | — | 26.9 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.05 | 0.61 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 175 | 175 | < 0.005 | 0.01 | 0.01 | 177 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 9.67 | 9.67 | < 0.005 | < 0.005 | 0.01 | 9.80 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.60 | 1.60 | < 0.005 | < 0.005 | < 0.005 | 1.62 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.7. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12 | 0.94 | 8.39 | 12.9 | 0.02 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12 | 0.94 | 8.39 | 12.9 | 0.02 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64 | 0.54 | 4.80 | 7.36 | 0.01 | 0.15 | — | 0.15 | 0.14 | — | 0.14 | — | 1,370 | 1,370 | 0.06 | 0.01 | — | 1,374 |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.88 | 1.34 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 227 | 227 | 0.01 | < 0.005 | — | 228 |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.20 | 0.17 | 0.16 | 2.46 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | — | 660 | 660 | 0.01 | 0.03 | 1.74 | 669 |
| Vendor | 0.01 | 0.01 | 0.24 | 0.08 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 219 | 219 | < 0.005 | 0.03 | 0.38 | 229 |
| Hauling | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.17 | 0.19 | 2.21 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | — | 631 | 631 | 0.01 | 0.03 | 0.05 | 638 |
| Vendor | 0.01 | < 0.005 | 0.25 | 0.08 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 219 | 219 | < 0.005 | 0.03 | 0.01 | 229 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.11 | 0.09 | 0.11 | 1.27 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | — | 363 | 363 | < 0.005 | 0.01 | 0.43 | 368 |
| Vendor | < 0.005 | < 0.005 | 0.14 | 0.05 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 125 | 125 | < 0.005 | 0.02 | 0.09 | 131 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.23 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 60.1 | 60.1 | < 0.005 | < 0.005 | 0.07 | 60.9 |
| Vendor | < 0.005 | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 20.7 | 20.7 | < 0.005 | < 0.005 | 0.02 | 21.7 |
| Hauling | 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 | 0.00 |

## 3.9. Building Construction (2031) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.10 | 0.92 | 8.12 | 12.8 | 0.02 | 0.24 | — | 0.24 | 0.22 | — | 0.22 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.06 | 0.49 | 0.78 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 145 | 145 | 0.01 | < 0.005 | — | 146 |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.09 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 24.1 | 24.1 | < 0.005 | < 0.005 | — | 24.2 |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.16 | 0.17 | 2.07 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | — | 621 | 621 | 0.01 | 0.03 | 0.04 | 628 |
| Vendor | 0.01 | < 0.005 | 0.24 | 0.08 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 212 | 212 | < 0.005 | 0.03 | 0.01 | 222 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.13 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 37.9 | 37.9 | < 0.005 | < 0.005 | 0.04 | 38.4 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 12.9 | 12.9 | < 0.005 | < 0.005 | 0.01 | 13.4 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 6.28 | 6.28 | < 0.005 | < 0.005 | 0.01 | 6.36 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 2.13 | 2.13 | < 0.005 | < 0.005 | < 0.005 | 2.23 |
| Hauling | 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 | 0.00 |

## 3.11. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.75 | 0.63 | 6.13 | 9.88 | 0.01 | 0.21 | — | 0.21 | 0.19 | — | 0.19 | — | 1,511 | 1,511 | 0.06 | 0.01 | — | 1,516 |
| Paving | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.03 | 0.34 | 0.54 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 82.8 | 82.8 | < 0.005 | < 0.005 | — | 83.1 |
| Paving | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.06 | 0.10 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 13.7 | 13.7 | < 0.005 | < 0.005 | — | 13.8 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.04 | 0.05 | 0.57 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 172 | 172 | < 0.005 | 0.01 | 0.01 | 175 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 9.51 | 9.51 | < 0.005 | < 0.005 | 0.01 | 9.64 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.58 | 1.58 | < 0.005 | < 0.005 | < 0.005 | 1.60 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.13. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.78 | 1.10 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | — | 21.6 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.78 | 1.10 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | — | 21.6 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.05 | 0.08 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 9.15 | 9.15 | < 0.005 | < 0.005 | — | 9.18 |
| Architectural Coatings | — | 1.48 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.51 | 1.51 | < 0.005 | < 0.005 | — | 1.52 |
| Architectural Coatings | — | 0.27 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.03 | 0.03 | 0.46 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 130 | 130 | < 0.005 | < 0.005 | 0.31 | 130 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.03 | 0.03 | 0.41 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 124 | 124 | < 0.005 | 0.01 | 0.01 | 126 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 8.56 | 8.56 | < 0.005 | < 0.005 | 0.01 | 8.68 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.42 | 1.42 | < 0.005 | < 0.005 | < 0.005 | 1.44 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | 210 | 210 | 0.03 | < 0.005 | — | 212 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 62.6 | 62.6 | 0.01 | < 0.005 | — | 63.1 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 273 | 273 | 0.03 | < 0.005 | — | 275 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | 210 | 210 | 0.03 | < 0.005 | — | 212 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 62.6 | 62.6 | 0.01 | < 0.005 | — | 63.1 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 273 | 273 | 0.03 | < 0.005 | — | 275 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | 34.8 | 34.8 | < 0.005 | < 0.005 | — | 35.0 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 10.4 | 10.4 | < 0.005 | < 0.005 | — | 10.4 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 45.1 | 45.1 | 0.01 | < 0.005 | — | 45.5 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartme Low Rise | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 437 | 437 | 0.04 | < 0.005 | — | 438 |
| Parking Lot | 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 |
| Total | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 437 | 437 | 0.04 | < 0.005 | — | 438 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 437 | 437 | 0.04 | < 0.005 | — | 438 |
| Parking Lot | 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 |
| Total | 0.04 | 0.02 | 0.34 | 0.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 437 | 437 | 0.04 | < 0.005 | — | 438 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | 0.01 | < 0.005 | 0.06 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 72.3 | 72.3 | 0.01 | < 0.005 | — | 72.5 |
| Parking Lot | 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 |
| Total | 0.01 | < 0.005 | 0.06 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 72.3 | 72.3 | 0.01 | < 0.005 | — | 72.5 |

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 21.7 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hearths | 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 |
| Consumer Products | — | 1.71 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.39 | 0.37 | 0.04 | 4.27 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 11.4 | 11.4 | < 0.005 | < 0.005 | — | 11.4 |
| Total | 0.39 | 23.8 | 0.04 | 4.27 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 11.4 | 11.4 | < 0.005 | < 0.005 | — | 11.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 21.7 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 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 |
| Consumer Products | — | 1.71 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 0.00 | 23.4 | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 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 |
| Consumer Products | — | 0.31 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.03 | 0.03 | < 0.005 | 0.38 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.93 | 0.93 | < 0.005 | < 0.005 | — | 0.93 |
| Total | 0.03 | 0.64 | < 0.005 | 0.38 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 0.93 | 0.93 | < 0.005 | < 0.005 | — | 0.93 |

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 5.45 | 13.8 | 19.3 | 0.56 | 0.01 | — | 37.3 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | 0.90 | 2.29 | 3.19 | 0.09 | < 0.005 | — | 6.18 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.90 | 2.29 | 3.19 | 0.09 | < 0.005 | — | 6.18 |

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 9.93 | 0.00 | 9.93 | 0.99 | 0.00 | — | 34.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | 1.64 | 0.00 | 1.64 | 0.16 | 0.00 | — | 5.75 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.64 | 0.00 | 1.64 | 0.16 | 0.00 | — | 5.75 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.57 | 0.57 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Low Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Remove | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/1/2030 | 1/29/2030 | 5.00 | 20.0 | — |
| Site Preparation | Site Preparation | 1/30/2030 | 2/13/2030 | 5.00 | 10.0 | — |
| Grading | Grading | 2/14/2030 | 3/14/2030 | 5.00 | 20.0 | — |
| Building Construction | Building Construction | 3/15/2030 | 1/31/2031 | 5.00 | 230 | — |
| Paving | Paving | 2/1/2031 | 3/1/2031 | 5.00 | 20.0 | — |
| Architectural Coating | Architectural Coating | 3/2/2031 | 4/4/2031 | 5.00 | 25.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Tier 3 | 1.00 | 8.00 | 33.0 | 0.73 |
| Demolition | Excavators | Diesel | Tier 3 | 3.00 | 8.00 | 36.0 | 0.38 |
| Demolition | Rubber Tired Dozers | Diesel | Tier 3 | 2.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Rubber Tired Dozers | Diesel | Tier 3 | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Tier 3 | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Average | 1.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 8.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 7.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 3.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 7.00 | 84.0 | 0.37 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Building Construction | Welders | Diesel | Average | 1.00 | 8.00 | 46.0 | 0.45 |
| Paving | Pavers | Diesel | Average | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 15.0 | 18.5 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 10.2 | HHDT,MHDT |
| Demolition | Hauling | 15.7 | 20.0 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 18.5 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 10.2 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 15.0 | 18.5 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 10.2 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 54.0 | 18.5 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Building Construction | Vendor | 8.02 | 10.2 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 18.5 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10.2 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 10.8 | 18.5 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10.2 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 160,988 | 53,663 | 4,500 | 1,500 | 6,000 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 27,260 | — |
| Site Preparation | — | — | 15.0 | 0.00 | — |
| Grading | — | — | 20.0 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 2.30 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Apartments Low Rise | — | 0% |
| Parking Lot | 2.30 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2030 | 0.00 | 261 | 0.03 | < 0.005 |
| 2031 | 0.00 | 261 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 506 | 101 | 101 | 26,399 | 0.00 | 0.00 | 0.00 | 0.00 |

# 5.10. Operational Area Sources

## 5.10.1. Hearths

### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Apartments Low Rise | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 0 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 0 |
| No Fireplaces | 75 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |

## 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 160987.5 | 53,663 | 4,500 | 1,500 | 6,000 |

## 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Apartments Low Rise | 293,878 | 261 | 0.0330 | 0.0040 | 1,362,885 |
| Parking Lot | 87,600 | 261 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Apartments Low Rise | 2,842,757 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Apartments Low Rise | 18.4 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Apartments Low Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Apartments Low Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|
| — | — |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 14.1 | annual days of extreme heat |
| Extreme Precipitation | 5.10 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 36.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 1 | 1 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| Air Quality | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 59.9 |
| AQ-PM | 39.5 |
| AQ-DPM | 31.1 |
| Drinking Water | 64.2 |
| Lead Risk Housing | 15.2 |
| Pesticides | 84.3 |
| Toxic Releases | 19.4 |
| Traffic | 67.7 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 2.72 |
| Haz Waste Facilities/Generators | 55.4 |
| Impaired Water Bodies | 98.1 |
| Solid Waste | 72.4 |

| | |
|---|---|
| Sensitive Population | — |
| Asthma | 19.6 |
| Cardio-vascular | 45.9 |
| Low Birth Weights | 23.7 |
| Socioeconomic Factor Indicators | — |
| Education | 21.4 |
| Housing | 3.89 |
| Linguistic | 23.8 |
| Poverty | 7.83 |
| Unemployment | 22.6 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 84.46041319 |
| Employed | 90.79943539 |
| Education | — |
| Bachelor's or higher | 77.58244578 |
| High school enrollment | 100 |
| Preschool enrollment | 84.21660465 |
| Transportation | — |
| Auto Access | 38.0341332 |
| Active commuting | 21.85294495 |
| Social | — |
| 2-parent households | 97.9468754 |
| Voting | 87.27062749 |

| | |
|---|---|
| Neighborhood | — |
| Alcohol availability | 82.11215193 |
| Park access | 33.28628256 |
| Retail density | 16.52765302 |
| Supermarket access | 30.23225972 |
| Tree canopy | 54.83125882 |
| Housing | — |
| Homeownership | 86.71885025 |
| Housing habitability | 73.55318876 |
| Low-inc homeowner severe housing cost burden | 97.6774028 |
| Low-inc renter severe housing cost burden | 68.90799435 |
| Uncrowded housing | 35.53188759 |
| Health Outcomes | — |
| Insured adults | 81.62453484 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 71.7 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 77.2 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 85.5 |
| Heart Attack ER Admissions | 55.1 |
| Mental Health Not Good | 0.0 |

| | |
|---|---|
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 85.8 |
| SLR Inundation Area | 0.0 |
| Children | 51.6 |
| Elderly | 40.9 |
| English Speaking | 47.3 |
| Foreign-born | 51.7 |
| Outdoor Workers | 63.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 81.9 |
| Traffic Density | 59.7 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 33.0 |
| Other Decision Support | — |
| 2016 Voting | 89.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0 |
| Healthy Places Index Score for Project Location (b) | 92.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Construction: Off-Road Equipment | MM |
| Construction: Architectural Coatings | MM |
| Construction: Construction Phases | MM |

# Phase 4.0 Moorpark v3 Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Phase 4.0 Moorpark v3 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 10.4 |
| Location | Moorpark, CA 93021, USA |
| County | Ventura |
| City | Moorpark |
| Air District | Ventura County APCD |
| Air Basin | South Central Coast |
| TAZ | 3524 |
| EDFZ | 8 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 22.0 | 1000sqft | 0.51 | 22,000 | 5,000 | — | — | — |
| Parking Lot | 48.0 | 1000sqft | 1.10 | 0.00 | 0.00 | — | — | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Other Asphalt Surfaces | 56.0 | 1000sqft | 1.29 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.11 | 0.93 | 7.78 | 11.6 | 0.02 | 0.17 | 0.12 | 0.29 | 0.15 | 0.03 | 0.18 | — | 2,364 | 2,364 | 0.09 | 0.03 | 0.20 | 2,376 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.34 | 14.6 | 9.17 | 13.0 | 0.03 | 0.33 | 2.89 | 3.23 | 0.31 | 1.37 | 1.67 | — | 2,797 | 2,797 | 0.11 | 0.03 | 0.01 | 2,806 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.79 | 0.68 | 5.51 | 8.20 | 0.02 | 0.13 | 0.14 | 0.27 | 0.12 | 0.04 | 0.16 | — | 1,668 | 1,668 | 0.06 | 0.02 | 0.06 | 1,676 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.14 | 0.12 | 1.00 | 1.50 | < 0.005 | 0.02 | 0.03 | 0.05 | 0.02 | 0.01 | 0.03 | — | 276 | 276 | 0.01 | < 0.005 | 0.01 | 277 |

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2035 | 1.11 | 0.93 | 7.78 | 11.6 | 0.02 | 0.17 | 0.12 | 0.29 | 0.15 | 0.03 | 0.18 | — | 2,364 | 2,364 | 0.09 | 0.03 | 0.20 | 2,376 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2035 | 1.34 | 1.16 | 9.17 | 13.0 | 0.03 | 0.33 | 2.89 | 3.23 | 0.31 | 1.37 | 1.67 | — | 2,797 | 2,797 | 0.11 | 0.03 | 0.01 | 2,806 |
| 2036 | 0.62 | 14.6 | 4.89 | 8.50 | 0.01 | 0.12 | 0.20 | 0.31 | 0.11 | 0.05 | 0.15 | — | 1,405 | 1,405 | 0.05 | 0.01 | 0.01 | 1,410 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2035 | 0.79 | 0.68 | 5.51 | 8.20 | 0.02 | 0.13 | 0.14 | 0.27 | 0.12 | 0.04 | 0.16 | — | 1,668 | 1,668 | 0.06 | 0.02 | 0.06 | 1,676 |
| 2036 | 0.01 | 0.41 | 0.04 | 0.06 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 9.58 | 9.58 | < 0.005 | < 0.005 | < 0.005 | 9.61 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2035 | 0.14 | 0.12 | 1.00 | 1.50 | < 0.005 | 0.02 | 0.03 | 0.05 | 0.02 | 0.01 | 0.03 | — | 276 | 276 | 0.01 | < 0.005 | 0.01 | 277 |
| 2036 | < 0.005 | 0.07 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 1.59 | 1.59 | < 0.005 | < 0.005 | < 0.005 | 1.59 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.31 | 1.78 | 0.44 | 3.03 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 76.0 | 593 | 669 | 7.71 | 0.05 | 0.05 | 878 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.14 | 1.63 | 0.46 | 2.71 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 76.0 | 591 | 667 | 7.72 | 0.06 | 0.05 | 877 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 0.30 | 0.80 | 0.21 | 1.02 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 76.0 | 532 | 608 | 7.68 | 0.03 | 0.05 | 809 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.05 | 0.15 | 0.04 | 0.19 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | 12.6 | 88.0 | 101 | 1.27 | 0.01 | 0.01 | 134 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.12 | 1.10 | 0.27 | 1.94 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 72.8 | 72.8 | 0.04 | 0.03 | 0.00 | 82.1 |
| Area | 0.17 | 0.68 | 0.01 | 0.96 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.93 | 3.93 | < 0.005 | < 0.005 | — | 3.95 |
| Energy | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 495 | 495 | 0.06 | 0.01 | — | 498 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | 1.31 | 1.78 | 0.44 | 3.03 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 76.0 | 593 | 669 | 7.71 | 0.05 | 0.05 | 878 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.12 | 1.10 | 0.31 | 2.57 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 74.1 | 74.1 | 0.05 | 0.03 | 0.00 | 84.6 |
| Area | — | 0.52 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 495 | 495 | 0.06 | 0.01 | — | 498 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | 1.14 | 1.63 | 0.46 | 2.71 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 76.0 | 591 | 667 | 7.72 | 0.06 | 0.05 | 877 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.20 | 0.20 | 0.05 | 0.42 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 13.3 | 13.3 | 0.01 | 0.01 | 0.00 | 15.1 |
| Area | 0.08 | 0.60 | < 0.005 | 0.47 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.94 | 1.94 | < 0.005 | < 0.005 | — | 1.95 |
| Energy | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 495 | 495 | 0.06 | 0.01 | — | 498 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | 0.30 | 0.80 | 0.21 | 1.02 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 76.0 | 532 | 608 | 7.68 | 0.03 | 0.05 | 809 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.04 | 0.04 | 0.01 | 0.08 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | — | 2.20 | 2.20 | < 0.005 | < 0.005 | 0.00 | 2.50 |
| Area | 0.02 | 0.11 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | — | 0.32 |
| Energy | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 81.9 | 81.9 | 0.01 | < 0.005 | — | 82.4 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.39 | 3.56 | 4.95 | 0.14 | < 0.005 | — | 9.54 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 11.2 | 0.00 | 11.2 | 1.12 | 0.00 | — | 39.1 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | 0.05 | 0.15 | 0.04 | 0.19 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | 12.6 | 88.0 | 101 | 1.27 | 0.01 | 0.01 | 134 |

# 3. Construction Emissions Details

## 3.1. Demolition (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.30 | 1.09 | 9.15 | 12.6 | 0.02 | 0.28 | — | 0.28 | 0.26 | — | 0.26 | — | 2,493 | 2,493 | 0.10 | 0.02 | — | 2,501 |
| Demolition | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.06 | 0.50 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 137 | 137 | 0.01 | < 0.005 | — | 137 |
| Demolition | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.09 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 22.6 | 22.6 | < 0.005 | < 0.005 | — | 22.7 |
| Demolition | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.03 | 0.38 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 136 | 136 | < 0.005 | < 0.005 | 0.01 | 137 |
| Vendor | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 7.52 | 7.52 | < 0.005 | < 0.005 | < 0.005 | 7.54 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.24 | 1.24 | < 0.005 | < 0.005 | < 0.005 | 1.25 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.3. Site Preparation (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.03 | 0.87 | 5.66 | 10.3 | 0.03 | 0.23 | — | 0.23 | 0.21 | — | 0.21 | — | 2,715 | 2,715 | 0.11 | 0.02 | — | 2,724 |
| Dust From Material Movement | — | — | — | — | — | — | 0.62 | 0.62 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.01 | 0.01 | 0.05 | 0.08 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 22.3 | 22.3 | < 0.005 | < 0.005 | — | 22.4 |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.69 | 3.69 | < 0.005 | < 0.005 | — | 3.71 |
| Dust From Material Movement | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.23 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 81.7 | 81.7 | < 0.005 | < 0.005 | < 0.005 | 81.9 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.68 | 0.68 | < 0.005 | < 0.005 | < 0.005 | 0.68 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.11 | 0.11 | < 0.005 | < 0.005 | < 0.005 | 0.11 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.5. Grading (2035) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.30 | 1.09 | 8.27 | 12.1 | 0.02 | 0.33 | — | 0.33 | 0.31 | — | 0.31 | — | 2,455 | 2,455 | 0.10 | 0.02 | — | 2,463 |
| Dust From Material Movement | — | — | — | — | — | — | 2.76 | 2.76 | — | 1.34 | 1.34 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.14 | 0.20 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 40.3 | 40.3 | < 0.005 | < 0.005 | — | 40.5 |
| Dust From Material Movement | — | — | — | — | — | — | 0.05 | 0.05 | — | 0.02 | 0.02 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 6.68 | 6.68 | < 0.005 | < 0.005 | — | 6.70 |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.02 | 0.30 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 109 | 109 | < 0.005 | < 0.005 | < 0.005 | 109 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 1.80 | 1.80 | < 0.005 | < 0.005 | < 0.005 | 1.81 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.30 | 0.30 | < 0.005 | < 0.005 | < 0.005 | 0.30 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.7. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.09 | 0.91 | 7.68 | 11.3 | 0.02 | 0.16 | — | 0.16 | 0.15 | — | 0.15 | — | 2,201 | 2,201 | 0.09 | 0.02 | — | 2,209 |
| Onsite truck | 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.09 | 0.91 | 7.68 | 11.3 | 0.02 | 0.16 | — | 0.16 | 0.15 | — | 0.15 | — | 2,201 | 2,201 | 0.09 | 0.02 | — | 2,209 |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.66 | 0.55 | 4.63 | 6.84 | 0.01 | 0.10 | — | 0.10 | 0.09 | — | 0.09 | — | 1,327 | 1,327 | 0.05 | 0.01 | — | 1,331 |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.85 | 1.25 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 220 | 220 | 0.01 | < 0.005 | — | 220 |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.01 | 0.24 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 80.2 | 80.2 | < 0.005 | < 0.005 | 0.12 | 80.5 |
| Vendor | < 0.005 | < 0.005 | 0.09 | 0.03 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 82.8 | 82.8 | < 0.005 | 0.01 | 0.08 | 86.7 |
| Hauling | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.21 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 76.7 | 76.7 | < 0.005 | < 0.005 | < 0.005 | 76.9 |
| Vendor | < 0.005 | < 0.005 | 0.09 | 0.03 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 82.9 | 82.9 | < 0.005 | 0.01 | < 0.005 | 86.7 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.13 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 46.6 | 46.6 | < 0.005 | < 0.005 | 0.03 | 46.7 |
| Vendor | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 50.0 | 50.0 | < 0.005 | 0.01 | 0.02 | 52.3 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 7.71 | 7.71 | < 0.005 | < 0.005 | 0.01 | 7.73 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.27 | 8.27 | < 0.005 | < 0.005 | < 0.005 | 8.66 |
| Hauling | 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 | 0.00 |

## 3.9. Paving (2035) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.59 | 0.50 | 4.93 | 8.08 | 0.01 | 0.13 | — | 0.13 | 0.12 | — | 0.12 | — | 1,243 | 1,243 | 0.05 | 0.01 | — | 1,248 |
| Paving | — | 0.63 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.01 | 0.13 | 0.21 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 31.6 | 31.6 | < 0.005 | < 0.005 | — | 31.7 |
| Paving | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 5.24 | 5.24 | < 0.005 | < 0.005 | — | 5.26 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.03 | 0.46 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 163 | 163 | < 0.005 | < 0.005 | 0.01 | 164 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 4.19 | 4.19 | < 0.005 | < 0.005 | < 0.005 | 4.20 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.69 | 0.69 | < 0.005 | < 0.005 | < 0.005 | 0.70 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.11. Paving (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.58 | 0.49 | 4.86 | 8.07 | 0.01 | 0.12 | — | 0.12 | 0.11 | — | 0.11 | — | 1,243 | 1,243 | 0.05 | 0.01 | — | 1,248 |
| Paving | — | 0.63 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 4.87 | 4.87 | < 0.005 | < 0.005 | — | 4.88 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.81 | 0.81 | < 0.005 | < 0.005 | — | 0.81 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.03 | 0.43 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | — | 162 | 162 | < 0.005 | < 0.005 | 0.01 | 162 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.64 | 0.64 | < 0.005 | < 0.005 | < 0.005 | 0.64 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.11 | 0.11 | < 0.005 | < 0.005 | < 0.005 | 0.11 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

## 3.13. Architectural Coating (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.11 | 0.09 | 0.75 | 1.10 | < 0.005 | 0.01 | — | 0.01 | < 0.005 | — | < 0.005 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | — | 14.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.66 | 3.66 | < 0.005 | < 0.005 | — | 3.67 |
| Architectural Coatings | — | 0.40 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.61 | 0.61 | < 0.005 | < 0.005 | — | 0.61 |
| Architectural Coatings | — | 0.07 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 15.2 | 15.2 | < 0.005 | < 0.005 | < 0.005 | 15.2 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.42 | 0.42 | < 0.005 | < 0.005 | < 0.005 | 0.42 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | 0.00 | 0.00 | — | 0.07 | 0.07 | < 0.005 | < 0.005 | < 0.005 | 0.07 |
| Vendor | 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 | 0.00 |
| Hauling | 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 | 0.00 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | 278 | 278 | 0.04 | < 0.005 | — | 280 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 30.0 | 30.0 | < 0.005 | < 0.005 | — | 30.3 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 308 | 308 | 0.04 | < 0.005 | — | 310 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | 278 | 278 | 0.04 | < 0.005 | — | 280 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 30.0 | 30.0 | < 0.005 | < 0.005 | — | 30.3 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 308 | 308 | 0.04 | < 0.005 | — | 310 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | 46.0 | 46.0 | 0.01 | < 0.005 | — | 46.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 4.97 | 4.97 | < 0.005 | < 0.005 | — | 5.01 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 51.0 | 51.0 | 0.01 | < 0.005 | — | 51.3 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 187 | 187 | 0.02 | < 0.005 | — | 188 |
| Parking Lot | 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 |
| Other Asphalt Surfaces | 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 |
| Total | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 187 | 187 | 0.02 | < 0.005 | — | 188 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 187 | 187 | 0.02 | < 0.005 | — | 188 |
| Parking Lot | 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 |
| Other Asphalt Surfaces | 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 |
| Total | 0.02 | 0.01 | 0.16 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 187 | 187 | 0.02 | < 0.005 | — | 188 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 31.0 | 31.0 | < 0.005 | < 0.005 | — | 31.1 |
| Parking Lot | 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 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Asphalt Surfaces | 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 |
| Total | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 31.0 | 31.0 | < 0.005 | < 0.005 | — | 31.1 |

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.48 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.17 | 0.16 | 0.01 | 0.96 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.93 | 3.93 | < 0.005 | < 0.005 | — | 3.95 |
| Total | 0.17 | 0.68 | 0.01 | 0.96 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.93 | 3.93 | < 0.005 | < 0.005 | — | 3.95 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 14.6 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.48 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | 15.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.08 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.09 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.02 | 0.01 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | — | 0.32 |
| Total | 0.02 | 0.18 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | — | 0.32 |

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 8.37 | 21.5 | 29.9 | 0.86 | 0.02 | — | 57.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 1.39 | 3.56 | 4.95 | 0.14 | < 0.005 | — | 9.54 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.39 | 3.56 | 4.95 | 0.14 | < 0.005 | — | 9.54 |

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Governm ent (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 67.6 | 0.00 | 67.6 | 6.75 | 0.00 | — | 236 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Governm ent (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 11.2 | 0.00 | 11.2 | 1.12 | 0.00 | — | 39.1 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 11.2 | 0.00 | 11.2 | 1.12 | 0.00 | — | 39.1 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipme Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Remove | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/1/2035 | 1/29/2035 | 5.00 | 20.0 | — |
| Site Preparation | Site Preparation | 1/30/2035 | 2/3/2035 | 5.00 | 3.00 | — |
| Grading | Grading | 2/4/2035 | 2/12/2035 | 5.00 | 6.00 | — |
| Building Construction | Building Construction | 2/13/2035 | 12/18/2035 | 5.00 | 220 | — |
| Paving | Paving | 12/19/2035 | 1/2/2036 | 5.00 | 10.0 | — |
| Architectural Coating | Architectural Coating | 1/3/2036 | 1/17/2036 | 5.00 | 10.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.00 | 8.00 | 33.0 | 0.73 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 8.00 | 84.0 | 0.37 |
| Site Preparation | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Site Preparation | Scrapers | Diesel | Average | 1.00 | 8.00 | 423 | 0.48 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 7.00 | 84.0 | 0.37 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 8.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 2.00 | 7.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 6.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Average | 3.00 | 8.00 | 46.0 | 0.45 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 1.00 | 8.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Average | 1.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 1.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 18.5 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 10.2 | HHDT,MHDT |
| Demolition | Hauling | 0.00 | 20.0 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 7.50 | 18.5 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 10.2 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 10.0 | 18.5 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Grading | Vendor | — | 10.2 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 7.04 | 18.5 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 3.61 | 10.2 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 18.5 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10.2 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 1.41 | 18.5 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10.2 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 0.00 | 0.00 | 37,680 | 12,560 | 6,240 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 0.00 | — |
| Site Preparation | — | — | 4.50 | 0.00 | — |
| Grading | — | — | 6.00 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 2.39 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Government (Civic Center) | 0.00 | 0% |
| Parking Lot | 1.10 | 100% |
| Other Asphalt Surfaces | 1.29 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2035 | 0.00 | 261 | 0.03 | < 0.005 |
| 2036 | 0.00 | 532 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 497 | 99.0 | 99.0 | 32,745 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 0 | 0.00 | 37,680 | 12,560 | 6,240 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 388,694 | 261 | 0.0330 | 0.0040 | 584,123 |
| Parking Lot | 42,048 | 261 | 0.0330 | 0.0040 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 4,370,513 | 64,638 |
| Parking Lot | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 125 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|
| — | — |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 14.1 | annual days of extreme heat |
| Extreme Precipitation | 5.10 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 36.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |
| Air Quality | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 1 | 1 | 1 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| Air Quality | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 59.9 |
| AQ-PM | 39.5 |
| AQ-DPM | 31.1 |
| Drinking Water | 64.2 |
| Lead Risk Housing | 15.2 |
| Pesticides | 84.3 |
| Toxic Releases | 19.4 |
| Traffic | 67.7 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 2.72 |
| Haz Waste Facilities/Generators | 55.4 |
| Impaired Water Bodies | 98.1 |
| Solid Waste | 72.4 |

| | |
|---|---|
| Sensitive Population | — |
| Asthma | 19.6 |
| Cardio-vascular | 45.9 |
| Low Birth Weights | 23.7 |
| Socioeconomic Factor Indicators | — |
| Education | 21.4 |
| Housing | 3.89 |
| Linguistic | 23.8 |
| Poverty | 7.83 |
| Unemployment | 22.6 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 84.46041319 |
| Employed | 90.79943539 |
| Education | — |
| Bachelor's or higher | 77.58244578 |
| High school enrollment | 100 |
| Preschool enrollment | 84.21660465 |
| Transportation | — |
| Auto Access | 38.0341332 |
| Active commuting | 21.85294495 |
| Social | — |
| 2-parent households | 97.9468754 |
| Voting | 87.27062749 |

| | |
|---|---|
| Neighborhood | — |
| Alcohol availability | 82.11215193 |
| Park access | 33.28628256 |
| Retail density | 16.52765302 |
| Supermarket access | 30.23225972 |
| Tree canopy | 54.83125882 |
| Housing | — |
| Homeownership | 86.71885025 |
| Housing habitability | 73.55318876 |
| Low-inc homeowner severe housing cost burden | 97.6774028 |
| Low-inc renter severe housing cost burden | 68.90799435 |
| Uncrowded housing | 35.53188759 |
| Health Outcomes | — |
| Insured adults | 81.62453484 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 71.7 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 77.2 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 85.5 |
| Heart Attack ER Admissions | 55.1 |
| Mental Health Not Good | 0.0 |

| | |
|---|---|
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 85.8 |
| SLR Inundation Area | 0.0 |
| Children | 51.6 |
| Elderly | 40.9 |
| English Speaking | 47.3 |
| Foreign-born | 51.7 |
| Outdoor Workers | 63.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 81.9 |
| Traffic Density | 59.7 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 33.0 |
| Other Decision Support | — |
| 2016 Voting | 89.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0 |
| Healthy Places Index Score for Project Location (b) | 92.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

# 8. User Changes to Default Data

# APPENDIX D

# HISTORICAL RESOURCE ASSESSMENT REPORT

# Historical Resource Assessment Report

## Civic Center Master Plan Project, Moorpark, California

**August 2022**

**Prepared For:**
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## Appendix

A. Civic Center Master Plan Site Plan

# Executive Summary

South Environmental was retained to complete a Historical Resource Assessment Report for the Civic Center Master Plan Project located in the City of Moorpark in Ventura County, California. This study includes the results of a literature review, pedestrian survey of the project site by a qualified architectural historian; building development and archival research; and an assessment of potential impacts to historic built environment resources under California Environmental Quality Act (CEQA) Guidelines § 15064.5 for historical resources.

No historic built environment resources over 45 years old were identified within the project site as a result of the background research and pedestrian field survey. One historical resource was identified directly adjacent to the project site: the CRHR-listed Tanner Corner building located at 601 Moorpark Avenue. Although the project does not propose any changes or direct impacts to this resource that would impair its major character-defining features, the building's proximity to proposed demolition and construction activities is considered a potentially significant impact that requires further consideration.

Implementation of recommended mitigation measures 1 and 2 (Section 6) would provide an appropriate level of protection for the Tanner Corner building and reduce impacts to historical resources to a less than significant level. These pre-construction measures include 1) completion of a groundborne vibration analysis in consideration of the building's type and all proposed construction equipment that will be used in the vicinity, and 2) development of a protection plan for the building during demolition and construction activities.

# 1. Introduction

South Environmental was retained to complete a Historical Resource Assessment Report for the Civic Center Master Plan Project located in the City of Moorpark in Ventura County, California. This study includes the results of a literature review, pedestrian survey of the project site by a qualified architectural historian; building development and archival research; and an assessment of potential impacts to historic built environment resources under California Environmental Quality Act (CEQA) Guidelines § 15064.5 for historical resources.

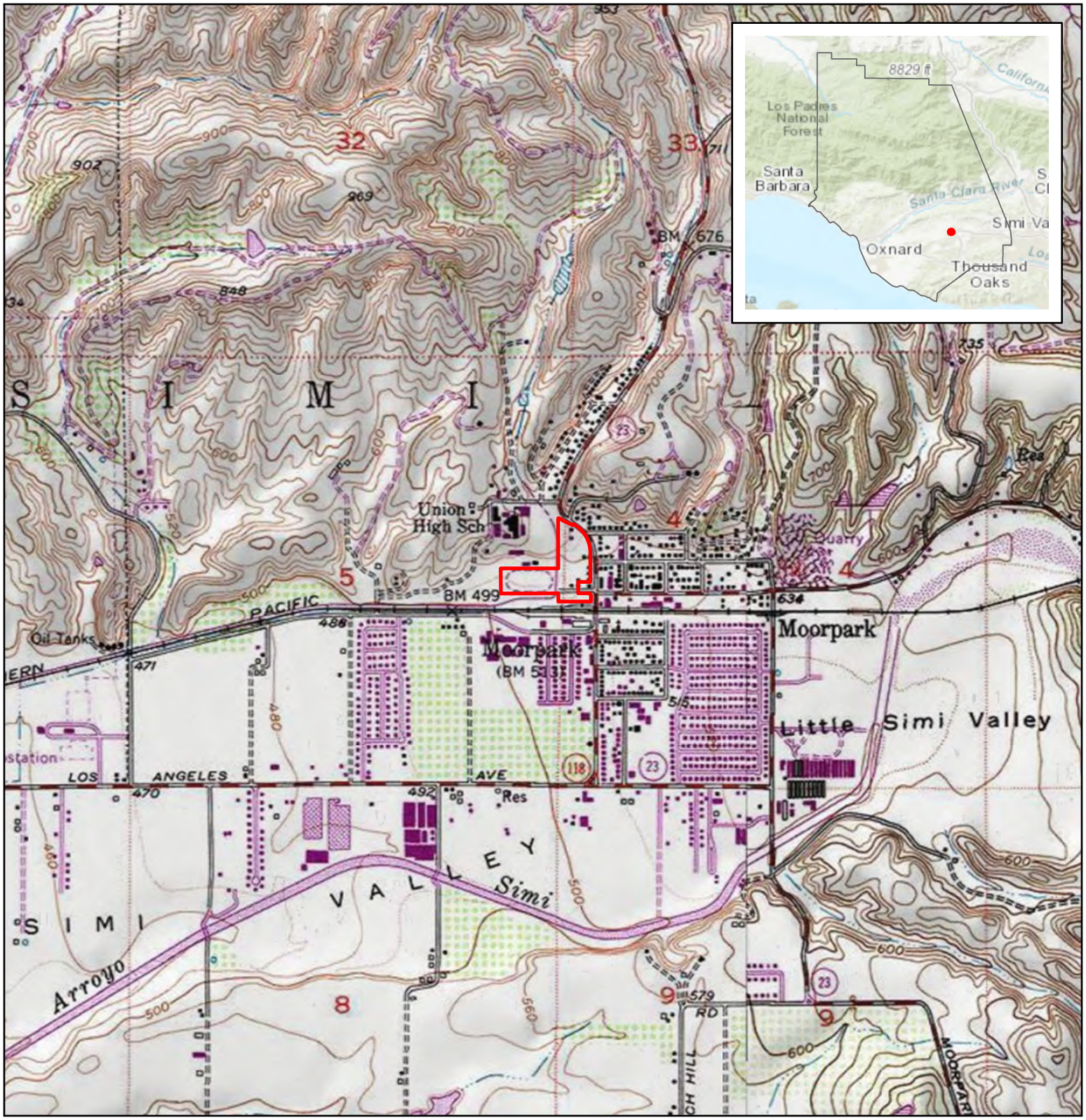
## Project Description

The City of Moorpark is the lead agency and will prepare an Environmental Impact Report (EIR) for the Civic Center Master Plan Project (Appendix A). The project would consist of the following phased development of a new City Civic Center within the Project site:

- During Phase 1, a new 18,000 square foot (sf) library with outdoor plaza would be constructed. The existing city hall would be re-purposed as 5,085 sf of office space, and the existing community center would remain as an active adult center. The existing library would be removed at the end of this phase once the library is moved to the new facility.
- During Phase 2, the west commercial site would be developed with approximately 13,000 sf of commercial uses, which would also include the development of a public park.
- During Phase 3, the north site residential area would be developed with approximately 75 units at 25 du/acre. Phase 3 would include the removal of the existing city hall and community center/active adult center buildings.
- During Phase 4, a new 22,000 sf city hall and a mercado/market would be constructed.

## Project Location

The project site encompasses approximately 12.5 acres in the central, downtown area of the City of Moorpark in Ventura County, California. The project site is located west of Moorpark Avenue/Walnut Canyon Road (State Route [SR] 23) (Figure 1, Project Location). Portions of the project site are located on the north and south sides of West High Street (Figure 2, Project Site Detail). The project site currently contains a mix of land uses associated with the existing Civic Center, including city hall, a community center/active adult center, a city library, portable structures, parking areas, and vacant undeveloped areas within the western portion of the project site.




Source: ESRI USA Topo Maps and World Topo Map 2022

Civic Center Master Plan Project

# Figure 1. Project Location Map

Project Site

0 1,000 2,000 Feet

Scale: 1:24,000

N

Project Site is within the City of Moorpark, California, in Ventura County on the USGS Moorpark 7.5-minute quadrangle map in Sections 4 and 5 of Township 02 North and Range 19 West

Center Coordinate (Decimal Degrees):
Latitude: 34.2857137N, Longitude: -118.8834995W

SOUTH ENVIRONMENTAL

Source: ESRI USA Topo Maps and World Topo Map 2022

Civic Center Master Plan Project

# Figure 2. Project Site Detail

Parcel Boundary

Project Site

0 125 250 Feet

N

Scale: 1:2,500

SOUTH ENVIRONMENTAL

# 2. Regulatory Framework

## Federal

### National Register of Historic Places

The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, "How to Apply the National Register Criteria," as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1990). NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for

eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration to be considered for listing.

# State

## California Register of Historical Resources

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code Section 5020.1(j)). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code Section 5024.1(a)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to California Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

(2) Is associated with the lives of persons important in our past.

(3) 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.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

## California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- California Public Resources Code Section 21083.2(g) defines "unique archaeological resource."
- California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of an historical resource.
- California Public Resources Code Section 21074(a) defines "tribal cultural resources."
- California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); California Public Resources Code

Section 5020.1(q)). In turn, CEQA Guidelines section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

# Local

## City of Moorpark

### General Plan Land Use Element

The focus of the *Moorpark General Plan Land Use Element* (May 1992, as amended) is on goals and policies for land use development, including population and building densities and intensities for property. Land use categories are used in the Land Use Element to depict the general distribution, location, and extent of public and private use of land. In accomplishing this primary purpose, the Land Use Element fulfills the requirements of Section 65302(a) of the *California Government Code,* which establishes it as a mandated element of a general plan.

### Moorpark Downtown Specific Plan

The *Moorpark Downtown Specific Plan* (October 1998, as amended) promotes the revitalization of the City's downtown area. This Specific Plan encompasses the areas along Moorpark Avenue, High Street, Charles Street, Everett Street, and a portion of Spring Road, within the City's historic

core. This area is developed with older commercial, industrial, public, and residential land uses. The Specific Plan promotes commercial development, economic development and employment through commercial retail, service, and civic uses that would create a business core in the City; be compatible with adjacent civic center, industrial, and residential uses; and create jobs for local residents. In addition, design guidelines, landscape guidelines, and site development standards for each land use category, maintenance and renovation guidelines, circulation and roadway improvements, and other infrastructure and service improvements are provided to guide development within the downtown area and to help create a unified and revitalized downtown.

## Municipal Code

City of Moorpark Municipal Code

Chapter 15.36 of the Moorpark Municipal Code (1994) addresses historic preservation. As set forth in Chapter 15.36, its purpose is to provide for the identification, protection, enhancement, perpetuation and use of historic landmarks within the city that reflect special elements of the city's historical heritage and to promote the general welfare by:

A. Encouraging public knowledge, understanding, and appreciation of the city's past;

B. Fostering civic pride in the beauty and personality of the city and in the accomplishments of the city's past;

C. Safeguarding the heritage of the city by protecting landmarks which reflect the city's history;

D. Protecting and enhancing property values within the city and increasing economic and financial benefits to the city and its inhabitants;

E. Identifying as early as possible and resolving conflicts between the preservation of historical landmarks and alternative land uses;

F. Preserving historic building materials through maintenance and restoration of existing historical landmarks;

G. Taking whatever steps are reasonable and necessary to safeguard the property rights of the owners whose building or structure is declared to be a landmark;

H. Promoting the use of landmarks for the education and enjoyment of the people of the city; and

I. Promoting awareness of the economic benefits of historic preservation.

As also described in Chapter 15.36 Municipal Code, the City can designate as a landmark, a building, site, tree, or structure which has significant historical significance which meets one or more of the following criteria:

1. It is associated with persons or events significant in local, State, or national history.
2. It reflects or exemplifies a particular period of national, State, or local history.
3. It embodies the distinctive characteristics of a type, style, or period of architecture or of a method of construction.
4. It is strongly identified with a person or persons who significantly contributed to the culture, history, or development of the area.
5. It is one of the few remaining examples in the area possessing distinguishing characteristics of an architectural type of specimen.
6. It is a notable work of an architect or master builder whose individual work has significantly influenced the development of the area.
7. It embodies elements of architectural design, detail, materials, or craftsmanship that represents a significant architectural innovation.
8. It has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community, or the area.
9. It has unique design or detailing.
10. It is a particularly good example of a period of style.
11. It contributes to the historical or scenic heritage or historical or scenic properties of the area (to include, but not limited to landscaping, light standards, trees, curbing, and signs).

# 3. Research and Field Methodology

## Background Research Conducted

Background research was completed to establish a thorough and accurate historic context, and to confirm the building development history of the project site and surrounding area. The following provides an overview of all background research completed as part of the current study.

### CHRIS Records Search

A California Historical Resources Information System (CHRIS) records search of the project site and a one-half mile search radius was requested by Psomas and completed by staff at the South Central Coastal Information Center (SCCIC) on May 11, 2022. The records search results indicate that one previously recorded historical resource is located within the project site: the Tanner Corner building (P-56-152817) located at 601 Moorpark Avenue on the northwest corner of Moorpark Avenue and High Street. The Tanner Corner building was nominated for listing in the CRHR by its owners in March 2000 and was accepted for listing in the CRHR on November 3, 2000:[1]

> The State Historical Resources Commission had approved its listing as a significant resource under criteria 1, 2, and 3, for the period 1913-1953. Under criteria 1, the building is significant because of its association with the events and patterns of development of Moorpark, and for it being the only surviving commercial building from the early days of Moorpark. Under criteria 2, Tanner Corner building is significant for its association with Ira G. Tanner, a resident of Moorpark who contributed greatly to the community's development. The Tanner Corner building is a significant example of commercial architecture and distinctive design that have made it a focal landmark in the town, making it significant under criteria 3. The Tanner Corner building has also retained a high degree of architectural integrity allowing it to convey its association with the history of Moorpark from 1913 to 1953.

One additional resource, Fire Station 42 (P-56-153133), is located within the one-half mile records search radius but is outside the proposed project site. The resource is the former location of a

[1] Daly, *Draft Historic Resources Assessment Report of Tanner Corner Building*, 16

garage that housed Moorpark's first fire truck. The garage housed the fire truck from circa 1913 to 1942. It was demolished sometime between 2006 and 2011.[2]

## Historical Newspaper Search

South Environmental reviewed historical newspapers covering the Ventura County region to better understand the development of the project site and surrounding areas. Such newspapers included the Los Angeles Times and Ventura County Star.

## Historical Aerial Photographs

Historic aerial photographs of the project site were available from Nationwide Environmental Title Research LLC[3] maps for the years 1947, 1969, 1978, 1980, 1985, 1994, 2002, 2005, 2009, 2010, 2012, 2014, 2016, and 2018 and from the University of California, Santa Barbara, FrameFinder Maps[4] for the years 1938, 1945, and 1961. These photographs were reviewed to assess changes to the subject property and surrounding neighborhood overtime.

# Field Methods

Senior Architectural Historian, Samantha Murray, MA, conducted a pedestrian survey of the project site on May 27, 2022. The survey entailed walking the project site and documenting existing buildings, structures, and viewsheds with detailed notes and digital photographs, specifically along Moorpark Avenue and High Street. All field notes and photographs are on file with South Environmental.

[2] Daly, *Draft Historic Resources Assessment Report of Tanner Corner Building*, 17
[3] Nationwide Environmental Title Research LLC 2022. Accessed online: www.historicaerials.com
[4] University California, Santa Barbara. Accessed online: https://mil.library.ucsb.edu/ap_indexes/FrameFinder

# 4. Historic Context

## Historical Overview of Moorpark

During the 1860s, many of the California ranchos were subdivided following the collapse of the cattle industry due to prolonged drought. Rancho land was therefore cheap to purchase, and settlers throughout the country headed west to acquire land. Thomas A. Scott, of the Pennsylvania Railroad, purchased large portions of Ventura County in the 1870s for oil exploration. Scott placed Thomas R. Bard in charge of his holdings, who in turn rented the land to local residents for sheep grazing. One of these early residents was Charles Hoar, who rented the eastern half of Simi Valley. Hoar later went into business with A. W. (Pete) Brown and Mr. Bates (first name unknown), retaining the eastern half of the valley.[5] Hoar and his partners sublet portions of their land to local ranchers and farmers to raise barley and paid Bard one-fifth of their earnings. In turn, they collected one-fifth of the earnings from their renters.[6] Scott died in 1888, and Bard was responsible for closing his estate. In the process of liquidating Scott's holdings, Bard formed the Simi Land and Water Company and subsequently made Charles B. McCoy manager of all 96,000 acres held by the company.[7]

In 1887, Robert W. Poindexter, secretary of the Simi Land and Water Company, was granted the title to what is now the City of Moorpark. It is believed that the town of Moorpark got its name from the Moorpark apricot, which was grown throughout the area. Robert's wife, Madeline Poindexter, plotted and laid out the town.[8] In 1900, one of the first civic improvements was beautification of the town, which included the planting of numerous pepper trees in the downtown area. In the early 1900s, a railroad depot was built on High Street after completion of the Southern Pacific Railroad track between Los Angeles and Santa Barbara in 1904, bringing the railroad through Moorpark for the first time. The original depot was destroyed by a fire in 1909 and rebuilt the following year. The railroad played a significant role in the growth and development of the town. That same year, the community built a telephone office/public library on High Street. Shortly after completion of the railroad, Poindexter sold the townsite to M. L. Wicks, Sr. Wicks continued Poindexter's beautification initiative by planting 1,300 spineless cactus plants in 1914.[9] The railroad depot was demolished in 1964. In 1979, S&K Ranch constructed a

[5] J.S. Cameron, "Simi Grows Up: The Story of the Simi, Ventura County, California." (Anderson, Ritchie, and Simon, U.S.A. 1963).
[6] J.S. Cameron, "Historical Tour of Simi Valley" (Simi Valley: Alert Letter Shop, 1974).
[7] Cameron "Simi Grows Up"
[8] Craig Chalquist, "Deep California: Images and Ironies of Cross and Sword Along El Camino Real." (Bloomington: iUniversity. 2008).
[9] Norma Gunter, "The Moorpark Story." Moorpark Chamber of Commerce, Moorpark, California 1969.

grain storage facility near the former depot. To help the structure blend in with the surrounding commercial properties, the façade was constructed to mimic the former depot.[10]

Jake Smith purchased a parcel of land on the northwest corner of High Street and Moorpark Avenue in 1900. The parcel was in a prime location, with the railroad located just south of it in 1904. The original building was a wood-framed, gabled building that measured approximately 60 x 40 feet. It is believed that Robert J. Batty, the following owner of the property, added the exterior brick walls and additional buildings in 1913. Ira Gilpin Tanner and his wife Lucy were the next owners of the property and they worked out of that location until his retirement in 1953. While at the subject property, Tanner organized and supervised a volunteer corps of firemen. For years, the only fire truck was parked in a garage that Tanner built for it. Tanner also joined the school board and helped found the first church. Tanner also served as the head of the county water works.[11]

In 1905, Mrs. John E. Smith and her daughter Hope formed the Women's Fortnightly Club, a social club for women in and around the Moorpark area. Mr. Wicks sold the group a lot for $75 for construction of a formal clubhouse. When the club opened in 1912, the women became the first club in Ventura County to own their own house. The club made many important contributions to the community, including establishment of the Moorpark branch library, renting out the clubhouse as a school for disabled children, naming streets and having street signs installed throughout the town, and even assisting the U.S.O. during both World Wars.[12]

By the 1910s, High Street became the main central commercial center of Moorpark with the construction of the Southern Pacific Milling Company and the Moorpark Hotel. In 1927, the El Rancho was constructed to replace the former silent movie theater. El Rancho was the only "talking movie" theater in the east end of Ventura County. The name later changed to the Moorpark Theater and later ceased operations in the 1950s. It was reincarnated as the Moorpark Melodrama & Vaudeville Company, but eventually closed in 1999. It currently operates as the High Street Arts Center.[13]

Apricots were the first crops to be raised in the Moorpark area, with approximately 1,000 acres of land devoted to their cultivation in 1915. Apricot cultivation reached its prime in the 1920s and 1930s. Moorpark's warm, dry inland climate with limited coastal fog made for an ideal apricot growing climate. Moorpark would eventually become known as the apricot center of Ventura County. While the City's name is thought to have come from the Moorpark variety of apricot, the

[10] Michele Willer-Allred, "Unveiling Moorpark." *Ventura County Star,* March 20, 2014.
[11] "Mayor of Moorpark 40 Years will Retire." *Los Angeles Times*, August 8,1953, page 25.
[12] Gunter, "The Moorpark Story." 1969.
[13]"History" *High Street Arts Center*, accessed May 26, 2022, https://highstreetartscenter.com/info/history/

Royal variety of apricot actually fared much better and was more common throughout ranches in the area.[14]

Early industrialization in Moorpark is reflected by the establishment of agricultural support businesses like fruit packing plants. After World War II, agricultural industrialization came in the form of large-scale poultry farms. One such example was Julius Goldman's Egg City in 1961, which contained millions of chickens spread out across 36 houses.[15]

Like much of California, Moorpark experienced a boost in industrialization following World War II. One of the most notable industrial presences in the area was the Santa Susana Field Laboratory (SSFL). The large site, which today totals 2,850 acres, was used largely for rocket engine testing for many decades during the twentieth century under a variety of corporations starting with Rocketdyne, who later became part of Rockwell International Corporation. Sections of the property were also used as a Liquid Oxygen plant and by the United States Air Force. Today the property is owned by Boeing.[16] According to the California Energy Commission (CEC), the laboratory was also used as the location of the first commercial nuclear power plant and it provided electricity to the area from 1957-1964.[17]

Although there were some significant examples of industrialization with Egg City and the SSFL following World War II, Moorpark did not see large scale commercial, residential, and industrial development until the 1970s and 1980s. This period of growth and development eventually led to a population increase, which resulted in the city moving forward with the incorporation process in the 1980s.[18]

Unknown to many, Moorpark has been the site of many "firsts," including being one of the first towns in California to be planned by a woman, Madeline Poindexter[19]; hosting the first event in the 1932 Los Angeles Olympic games with the cross-country bicycle run, which started at Balcom Canyon on Highway 118 and ended in Santa Monica[20]; and being the first community in the United States to be lighted by nuclear electricity in 1957.[21]

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[14] Gunter, "The Moorpark Story." 1969
[15] "History of Moorpark." *Moorpark Historical Society,* accessed January 8, 2018. http://moorparkhistoricalsociety.org/history/
[16]. "Santa Susana Field Laboratory Environmental Cleanup and Closure." *NASA*, accessed January 8, 2018. https://ssfl.msfc.nasa.gov/history
[17] Carlos Lozano, "Moorpark Marks Anniversary of Hour of Nuclear Power: History: On Nov. 12, 1957, a switch was flipped, making the city the first in the nation to use atomic energy." *Los Angeles Times*. November 12, 1993.
[18] "History of Moorpark" Moorpark Historical Society
[19] Chalquist "Deep California"
[20] Gunter "A Diamond for Moorpark" 1975
[21] Gunter "The Moorpark Story" 1969

In March of 1983, Moorpark residents voted to become a city, and on July 7, 1983, Moorpark became the 10th city to be incorporated in Ventura County. A celebration was held at the Moorpark Community Center.[22]

Exciting news was announced on March 29, 2005, when an earthmover operator working on the new Meridian Hills housing development, approximately one mile north of the subject property, uncovered a one-million-year-old mammoth skeleton. Approximately 3,000 pounds of dirt surrounding the bones was removed. The Santa Barbara Museum and the City worked together on preservation of the skeleton (Moorpark Historical Society 2009).[23]

# History of the Project Site

The first available historic aerial photograph of the project site and vicinity is from 1938. At this time, the project site was farmland with buildings present on the west side of Moorpark Avenue and south of Charles Street. The city blocks bound by Charles Street to the north, Magnolia Street to the east, High Street to the south and Moorpark Avenue to the west were developed with several buildings. The area remained largely unchanged until 1961 when the farmland was razed, leaving behind an empty field. More buildings were constructed north of Charles Street east of Moorpark Avenue.

An open field is located west of the Tanner Corner Building, north of the railroad tracks, and south of Walnut Canyon School. Between 1938 and 1947 this land was used as farmland and later cleared. The field became part of Moorpark Union High School, presently Walnut Canyon School. Between 1969 and 1994 the field featured a running track and two baseball but were removed by 2002. The land remains vacant and undeveloped to the present day.

Aerial photographs confirm that construction within the project site began in 1980 with grading for the present Community Center evident in the photograph. By 1985, the Community Center and the Library were constructed. The Administration Building is first visible in 1994. The Development and Community Services trailer was placed north of the Administration Building by 2009. Available information indicates that the library opened in the early 1980s and expanded in 1995; City Hall opened in 1988; and the Active Adult Center opened in 1989.[24]

[22] "Conejo/Simi/Moorpark" *Los Angeles Times*. 7 July 1983: V-2.
[23] "The Moorpark Mammoth," Moorpark Historical Society, accessed online November 9, 2009 http://www.moorparkhistorical.com/
[24] Hathaway, "Moorpark: A 30-Year Glance 1983-2013"

# 5. Description of Surveyed Resources

No historic built environment resources over 45 years old were identified within the project site as a result of the background research and pedestrian field survey. The existing buildings and structures within the project site consist of the Administration Building (Photograph 1), Active Adult Center/Community Center (Photograph 2), City Hall (Photograph 3), and Library (Photograph 4), all of which were constructed in the 1980s by unknown architects. Buildings directly adjacent to the proposed project site include the recently constructed post office located at 100 West High Street (built c. 2009) and the CRHR-listed Tanner Corner Building (Photographs 5 and 6) located at 601 Moorpark Avenue, which is an historical resource under CEQA.

**Photograph 1. Administration Building, east elevation, view west**

**Photograph 2. Active Adult Center/Community Center, northeast elevation, view southwest**

**Photograph 3. City Hall temporary building, south elevation, view northwest**

**Photograph 4. Moorpark City Library, east elevation, view southwest**

**Photograph 5. Tanner Corner Building, east elevation, view west**

**Photograph 6. Tanner Corner Building, west elevation, view east**

# Tanner Corner Building

The Tanner Corner building (Photographs 5 and 6) is a one-story commercial building located on the northwest corner of Moorpark Avenue and High Street with an irregular floor plan. It is comprised of a wood framed structural building with a cross-gabled roof. In the 1913, a buff-colored brick façade was added to the south, east, and north elevations featuring a flat parapet wall at the roof. Entrances into each storefront are located on the primary south and east elevations; there is a storefront entrance on the southeast corner of the building that sits at an angle. Storefront entrances feature fabric awnings. Metal fixed windows are located on the primary elevations.

A garage is located to the rear of the Tanner Corner building on the same parcel and first appears in the 1938 historic aerial photograph, indicating it was constructed within the Tanner Corner building's period of significance. It has a concrete masonry unit structural system and is located west of the Tanner building. The garage has a rectangular floor plan, flat roof and two, two-car bays with metal doors. Neither the nomination form nor the most recent documentation of the Tanner Corner building[25] clarify if the rear garage is a contributing feature of the property.

[25] Daly, *Draft Historic Resources Assessment Report of Tanner Corner Building*

However, given that the garage was constructed within the period of significance identified for the Tanner Corner building, it should be treated as a contributing feature.

The Tanner Corner building (P-56-152817) was evaluated and formally listed in the CRHR on November 3, 2000. The Tanner Corner building is also eligible for the NRHP and as a City of Moorpark landmark. The building is listed in the CRHR under criteria 1, 2, and 3, with a period of significance of 1913-1953. The Tanner Corner building is significant under criterion 1 for its association with the events and patterns of development of Moorpark, and for it being one of the only surviving commercial building from the early days of Moorpark. The building is significant under criteria 2 for its association with Ira G. Tanner, a resident of Moorpark who contributed greatly to the community's development. Finally, the building is also eligible under criterion 3 as a significant example of commercial architecture with a distinctive design that has made it an established visual landmark in downtown. The Tanner Corner building also retains a high degree of architectural integrity from its period of significance.

# 6. Impacts Assessment

## Identified Impacts

One historical resource was identified directly adjacent to the project site: the CRHR-listed Tanner Corner building located at 601 Moorpark Avenue. Although the project does not propose any changes or direct impacts to this resource that would impair its major character-defining features, the building's proximity to proposed demolition and construction activities is considered a potentially significant impact that requires further consideration.

### Impact 1: Adjacent Demolition and New Construction

The project proposes to demolish the existing City Hall, community center/active adult center, city library building, portable structures, and parking areas located north and west of the Tanner Corner building and proposes construction of new city hall and library buildings directly adjacent to the north and west elevations of the Tanner Corner building. Across High Street to the south, new construction is also proposed for the future Mercado. All of these activities have the potential to impact the Tanner Corner building's physical integrity through groundborne vibration and inadvertent construction damage. Implementation of mitigation measures 1, 2, and 3 (see below) would provide an appropriate level of protection for the building and reduce impacts to historical resources to a less than significant level. The Tanner Corner building is prominently featured on the northwest corner of Moorpark Avenue and High Street such that it would not be possible for the proposed new construction to obscure its major, character-defining features.

## Recommended Mitigation

The following mitigation measures are recommended to reduce project impacts to historical resources (specifically, built environment resources) to a less than significant level.

1. **Proposed Project Design Review (pre-construction):** Prior to the start of project construction during the final design phase, all designs for proposed new construction shall be reviewed for consistency with the aesthetic requirements outlined in the City's Downtown Specific Plan. This includes consideration of the existing scale, massing, and height of the surrounding commercial and residential buildings, avoiding design choices that would alter the historic character/viewsheds of High Street and the Tanner Building. Prior to public hearings, a photo rendering and site plan of the proposed library building shall be submitted to the Community Development Department for consideration on any elements that are out of scale or could better coordinate the aesthetic design of the library with surrounding structures and setting. Prior to issuance of a building permit, any

architectural changes discussed during public hearings shall be incorporated into a photo rendering to ensure that the changes and design are consistent with the Tanner Building, High Street corridor, and applicable standards in the Downtown Specific Plan.

2. **Groundborne Vibration Analysis (pre-construction):** Prior to the start of project-related demolition and construction activities, it is necessary to consider potential impacts to the Tanner Corner building resulting from groundborne vibrations due to construction equipment which will be operated in close proximity to the building. The California Department of Transportation (Caltrans) has established thresholds, related to the Peak Particle Velocity (PPV), for groundborne construction vibration that take into account the type of building or structures near the vibration source[26]. The associated noise and vibration analysis for the proposed project shall examine the potential for groundborne vibrations to impact the Tanner Corner building and develop specific requirements for the type of equipment that can safely be used in the vicinity of the building, as appropriate. The results of this analysis shall inform development of the Protection Plan for Demolition and Construction (outlined below).

3. **Protection Plan for Demolition and Construction (pre-construction):** Prior to the start of project-related demolition and construction activities, protection measures shall be developed in a formal plan for the adjacent Tanner Corner building at 601 Moorpark Avenue. Protection measures shall include at a minimum: 1) clear denotation in the project construction plans that portions of the project site are located directly adjacent to an historical resource, marking the location of the Tanner Corner building; 2) a protocol for informing all construction workers of the presence of the historical resource and making them aware of the protocol to avoid and protect it; 3) a list of approved construction equipment/distances in consideration of any identified groundborne vibration impacts; 4) recommendations for specific protective fencing and signage to be implemented during construction; and 5) if determined appropriate based on the results of the groundborne vibration analysis, recommendations for construction monitoring (pre-, post-, and during construction). The protection plan shall be prepared by a qualified architectural historian/historic preservation professional, clearly identify all responsible parties with their contact information, and be appended to the final set of construction plans.

[26] Caltrans, *Transportation and Construction Vibration Guidance Manual*

# 7. Summary of Findings

One historical resource was identified directly adjacent to the project site as a result of the background research and pedestrian survey: the CRHR-listed Tanner Corner building located at 601 Moorpark Avenue. Although the project does not propose any changes or direct impacts to this resource that would impair its major character-defining features, the building's proximity to proposed demolition and construction activities is considered a potentially significant impact.

Implementation of recommended mitigation measures 1, 2, and 3 would provide an appropriate level of protection for the Tanner Corner building and reduce impacts to historical resources to a less than significant level. These pre-construction measures include 1) completion of a design review of all proposed new construction to ensure consistency with the City's Downtown Specific Plan and the historic character of High Street; 2) completion of a groundborne vibration analysis in consideration of the building's type and all proposed construction equipment that will be used in the vicinity; and 3) development of a protection plan for the building during demolition and construction activities.

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# Appendix A:
# Civic Center Master Plan Site Plan

CWAAIA INC
ARCHITECTURE PLANNING INTERIOR DESIGN

# CIVIC CENTER MASTER PLAN

Moorpark
Life can be this good.

PROPOSED CITY HALL : 22,000 Sq. Ft
PROPOSED LIBRARY : 18,000 Sq. Ft

N

SEPTEMBER 03, 2020

# APPENDIX E

# THE SACRED LANDS FILE SEARCH RESULTS

# NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
**Laura Miranda**
*Luiseño*

VICE CHAIRPERSON
**Reginald Pagaling**
*Chumash*

PARLIAMENTARIAN
**Russell Attebery**
*Karuk*

SECRETARY
**Sara Dutschke**
*Miwok*

COMMISSIONER
**William Mungary**
*Paiute/White Mountain Apache*

COMMISSIONER
**Isaac Bojorquez**
*Ohlone-Costanoan*

COMMISSIONER
**Buffy McQuillen**
*Yokayo Pomo, Yuki, Nomlaki*

COMMISSIONER
**Wayne Nelson**
*Luiseño*

COMMISSIONER
**Stanley Rodriguez**
*Kumeyaay*

EXECUTIVE SECRETARY
**Raymond C. Hitchcock**
*Miwok/Nisenan*

**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 16, 2022

Charles Cisneros
Psomas

Via Email to: Charles.Cisneros@psomas.com

**Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, 3MO010100 Project, Ventura County**

Dear Mr. Cisneros:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

*Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.*

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
*Cultural Resources Analyst*

Attachment

**Native American Heritage Commission**
**Tribal Consultation List**
**Ventura County**
**5/16/2022**

***Barbareno/Ventureno Band of Mission Indians***
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com
Chumash

***Chumash Council of Bakersfield***
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net
Chumash

***Coastal Band of the Chumash Nation***
Mariza Sullivan, Chairperson
P. O. Box 4464
Santa Barbara, CA, 93140
Phone: (805) 665 - 0486
cbcntribalchair@gmail.com
Chumash

***Gabrieleno/Tongva San Gabriel Band of Mission Indians***
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com
Gabrieleno

***Gabrielino /Tongva Nation***
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com
Gabrielino

***Northern Chumash Tribal Council***
Violet Walker, Chairperson
P.O. Box 6533
Los Osos, CA, 93412
Phone: (760) 549 - 3532
violetsagewalker@gmail.com
Chumash

***San Luis Obispo County Chumash Council***
1030 Ritchie Road
Grover Beach, CA, 93433
Chumash

***Santa Ynez Band of Chumash Indians***
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org
Chumash

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed 3MO010100 Project, Ventura County.

# APPENDIX F

# ENERGY

# Energy Use Summary

| Construction Phase (gallons/construction perioc | Gasoline | Diesel |
|---|---|---|
| Construction Vehicles | 46,522 | 21,426 |
| Worker Trips | 26,049 | 124 |
| Vendor Trips | 2,904 | 48 |
| Haul Trucks | 0 | 252 |
| **Total** | **75,475** | **21,850** |

| Operations Phase (gallons/year) | Gasoline | Diesel | Natural Gas (kBTU/yr) | Electricity (kWh/yr) |
|---|---|---|---|---|
| Library | 242,820 | 24,997 | 767,695 | 167,381 |
| Office Park | 54,109 | 5,570 | 345,164 | 229,683 |
| Apartments | 65,182 | 6,710 | 1,362,885 | 293,878 |
| Civic Center | 65,301 | 7,785 | 584,123 | 388,694 |
| All Land Uses | 427,413 | 45,062 | 3,059,867 | 1,079,636 |

## Operations Onroad Energy Use

Year 2024

| Vehicle Types | MPG by Fuel Type | | | Population by Fuel Type | | | |
|---|---|---|---|---|---|---|---|
| | GAS | DSL | ELEC | GAS | DSL | ELEC | Total |
| LDA | 32.5 | 51.2 | | 6,721,891 | 65,702 | 176,700 | 6,787,593 |
| LDT1 | 27.8 | 23.2 | | 779,749 | 337 | 9,098 | 780,085 |
| LDT2 | 26.3 | 37.5 | | 2,324,382 | 16,867 | 35,655 | 2,341,248 |
| LHDT1 | 10.8 | 22.2 | | 174,005 | 131,545 | | 305,550 |
| LHDT2 | 9.4 | 20.0 | | 30,199 | 52,581 | | 82,780 |
| MCY | 36.2 | | | 313,846 | | | 313,846 |
| MDV | 21.3 | 28.8 | | 1,599,677 | 38,790 | 21,547 | 1,638,467 |
| MH | 5.3 | 10.8 | | 34,296 | 13,472 | | 47,768 |
| MHDT | 5.2 | 11.3 | | 25,804 | 127,715 | | 153,519 |
| HHDT | 4.4 | 7.2 | | 74 | 112,561 | | 112,635 |
| OBUS | 5.2 | 8.8 | | 5,954 | 4,446 | | 10,401 |
| SBUS | 9.3 | 7.8 | | 2,938 | 6,710 | | 9,648 |
| UBUS | 5.3 | 5.7 | | 963 | 10 | 16 | 974 |

| Trips/Day<br>Land Use | Trips/day<br>Weekday | Trips/day<br>Saturday | Trips/day<br>Sunday | Total<br>Weekly | VMT/day<br>Weekday | VMT/day<br>Saturday | VMT/day<br>Sunday | Trip Length |
|---|---|---|---|---|---|---|---|---|
| Library | 1,297.00 | 1,442.00 | 758.00 | 8685 | 19,651 | 21,848 | 11,485 | 15.15 |
| Office Park | 371 | 55 | 25 | 1934.9 | 5,622 | 829 | 382 | 15.15 |
| Apartments | 430 | 479 | 369 | 2998 | 5,066 | 5,644 | 4,348 | 11.78 |
| Civic Center | 467 | 0 | 0 | 2335 | 7,078 | 0 | 0 | 15.16 |
| **Total** | **2,565** | **1,976** | **1,152** | | | | | |

**Fleet Mix**

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 0.503650546 | 0.034372777 | 0.225023583 | 0.140848532 | 0.030177562 | 0.00887857 | 0.015963024 | 0.008141109 | 0.000603849 | 0.000427296 | 0.026520656 | 0.001051268 | 0.004341209 | 100.0% |
| Office Park | 0.503650546 | 0.034372777 | 0.225023583 | 0.140848532 | 0.030177562 | 0.00887857 | 0.015963024 | 0.008141109 | 0.000603849 | 0.000427296 | 0.026520656 | 0.001051268 | 0.004341209 | 100.0% |
| Apartments | 0.503650546 | 0.034372777 | 0.225023583 | 0.140848532 | 0.030177562 | 0.00887857 | 0.015963024 | 0.008141109 | 0.000603849 | 0.000427296 | 0.026520656 | 0.001051268 | 0.004341209 | 100.0% |
| Civic Center | 0.503650546 | 0.034372777 | 0.225023583 | 0.140848532 | 0.030177562 | 0.00887857 | 0.015963024 | 0.008141109 | 0.000603849 | 0.000427296 | 0.026520656 | 0.001051268 | 0.004341209 | 100.0% |

### Vehicle Trips

| Weekday Trips | LDA | LDT1 | LDT2 | MDV | LHDT1 | LHDT2 | MHDT | HHDT | Obus | Ubus | MCY | Sbus | MH | Total | Daily VMT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 653 | 45 | 292 | 183 | 39 | 12 | 21 | 11 | 1 | 1 | 34 | 1 | 6 | 1,297 | 19,651.26 |
| Office Park | 187 | 13 | 83 | 52 | 11 | 3 | 6 | 3 | 0 | 0 | 10 | 0 | 2 | 371 | 5,622.39 |
| Apartments | 217 | 15 | 97 | 61 | 13 | 4 | 7 | 4 | 0 | 0 | 11 | 0 | 2 | 430 | 5,066.44 |
| Civic Center | 235 | 16 | 105 | 66 | 14 | 4 | 7 | 4 | 0 | 0 | 12 | 0 | 2 | 467 | 7,077.60 |
| **Total** | **1292** | **88** | **577** | **361** | **77** | **23** | **41** | **21** | **2** | **1** | **68** | **3** | **11** | **2,565** | |

| Saturday Trips | LDA | LDT1 | LDT2 | MDV | LHDT1 | LHDT2 | MHDT | HHDT | Obus | Ubus | MCY | Sbus | MH | Total | Daily VMT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 726 | 50 | 324 | 203 | 44 | 13 | 23 | 12 | 1 | 1 | 38 | 2 | 6 | 1,442 | 21,848.20 |
| Office Park | 28 | 2 | 12 | 8 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 55 | 828.96 |
| Apartments | 241 | 16 | 108 | 67 | 14 | 4 | 8 | 4 | 0 | 0 | 13 | 1 | 2 | 479 | 5,643.78 |
| Civic Center | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| **Total** | **995** | **68** | **445** | **278** | **60** | **18** | **32** | **16** | **1** | **1** | **52** | **2** | **9** | **1,976** | |

| Sunday Trips | LDA | LDT1 | LDT2 | MDV | LHDT1 | LHDT2 | MHDT | HHDT | Obus | Ubus | MCY | Sbus | MH | Total | Daily VMT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 382 | 26 | 171 | 107 | 23 | 7 | 12 | 6 | 0 | 0 | 20 | 1 | 3 | 758 | 11,484.70 |
| Office Park | 13 | 1 | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 25 | 381.90 |
| Apartments | 186 | 13 | 83 | 52 | 11 | 3 | 6 | 3 | 0 | 0 | 10 | 0 | 2 | 369 | 4,347.71 |
| Civic Center | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| **Total** | **580** | **40** | **259** | **162** | **35** | **10** | **18** | **9** | **1** | **0** | **31** | **1** | **5** | **1,152** | |

### Gallons of Fuel

| Gasoline | LDA | LDT1 | LDT2 | MDV | LHDT1 | LHDT2 | MHDT | HHD | Obus | Ubus | MCY | Sbus | MH | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 105,045 | 8,463 | 58,014 | 44,183 | 10,932 | 2,369 | 3,524 | 8 | 456 | 549 | 5,011 | 236 | 4,029 | 242,820 | |
| Office Park | 23,408 | 1,886 | 12,928 | 9,846 | 2,436 | 528 | 785 | 2 | 102 | 122 | 1,117 | 52 | 898 | 54,109 | |
| Apartments | 28,198 | 2,272 | 15,573 | 11,860 | 2,935 | 636 | 946 | 2 | 123 | 147 | 1,345 | 63 | 1,082 | 65,182 | |
| Civic Center | 28,250 | 2,276 | 15,602 | 11,882 | 2,940 | 637 | 948 | 2 | 123 | 148 | 1,348 | 63 | 1,083 | 65,301 | |
| | **184,900** | **14,896** | **102,117** | **77,771** | **19,243** | **4,171** | **6,204** | **15** | **803** | **966** | **8,821** | **415** | **7,092** | **427,413** | **Total Gallons Gasoline** |

| Diesel | LDA | LDT1 | LDT2 | MDV | OBUS | LHDT2 | MHDT | HHD | Obus | Ubus | MCY | Sbus | MH | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 652 | 4 | 295 | 792 | 4,006 | 1,926 | 8,009 | 7,689 | 200 | 5 | 0 | 643 | 775 | 24,997 | |
| Office Park | 145 | 1 | 66 | 176 | 893 | 429 | 1,785 | 1,713 | 45 | 1 | 0 | 143 | 173 | 5,570 | |
| Apartments | 175 | 1 | 79 | 212 | 1,075 | 517 | 2,150 | 2,064 | 54 | 1 | 0 | 173 | 208 | 6,710 | |
| Civic Center | 203 | 1 | 92 | 247 | 1,248 | 600 | 2,494 | 2,395 | 62 | 2 | 0 | 200 | 241 | 7,785 | |
| | **1,176** | **8** | **533** | **1,427** | **7,221** | **3,472** | **14,437** | **13,862** | **361** | **10** | **0** | **1,159** | **1,397** | **45,062** | **Total Gallons Diesel** |

**472,475** **Total Gallons of Diesel and Gasoline**

**25** **Average MPG**

# Utilities

| | | NaturalGas Use | Electricity Use |
|---|---|---|---|
| Land Use | | kBTU/yr | kWh/yr |
| Library | | 767,695 | 167,381 |
| Office Park | | 345,164 | 229,683 |
| Apartments | | 1,362,885 | 293,878 |
| Civic Center | | 584,123 | 388,694 |
| | 0 | | |
| | 0 | | |
| **Total** | | **3,059,867** | **1,079,636** |

# Offroad Construction Equipment Energy Use

| PhaseName | OffRoadEquipmentType | OffRoadEquipmentUnitAmount | UsageHours | HorsePower | Load Factor | Horsepower Category | Num Days | Year | Fuel Consumption Rate (gal/hour) | Fuel Type | Total Fuel Consumption (gal/construction period) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase 1Demolition | Concrete/Industrial Saws | 1.00 | 8.00 | 33.0 | 0.73 | 100 | 20 | 2023 | 4.7 | Gasoline | 551 |
| Phase 1Demolition | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.40 | 300 | 20 | 2023 | 4.5 | Diesel | 286 |
| Phase 1Demolition | Tractors/Loaders/Backhoes | 3.00 | 8.00 | 84.0 | 0.37 | 100 | 20 | 2023 | 1.6 | Diesel | 283 |
| Phase 1Site Preparation | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 2 | 2023 | 3.2 | Diesel | 21 |
| Phase 1Site Preparation | Rubber Tired Dozers | 1.00 | 7.00 | 367 | 0.40 | 300 | 2 | 2023 | 4.5 | Diesel | 25 |
| Phase 1Site Preparation | Tractors/Loaders/Backhoes | 1.00 | 8.00 | 84.0 | 0.37 | 100 | 2 | 2023 | 1.6 | Diesel | 9 |
| Phase 1Grading | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 4 | 2023 | 3.2 | Diesel | 41 |
| Phase 1Grading | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.40 | 300 | 4 | 2023 | 4.5 | Diesel | 57 |
| Phase 1Grading | Tractors/Loaders/Backhoes | 2.00 | 7.00 | 84.0 | 0.37 | 100 | 4 | 2023 | 1.6 | Diesel | 33 |
| Phase 1Building Construction | Cranes | 1.00 | 6.00 | 367 | 0.29 | 300 | 200 | 2023 | 3.3 | Diesel | 1,141 |
| Phase 1Building Construction | Forklifts | 1.00 | 6.00 | 82.0 | 0.20 | 100 | 200 | 2023 | 2.0 | Diesel | 481 |
| Phase 1Building Construction | Generator Sets | 1.00 | 8.00 | 14.0 | 0.74 | 100 | 200 | 2023 | 5.2 | Gasoline | 6,150 |
| Phase 1Building Construction | Tractors/Loaders/Backhoes | 1.00 | 6.00 | 84.0 | 0.37 | 100 | 200 | 2023 | 1.6 | Diesel | 707 |
| Phase 1Building Construction | Welders | 3.00 | 8.00 | 46.0 | 0.45 | 50 | 200 | 2023 | 2.4 | Gasoline | 5,207 |
| Phase 1Paving | Cement and Mortar Mixers | 1.00 | 6.00 | 10.0 | 0.56 | 25 | 10 | 2023 | 0.4 | Gasoline | 13 |
| Phase 1Paving | Pavers | 1.00 | 6.00 | 81.0 | 0.42 | 100 | 10 | 2023 | 1.7 | Diesel | 44 |
| Phase 1Paving | Paving Equipment | 1.00 | 8.00 | 89.0 | 0.36 | 100 | 10 | 2023 | 1.6 | Diesel | 47 |
| Phase 1Paving | Rollers | 1.00 | 7.00 | 36.0 | 0.38 | 100 | 10 | 2023 | 1.7 | Diesel | 45 |
| Phase 1Paving | Tractors/Loaders/Backhoes | 1.00 | 8.00 | 84.0 | 0.37 | 100 | 10 | 2023 | 1.6 | Diesel | 47 |
| Phase 1Architectural Coating | Air Compressors | 1.00 | 6.00 | 37.0 | 0.48 | 100 | 10 | 2023 | 1.3 | Diesel | 38 |
| | | | | | | | | | | | |
| Phase 2Demolition | Concrete/Industrial Saws | 1.00 | 8.00 | 33.0 | 0.73 | 100 | 20.0 | 2023 | 4.7 | Gasoline | 551 |
| Phase 2Demolition | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.4 | 300 | 20.0 | 2023 | 4.5 | Diesel | 286 |
| Phase 2Demolition | Tractors/Loaders/Backhoes | 3.00 | 8.00 | 84.0 | 0.37 | 100 | 20.0 | 2023 | 1.6 | Diesel | 283 |
| Phase 2Site Preparation | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 2.00 | 2023 | 3.2 | Diesel | 21 |
| Phase 2Site Preparation | Rubber Tired Dozers | 1.00 | 7.00 | 367 | 0.40 | 300 | 2.00 | 2023 | 4.5 | Diesel | 25 |
| Phase 2Site Preparation | Tractors/Loaders/Backhoes | 1.00 | 8.00 | 84.0 | 0.37 | 100 | 2.00 | 2023 | 1.6 | Diesel | 9 |
| Phase 2Grading | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 4.00 | 2023 | 3.2 | Diesel | 41 |
| Phase 2Grading | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.40 | 300 | 4.00 | 2023 | 4.5 | Diesel | 57 |
| Phase 2Grading | Tractors/Loaders/Backhoes | 2.00 | 7.00 | 84.0 | 0.37 | 100 | 4.00 | 2023 | 1.6 | Diesel | 33 |
| Phase 2Building Construction | Cranes | 1.00 | 6.00 | 367 | 0.29 | 300 | 200 | 2023 | 3.3 | Diesel | 1,141 |
| Phase 2Building Construction | Forklifts | 1.00 | 6.00 | 82.0 | 0.20 | 100 | 200 | 2023 | 2.0 | Diesel | 481 |
| Phase 2Building Construction | Generator Sets | 1.00 | 8.00 | 14.0 | 0.74 | 100 | 200 | 2023 | 5.2 | Gasoline | 6,150 |
| Phase 2Building Construction | Tractors/Loaders/Backhoes | 1.00 | 6.00 | 84.0 | 0.37 | 100 | 200 | 2023 | 1.6 | Diesel | 707 |
| Phase 2Building Construction | Welders | 3.00 | 8.00 | 46.0 | 0.45 | 50 | 200 | 2023 | 2.4 | Gasoline | 5,207 |
| Phase 2Paving | Cement and Mortar Mixers | 1.00 | 6.00 | 10.0 | 0.56 | 25 | 10.0 | 2023 | 0.4 | Gasoline | 13 |
| Phase 2Paving | Pavers | 1.00 | 6.00 | 81.0 | 0.42 | 100 | 10.0 | 2023 | 1.7 | Diesel | 44 |
| Phase 2Paving | Paving Equipment | 1.00 | 8.00 | 89.0 | 0.36 | 100 | 10.0 | 2023 | 1.6 | Diesel | 47 |
| Phase 2Paving | Rollers | 1.00 | 7.00 | 36.0 | 0.38 | 100 | 10.0 | 2023 | 1.7 | Diesel | 45 |
| Phase 2Paving | Tractors/Loaders/Backhoes | 1.00 | 8.00 | 84.0 | 0.37 | 100 | 10.0 | 2023 | 1.6 | Diesel | 47 |
| Phase 2Architectural Coating | Air Compressors | 1.00 | 6.00 | 37.0 | 0.48 | 100 | 10.0 | 2023 | 1.3 | Diesel | 38 |
| | | | | | 1.13 | | | | | | |
| Phase 3Demolition | Concrete/Industrial Saws | 1.00 | 8.00 | 33.0 | 0.73 | 100 | 20.0 | 2023 | 4.7 | Gasoline | 551 |
| Phase 3Demolition | Excavators | 3.00 | 8.00 | 36.0 | 0.38 | 175 | 20.0 | 2023 | 2.9 | Diesel | 526 |
| Phase 3Demolition | Rubber Tired Dozers | 2.00 | 8.00 | 367 | 0.40 | 300 | 20.0 | 2023 | 4.5 | Diesel | 572 |
| Phase 3Site Preparation | Rubber Tired Dozers | 3.00 | 8.00 | 367 | 0.40 | 300 | 10.0 | 2023 | 4.5 | Diesel | 429 |
| Phase 3Site Preparation | Tractors/Loaders/Backhoes | 4.00 | 8.00 | 84.0 | 0.37 | 100 | 10.0 | 2023 | 1.6 | Diesel | 189 |
| Phase 3Grading | Excavators | 1.00 | 8.00 | 36.0 | 0.38 | 175 | 20.0 | 2023 | 2.9 | Diesel | 175 |
| Phase 3Grading | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 20.0 | 2023 | 3.2 | Diesel | 207 |
| Phase 3Grading | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.40 | 300 | 20.0 | 2023 | 4.5 | Diesel | 286 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase 3Grading | Tractors/Loaders/Backhoes | 3.00 | 8.00 | 84.0 | 0.37 | 100 | 20.0 | 2023 | 1.6 | | Diesel | 283 |
| Phase 3Building Construction | Cranes | 1.00 | 7.00 | 367 | 0.29 | 300 | 230 | 2023 | 3.3 | | Diesel | 1,530 |
| Phase 3Building Construction | Forklifts | 3.00 | 8.00 | 82.0 | 0.20 | 100 | 230 | 2023 | 2.0 | | Diesel | 2,213 |
| Phase 3Building Construction | Generator Sets | 1.00 | 8.00 | 14.0 | 0.74 | 100 | 230 | 2023 | 5.2 | | Gasoline | 7,073 |
| Phase 3Building Construction | Tractors/Loaders/Backhoes | 3.00 | 7.00 | 84.0 | 0.37 | 100 | 230 | 2023 | 1.6 | | Diesel | 2,846 |
| Phase 3Building Construction | Welders | 1.00 | 8.00 | 46.0 | 0.45 | 50 | 230 | 2023 | 2.4 | | Gasoline | 1,996 |
| Phase 3Paving | Pavers | 2.00 | 8.00 | 81.0 | 0.42 | 100 | 20.0 | 2023 | 1.7 | | Diesel | 233 |
| Phase 3Paving | Paving Equipment | 2.00 | 8.00 | 89.0 | 0.36 | 100 | 20.0 | 2023 | 1.6 | | Diesel | 189 |
| Phase 3Paving | Rollers | 2.00 | 8.00 | 36.0 | 0.38 | 100 | 20.0 | 2023 | 1.7 | | Diesel | 206 |
| Phase 3Architectural Coating | Air Compressors | 1.00 | 6.00 | 37.0 | 0.48 | 100 | 20.0 | 2023 | 1.3 | | Diesel | 76 |
| | | | | | | | | | | | | |
| Phase 4Demolition | Concrete/Industrial Saws | 1.00 | 8.00 | 33.0 | 0.73 | 100 | 20.0 | 2023 | 4.7 | | Gasoline | 551 |
| Phase 4Demolition | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.40 | 300 | 20.0 | 2023 | 4.5 | | Diesel | 286 |
| Phase 4Demolition | Tractors/Loaders/Backhoes | 3.00 | 8.00 | 84.0 | 0.37 | 100 | 20.0 | 2023 | 1.6 | | Diesel | 283 |
| Phase 4Site Preparation | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 3.00 | 2023 | 3.2 | | Diesel | 31 |
| Phase 4Site Preparation | Scrapers | 1.00 | 8.00 | 423 | 0.48 | 300 | 3.00 | 2023 | 5.5 | | Diesel | 64 |
| Phase 4Site Preparation | Tractors/Loaders/Backhoes | 1.00 | 7.00 | 84.0 | 0.37 | 100 | 3.00 | 2023 | 1.6 | | Diesel | 12 |
| Phase 4Grading | Graders | 1.00 | 8.00 | 148 | 0.41 | 175 | 6.00 | 2023 | 3.2 | | Diesel | 62 |
| Phase 4Grading | Rubber Tired Dozers | 1.00 | 8.00 | 367 | 0.40 | 300 | 6.00 | 2023 | 4.5 | | Diesel | 86 |
| Phase 4Grading | Tractors/Loaders/Backhoes | 2.00 | 7.00 | 84.0 | 0.37 | 100 | 6.00 | 2023 | 1.6 | | Diesel | 49 |
| Phase 4Building Construction | Cranes | 1.00 | 8.00 | 367 | 0.29 | 300 | 220 | 2023 | 3.3 | | Diesel | 1,673 |
| Phase 4Building Construction | Forklifts | 2.00 | 7.00 | 82.0 | 0.20 | 100 | 220 | 2023 | 2.0 | | Diesel | 1,235 |
| Phase 4Building Construction | Generator Sets | 1.00 | 8.00 | 14.0 | 0.74 | 100 | 220 | 2023 | 5.2 | | Gasoline | 6,765 |
| Phase 4Building Construction | Tractors/Loaders/Backhoes | 1.00 | 6.00 | 84.0 | 0.37 | 100 | 220 | 2023 | 1.6 | | Diesel | 778 |
| Phase 4Building Construction | Welders | 3.00 | 8.00 | 46.0 | 0.45 | 50 | 220 | 2023 | 2.4 | | Gasoline | 5,728 |
| Phase 4Paving | Cement and Mortar Mixers | 1.00 | 8.00 | 10.0 | 0.56 | 25 | 10.0 | 2023 | 0.4 | | Gasoline | 17 |
| Phase 4Paving | Pavers | 1.00 | 8.00 | 81.0 | 0.42 | 100 | 10.0 | 2023 | 1.7 | | Diesel | 58 |
| Phase 4Paving | Paving Equipment | 1.00 | 8.00 | 89.0 | 0.36 | 100 | 10.0 | 2023 | 1.6 | | Diesel | 47 |
| Phase 4Paving | Rollers | 2.00 | 8.00 | 36.0 | 0.38 | 100 | 10.0 | 2023 | 1.7 | | Diesel | 103 |
| Phase 4Paving | Tractors/Loaders/Backhoes | 1.00 | 8.00 | 84.0 | 0.37 | 100 | 10.0 | 2023 | 1.6 | | Diesel | 47 |
| Phase 4Architectural Coating | Air Compressors | 1.00 | 6.00 | 37.0 | 0.48 | 100 | 10.0 | 2023 | 1.3 | | Diesel | 38 |
| | | | | | | | | | | **Total** | **Gasoline** | **46,522** |
| | | | | | | | | | | **Total** | **Diesel** | **21,426** |

## Onroad Construction Energy Use

Year 2023

| Vehicle Types | MPG by Fuel Type | | | Population by Fuel Type | | | |
|---|---|---|---|---|---|---|---|
| | GAS | DSL | ELEC | GAS | DSL | ELEC | Total |
| LDA | 31.7 | 50.0 | | 6,635,002 | 62,493 | 150,700 | 6,697,495 |
| LDT1 | 27.2 | 22.9 | | 758,468 | 361 | 7,123 | 758,828 |
| LDT2 | 25.5 | 36.7 | | 2,285,150 | 15,595 | 28,810 | 2,300,745 |
| LHDT1 | 10.7 | 21.9 | | 174,910 | 125,545 | | 300,455 |
| LHDT2 | 9.3 | 19.8 | | 30,103 | 50,003 | | 80,106 |
| MCY | 36.4 | | | 305,045 | | | 305,045 |
| MDV | 20.7 | 28.1 | | 1,589,863 | 36,128 | 16,377 | 1,625,991 |
| MH | 5.2 | 10.7 | | 34,680 | 13,123 | | 47,802 |
| MHDT | 5.1 | 11.2 | | 25,624 | 122,124 | | 147,749 |
| HHDT | 4.3 | 7.1 | | 75 | 109,819 | | 109,894 |
| OBUS | 5.1 | 8.7 | | 5,955 | 4,287 | | 10,242 |
| SBUS | 9.2 | 7.7 | | 2,784 | 6,672 | | 9,455 |
| UBUS | 5.1 | 5.9 | | 958 | 13 | 16 | 971 |

| Input | | | | | | | Gasoline Consumption | | | Diesel Consumption | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase Name | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker | Vendor | Haul | Worker | Vendor | Haul |
| Demolition | 231 | 0 | 90 | 18.5 | 10.2 | 20.0 | | | | | | |
| Site Preparation | 139 | 0 | 0 | 18.5 | 10.2 | 20.0 | | | | | | |
| Grading | 185 | 0 | 0 | 18.5 | 10.2 | 20.0 | | | | | | |
| Building Construction | 140 | 30 | 0 | 18.5 | 10.2 | 20.0 | | | | | | |
| Paving | 231 | 0 | 0 | 18.5 | 10.2 | 20.0 | | | | | | |
| Architectural Coating | 28 | 0 | 0 | 18.5 | 10.2 | 20.0 | | | | | | |
| **Adjusted** | | | | | | | | | | | | |
| Demolition | 4625 | 0 | 90 | 18.5 | 10.2 | 20.0 | 3,327 | 0 | 0 | 16 | 0 | 252 |
| Site Preparation | 277.5 | 0 | 0 | 18.5 | 10.2 | 20.0 | 200 | 0 | 0 | 1 | 0 | 0 |
| Grading | 740 | 0 | 0 | 18.5 | 10.2 | 20.0 | 532 | 0 | 0 | 3 | 0 | 0 |
| Building Construction | 27972 | 6018 | 0 | 18.5 | 10.2 | 20.0 | 20,124 | 2,904 | 0 | 96 | 48 | 0 |
| Paving | 2312.5 | 0 | 0 | 18.5 | 10.2 | 20.0 | 1,664 | 0 | 0 | 8 | 0 | 0 |
| Architectural Coating | 279.35 | 0 | 0 | 18.5 | 10.2 | 20.0 | 201 | 0 | 0 | 1 | 0 | 0 |
| **Total** | | | | | | | **26,049** | **2,904** | **0** | **124** | **48** | **252** |

# APPENDIX G

# PRELIMINARY GEOTECHNICAL REPORT

# PRELIMINARY GEOTECHNICAL REPORT
# PROPOSED MOORPARK LIBRARY
# MOORPARK, CALIFORNIA

Prepared for:
City of Moorpark

June 17, 2017
Job No. 030.003

Oakridge Geoscience, Inc.
PO Box 2540, Camarillo, California 93011
www.Oakridgegeo.com
805-368-7765

June 17, 2017
Project No. 030.003

City of Moorpark
799 Moorpark Avenue
Moorpark, California 93021

Attention: Mr. Chris Ball

Subject: Preliminary Geotechnical Report, Proposed Moorpark Library, Moorpark, California

Dear Mr. Ball:

Oakridge Geoscience, Inc. (OGI) is pleased to provide this preliminary geotechnical report for the proposed library project in Moorpark, California. The purpose of the preliminary geotechnical study was to evaluate if seismic related geohazards including liquefaction, dry seismic settlement and lateral spreading, and hydroconsolidation (collapse) potential are present at the site and the need for ground improvement to mitigate potential settlements that may occur as a result of earthquake-induced ground shaking.

This report summarizes the geotechnical data review, field exploration, geotechnical laboratory testing, our evaluations, and our opinions of the site conditions based on the work performed. A supplemental geotechnical design report will be required as part of project design once the building type and location are selected.

**Closure**

Thank you for the opportunity to provide geotechnical services to the City of Moorpark for this project. Please contact us if you have any questions on the information presented herein or if we can be of further assistance on this project.

SINCERELY,
OAKRIDGE GEOSCIENCE, INC.

REGISTERED GEOLOGIST
LORI E. PRENTICE
EG NO. 2312
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA
7/31/18

REGISTERED GEOTECHNICAL ENGINEER
RORY A. ROBINSON
No 2491
Exp. 09/30/2017
GEOTECHNICAL
STATE OF CALIFORNIA

Lori E. Prentice, CEG
President

Rory "Tony" Robinson, GE
Principal Geotechnical Engineer

Copies Submitted: (1 electronic copy (pdf) via email)

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APPENDIX B LABORATORY TESTING
APPENDIX C LIQUEFACTION EVALUATION

# 1.0 INTRODUCTION

## 1.1 PROPOSED PROJECT AND PURPOSE

The City of Moorpark (City) is planning to build a new library building northwest of High Street and Moorpark Avenue near the location shown on Plate 1. As described in the staff report dated November 30, 2016, the library facility has not been designed but is anticipated to consist of an 18,000-square-foot, one-story building of standard wood frame construction.

A recent geotechnical study for the nearby Area Housing Authority (AHA) site development south of Everett Street (Plate 1) recommended ground improvement to reduce potential foundation settlement associated with liquefaction and dry seismic settlement from earthquake-induced ground shaking due to subsurface conditions at that site (Geotechnologies, Inc., 2016). The City retained Oakridge Geoscience, Inc. (OGI) to perform a preliminary geotechnical evaluation of the proposed library site to evaluate whether the conditions onsite will require subsurface ground improvement similar to the AHA site, prior to hiring an architect or engineer to design the proposed structure.

## 1.2 WORK PERFORMED AND AUTHORIZATION

The work performed for this study consisted of data review, project coordination, field exploration, laboratory testing, and geotechnical evaluation and reporting. The work was performed in general accordance with our revised proposal dated April 3, 2017 and was authorized by receipt of a Professional Services Agreement from the City, dated April 13, 2017.

### 1.2.1 Data Review and Project Coordination

We reviewed readily available published data and existing geotechnical reports provided by the City for the nearby AHA site to the east (Geotechnologies, Inc., 2016) and the Moorpark Apartments site (Gorian and Associates, 2013a) to the west. The approximate locations of the AHA and Moorpark Apartments sites are shown on Plate 1. Prior to field exploration, we performed a site reconnaissance to locate and mark the exploration locations for coordination with Underground Service Alert.

### 1.2.2 Field Exploration

Subsurface geologic conditions at the proposed library site were explored using a combination of cone penetrometer tests (CPTs) and drill holes near the locations shown on Plate 2. The CPT and drill hole logs are included in Appendix A.

**CPTs.** Five CPTs were advanced to depths of about 75 feet each on April 27 by Kehoe Testing & Engineering. The CPT is mounted on a 30-ton 3-axle truck and consists of an about 1.4-inch-diameter rod fitted with a cone at the base. The cone is sequentially connected to 1-meter-long rods and pushed into the subsurface at a constant rate by hydraulic rams using the weight of the truck as resistance. Additional rods are added to the rod length as the depth increases. The cone is equipped with electronic load cells which measure point (tip) resistance to the penetration and frictional resistance between the soils and the cylinder side (sleeve) of the cone. The subsurface stratigraphy and engineering parameters of the penetrated materials are inferred based on correlations of the recorded tip and sleeve properties. The CPT collects

nearly continuous data (2-centimeter intervals) and allows for efficient evaluation of seismic-related hazards, engineering properties, and stratigraphy.

Additionally, the CPT was equipped with a piezo-cone which measures excess pore pressure as a result of the penetration to further aid in evaluation of the depth to groundwater at the site. Pore-pressure dissipation tests were performed in CPT-3 and CPT-5.

Following the completion of each CPT, the rods were withdrawn, and the small-diameter holes were backfilled to the ground surface with fine bentonite chips.

**Drill Holes.** Two hollow-stem-auger drill holes, DH-1 and DH-2, were advanced near CPT-3 and CPT-4 by S/G Drilling on May 1, 2017 using a CME-85 drill rig equipped with 8-inch-diameter augers and a 140-pound automatic trip hammer. The drill holes were advanced to depths of 50 and 75 feet to help in evaluation of the subsurface conditions, to "ground truth" the CPT data, and to collect samples for laboratory testing and evaluation of liquefaction consistent with the guidelines published by the California Division of Mines and Geology (CDMG, now California Geologic Survey [CGS]), Special Publication 117A (CGS, 2008).

The drill holes were sampled at about 2.5-foot intervals to about 15 feet and at about 5-foot intervals to total depth using a combination of driven modified California and standard penetration test (SPT) samplers. In addition, bulk samples were collected from the near surface materials recovered from the auger flights. Our field geologist logged the recovered samples in general accordance with ASTM D2488 for visual soil classification. Groundwater depths encountered during drilling were measured and recorded on the drilling logs.

Following completion of drilling and sampling at each location, the drill holes were backfilled to the surface with the drill cuttings mixed with cement to create soil-cement and tamped.

### 1.2.3 Laboratory Testing

Geotechnical laboratory testing was performed on selected earth materials sampled in the drill holes to characterize the materials and estimate relevant preliminary engineering design parameters. The testing consisted of moisture/density relationships, grainsize, Atterberg limits (plasticity), hydroconsolidation (collapse) potential, R-value, and soil chemistry for corrosion (pH, resistivity, sulfates, and chlorides).

The laboratory test results are presented on the drill hole logs (Appendix A) and in Appendix B.

### 1.2.4 Geotechnical Evaluation and Reporting

We evaluated the field and laboratory geotechnical data, developed preliminary geotechnical engineering recommendations for the project, and prepared this report to summarize our findings, opinions and recommendations. Our report includes the following:

- Summary of soil and groundwater conditions encountered;
- Logs of CPT and drill hole explorations;
- Geologic cross sections depicting interpreted subsurface conditions;
- Laboratory test data;
- Evaluation of seismic-related hazards including fault rupture, liquefaction, dry seismic settlement and lateral spreading;
- Potential need for ground improvement;
- Preliminary design parameters for soil bearing and estimated settlement, and lateral earth pressures;
- Suitability of onsite soil for use as fill and select fill material;
- Anticipated excavation conditions; and
- Preliminary grading recommendations.

## 2.0 FINDINGS

### 2.1 BACKGROUND

Geotechnical studies for two nearby sites: 1) AHA site (Geotechnologies, Inc., 2016) and 2) Moorpark Apartments (Gorian and Associates, 2013a) have documented the potential for seismic-related geohazards (liquefaction, dry seismic settlement, lateral spreading) and hydroconsolidation (collapse) potential in the downtown Moorpark area. The approximate locations of the two sites relative to the proposed Moorpark Library site are shown on Plate 1.

**AHA Site.** At the AHA site, Geotechnologies, Inc. reported zones of medium dense granular soils ranging from less than one-foot to about 18-feet thick between depths of 15 to 75 feet. Their report indicated those soils could liquefy in response to the design earthquake event with settlements ranging from about two- to six-inches. On that basis, Geotechnologies recommended ground improvement to a depth of 30 feet to reduce total settlement to less than two inches and differential settlement to less than one inch. Their report indicated the structure could be supported on shallow spread footings following the recommended ground improvement. Alternatively, if the ground improvement could not reduce the total settlement to less than two inches the structure could be supported on a mat foundation. The report indicated the "most feasible ground improvement techniques could consist of a mixture of soil mixing, stone columns, aggregate piers or earthquake drains." The final ground improvement design was to be performed by a specialized ground improvement contractor.

As a follow-up to our initial review of the AHA geotechnical report, we spoke briefly with the City's Geotechnical review consultant, RJR Engineering. Mr. Rob Anderson with RJR

Engineering indicated seismic-related settlement issues have been reported at other locations within the City the Moorpark in addition to the AHA site. Sites closer to the Arroyo Simi drainage channel along the southern portion of the City seem to have a higher amount of estimated seismic settlement. The estimated seismic settlement in other areas in the City is variable.

**Moorpark Apartments Site.** Gorian and Associates (Gorian, 2006; 2013a; 2013b) prepared a geotechnical study for the Moorpark Apartments site directly west and northwest of the proposed Library Site (Plate 1). Gorian's evaluation of the subsurface conditions indicated the potential for up to nine inches of seismic-related settlement (liquefaction and dry seismic settlement) based on a groundwater level of 15 to 25 feet below the ground surface and an earthquake ground acceleration of 0.68g. Exploration by Gorian was limited to a depth of 50 feet, therefore, subsurface data are not available to evaluate if liquefaction could also occur at deeper depths for that site. We note Gorian (2006) indicates up to 15 inches of dry seismic settlement were estimated from CPT-3A, but the calculated value was not considered accurate and the soils in the upper portion of the CPT would be mitigated as part of site grading. Gorian recommended ground improvement consisting of overexcavation and recompaction of soils to a depth of 13 to 22 feet below the existing grade to mitigate soils susceptible to seismic-related settlement; the proposed mitigation reduced the estimated vertical seismic settlement to about one-and-one-half to four inches. Gorian also recommended the proposed structures be supported on a "strong mat" type foundation to reduce the potential for differential settlement.

## 2.2 GEOLOGIC SETTING

The project site is located within the Transverse Ranges geologic/geomorphic province of California. That province is characterized by generally east-west-trending mountain ranges composed of sedimentary and volcanic rocks ranging in age from Cretaceous to Recent. Major east-trending folds, reverse faults, and left-lateral strike-slip faults reflect regional north-south compression and are characteristic of the Transverse Ranges. Several authors including Dibblee (1992), and Weber (1973) have mapped the Moorpark area.

The project site is located south of the confluence of two southerly draining tributaries (Walnut Canyon and an unnamed canyon) to the Arroyo Simi. As mapped by Dibblee (1992), the earth materials in the vicinity of the proposed library site consists of alluvial sediments of silt, sand, and gravel deposits.

## 2.3 REGIONAL GEOLOGIC HAZARDS

Mapping by the CDMG, (now CGS, 2000) indicates the proposed library site is located in a potential liquefaction area based on a regional evaluation of geologic and geotechnical conditions. Proposed habitable developments within this zone are required to have a site-specific liquefaction evaluation performed in accordance with CGS Special Publication 117A (CGS, 2008).

## 2.4 SITE CONDITIONS

The project site is roughly an "L"-shaped vacant lot located west of the intersection of Moorpark Avenue and West High Street, south of the existing City library and parking lot as indicated on Plate 2. Review of images on Google Earth and the USGS topographic map

indicate the project site was formerly developed with small structures that were demolished after about 2003. Asphalt concrete pavement is located in the northwest portion of the "L"-shaped property; the remainder of the site is earthen. The site topography slopes gently to the south. Based on ground surface elevations from the USGS Moorpark Quadrangle, the ground surface at the project site slopes southward from about elevation (El.) +520 feet at the northern portion of the site to about El. +514 feet at the southern portion of the site (6 feet of elevation difference) over a distance of about 270 feet (approximately a 2.2 percent slope).

## 2.5 EARTH MATERIALS

Descriptions of soil conditions presented herein are based on visual classification of samples obtained from our field exploration combined with the results of laboratory testing.

As depicted on the attached Geologic Cross Sections A-A' and B-B' (Plates 3a and 3b), the earth materials encountered by the CPTs and drill holes for this study consist primarily of interbedded granular alluvial deposits of sand and silty sand to depths of about 40 feet and interbedded silty to clayey sand, sandy clay, and silt from about 40 to 75 feet (maximum depth explored). As shown on the CPT logs in Appendix A, the silt, clay, and sand layers below a depth of 40 feet are typically thinly bedded ranging from several inches to two feet in thickness, with occasional clay or silty sand layers to about five feet thick.

### 2.5.1 Engineering Properties

A summary of the general engineering parameters for the earth materials encountered in the explorations advanced for this study consists of:

- Field SPT N-values ranged from about 2 to 15 blows per foot (bpf) from the ground surface to a depth of about 25 feet, and 12 to 22 bpf from about 25 to 75 feet below the ground surface (Appendix A). The SPT N-values indicate the granular soils classify as very loose to loose in the upper 25 feet and loose to medium dense from 25 to 75 feet. The fine-grained silt and clay soil layers generally classify as medium stiff, with the exception of a very soft layer at a depth of 50 feet in DH-1.
- Moisture contents generally ranged from about 2 to 8 percent in the granular alluvial deposits above the groundwater level (above 37 feet) and from about 14 to 25 percent below the encountered groundwater level.
- Dry densities of the granular soil in the upper 40 feet of the site ranged from 95 to 111 pounds per cubic foot (pcf), and the densities of interbedded soils from 40 to 75 feet ranged from 112 to 118 pcf.
- The results of grainsize analyses indicate fines contents (percent passing No. 200 sieve) ranging from about 3 to 47 percent for the tested granular soil samples and from about 50 to 63 percent for cohesive materials.
- Atterberg Limit tests indicate the tested fine-grained sandy clay layers have liquid limits of 21 to 26 and plasticity indexes of 6 to 9. Those soils classify as low plasticity sandy clay and sandy to silty clay (Appendix B).
- The hydroconsolidation (collapse) potential for three silty sand soil samples from depths of 10, 25, and 30 feet was tested in accordance with ASTM D4546, Method

B. The test results are presented in Appendix B. The samples were selected for testing based on unit weight, degree of saturation, void ratio, and fines content (percent passing No. 200 sieve). The test results indicate hydroconsolidation potentials of 2.3 percent at 10 feet, 0.05 percent at 25 feet, and 0.4 percent at 30 feet. (Appendix B).

- The near surface soil materials consist of silty sand with an R-value of 70 and an anticipated low expansion index (EI of less than 20).
- The results of the soil chemistry tests are summarized below.

## 2.6 SOIL CHEMISTRY AND CORROSION

### 2.6.1 Test Results

A selected soil sample obtained from our exploration was provided to Cooper Testing Laboratories for resistivity, pH, chloride, and sulfate testing. The test results are summarized below and the laboratory test report is included in Appendix B.

**Table 1. Summary of Chemical Test Results**

| Drill Hole | USCS Classification | Depth (feet) | Sulfate (mg/kg/%) | Chloride (mg/kg) | Resistivity (ohm-cm) | pH |
|---|---|---|---|---|---|---|
| DH-1 | Sand with Silt | 0 - 5 | 6/0.0006 | 2 | 16,319 | 7.5 |

### 2.6.2 Corrosion and Cement Considerations

As summarized in the table above, the measured pH of the tested sample (ASTM G51) is 7.5, the measured electrical resistivity (ASTM G57) is 16,319 ohm-centimeters, the chloride content (ASTM D4327) of the measured samples is 2 mg/kg, and the sulfate content (ASTM D4327) of the measured sample is x6mg/kg (0.0006 percent).

Caltrans (2012) classifies soils as non-corrosive if the earth materials have less than 500 ppm chlorides, less than 0.20 percent sulfates (i.e., 2,000 mg/kg or ppm), a pH of 5.5 or more, or an electrical resistivity of 1,000 ohm-centimeters or more. The data suggest the tested soil materials are not corrosive to underground steel. If applicable, the test results should be evaluated by a corrosion engineer to determine how underground utilities should be protected from corrosion.

The cement type should be selected with consideration of the sulfate content of the tested soils. Available sulfate content data suggest that, per Table 4-3-1 of ACI 318, Type II cement can be used for concrete that will be in contact with onsite granular soils.

## 2.7 GROUNDWATER CONDITIONS

Groundwater was encountered at depths of about 36 to 37.5 feet in the drill holes advanced onsite (Appendix A). Interpretation of the CPT dissipation test data indicates similar groundwater depths of about 37 feet below ground surface at the time of our exploration on April 27, 2017 (Appendix A). Historically high groundwater levels reported by the CGS (2000)

indicate the groundwater levels at the project site have been within about 15 feet of the ground surface. Variations in groundwater levels and soil moisture conditions can occur as a result of rainfall, irrigation, runoff, and other factors.

## 2.8 DATA INTERPRETATION AND ANALYSES

Data interpretation for this study utilized the CPTs and the SPT N-values from the drill holes advanced onsite (Appendix A). Analyses of the CPT and SPT data from this study were performed using the computer program GeoLogisMiki. Selected computer printouts from the GeoLogisMiki analyses are presented in Appendix C. A complete pdf file of the analyses can be provided upon request.

The field SPT N-values presented on the drill hole logs in Appendix A were normalized to 1 ton/square foot and corrected for rig efficiency, hammer type, sampler type (no liner), and rod length as described in the Recommended Procedures for Implementation of CGS Special Publication 117A (CGS, 2008). Recent modifications to the CGS procedures by Boulanger and Idriss (2014) are incorporated into the software evaluation. We also utilized blow counts measured for the modified California sampler (MCS) in the analyses by dividing the MCS blowcount by 1.6 to provide an equivalent SPT N-value. The SPT N-value correction factors are summarized in Table 2.

**Table 2. SPT N-Value Correction Factors**

| Correction Factor | Value | Comment |
|---|---|---|
| Hammer Efficiency ($C_E$) | 1.3 | Auto trip hammer 80% efficiency |
| Rod Length ($C_R$) | L<15'=0.75<br>L<20'=0.85<br>L<35'=0.95<br>L>35'=1.0 | L= Rod Length (feet) |
| Sampling Method ($C_S$) | 1.2 | |
| Modified California Sampler (MCS) blowcounts | MCS/1.6 = SPT N-value | Equivalent SPT N-Value |

## 2.9 POTENTIAL VARIATION OF SUBSURFACE MATERIALS

There is a potential for variation in the consistency, density, and strength/hardness of the materials from what was encountered in our explorations. The potential exists to encounter perched water, zones of poorly consolidated soils, or other conditions not indicated on the exploration logs. If significant variation in the geologic conditions is observed during construction, we recommend the geotechnical engineer, in conjunction with the project designer, evaluate the impact of those variations on the project design.

## 2.10 SEISMIC CONSIDERATIONS AND GEOHAZARDS

### 2.10.1 Faults

The project site is located in a seismically active portion of southern California and the project most likely will be subjected to strong earthquake ground motion during its lifetime. As summarized in the following table, numerous active or potentially active faults are known or postulated to exist within about 15 miles of the proposed new library site.

**Table 3. Nearby Faults**

| Fault | Approximate Distance (miles)[1] | Maximum Moment Magnitude (Mmax) |
|---|---|---|
| Simi-Santa Rosa | 2.1 | 6.8 |
| Oak Ridge | 6.0 | 7.1 |
| San Cayetano | 8.1 | 7.1 |
| Northridge | 12.1 | 6.8 |

[1] Earthquake distances and magnitudes obtained from the USGS website (2017)

### 2.10.2 Ground Rupture Potential

The site is not located within a State of California Earthquake Fault Zone (formerly Alquist-Priolo Special Studies Zone) and no known active or potentially active faults cross or trend toward the site. The potential for fault rupture to affect the site is considered low.

### 2.10.3 Seismic Considerations for 2016 CBC

We estimated the probabilistic seismic ground acceleration at the proposed library site using the USGS web application (USGS; 2017). On the basis of the web-based analyses, the peak horizontal ground acceleration (pga) at the proposed site is estimated to be 1.035g for an earthquake with a 2,475-year return period (2 percent probability of exceedance in 50 years) assuming Site Class D soil conditions. The following table summarizes the probabilistically estimated strong ground motion parameters for the project site.

**Table 4. Summary of USGS Probabilistic Seismic Hazard Deaggregation Results**

| Return Period (years) | Mean Magnitude (Mw) | Mean Source Distance (miles) | Peak Horizontal Ground Acceleration |
|---|---|---|---|
| 2,475 | 6.9 | 5.0 | 1.035g |

### 2.10.4 2016 CBC Seismic Design Parameters

In accordance with Chapter 16, Section 1613 of the 2016 CBC, the following parameters have been obtained from the USGS Seismic Design Maps web application (USGS, 2017) and shall be incorporated into the seismic design at the project site. The subsurface conditions at

the site are considered to satisfy the parameters for Site Class D[1]. The associated seismic design parameters for Site Class D for use in generating the risk-targeted maximum considered earthquake and design level spectra are summarized in the following table.

**Table 5. 2016 CBC Seismic Design Parameters**

| 2013 California Building Code Section 1613 | Seismic Parameter | Site Class D Values |
|---|---|---|
| --- | Latitude | 34.2857 |
| --- | Longitude | -118.8829 |
| Figure 1613.3.1(1) | Mapped Acceleration Response Parameter ($S_s$) | 2.755g |
| Figure 1613.3.1(2) | Mapped Acceleration Response Parameter ($S_1$) | 0.968g |
| Section 1613.3.2 | Site Class | D |
| Section 1613.3.3 and Table 1613.3.3(1) | Site Coefficient ($F_a$) | 1.0 |
| Section 1613.3.3 and Table 1613.3.3(2) | Site Coefficient ($F_v$) | 1.5 |
| Section 1613.3.3 | $PGA_M$ Equation 11.8-1 $PGA_M=F_{PGA}PGA$ | 1.035g |
| Section 1613.3.3 | Adjusted Acceleration Response Parameter ($S_{MS}$) | 2.755g |
| Section 1613.3.3 | Adjusted Acceleration Response Parameter ($S_{M1}$) | 1.452g |
| Section 1613.3.3 | Adjusted Acceleration Response Parameter ($S_{DS}$) | 1.837g |
| Section 1613.3.3 | Adjusted Acceleration Response Parameter ($S_{D1}$) | 0.968g |

### 2.10.5 Liquefaction and Dry Seismic Settlement Potential

Liquefaction is described as the sudden loss of soil strength because of a rapid increase in soil pore water pressures due to cyclic loading during a seismic event. In order for liquefaction to occur, three general geotechnical characteristics must be present [2]: 1) groundwater must be present within the potentially liquefiable zone; 2) the potentially liquefiable soil must meet certain grainsize and classification characteristics; and 3) the potentially liquefiable granular soil must be of low to moderate relative density. If those criteria

[1] A Site Class D soil is defined in California Building Code (CBC) as the soil having the following average parameters for the upper 100 feet of the site: 1) shear wave velocity of 600 to 1,200 ft/sec, 2) standard penetration test SPT N-value of between 15 to 50, and 3) undrained shear strength of fine-grained soil between 1,000 to 2,000 psf. SPT N-values in the upper 50 feet of the Moorpark Library site ranged from 2 to 15 for granular soils to a depth of about 25 feet and 12 to 22 from about 25 to 75 feet (Appendix A). The average SPT N-values and soil shear strength in the upper 100 feet of the site would be consistent with Site Class D soil.

[2] Based on studies by Seed and Idriss (1971) and Youd and Idriss (2000), liquefaction occurs primarily in clean granular soils that classify as sand (SP) and sand with silt (SP-SM). Dense granular soils with fines contents greater than 35% (silty sand - SM and clayey sand - SC) are less likely to liquefy. Liquefaction susceptibility criteria developed by Boulanger and Idriss (2006) indicates that fine-grained soils with a PI of 6 or less can be susceptible to liquefaction. Studies by Bray and Sancio (2006) indicates that silty soils with a PI of 12 or less could potentially liquefy.

are met and strong ground motion occurs, then those soils may liquefy, depending upon the intensity and cyclic nature of the strong ground motion. Liquefaction that produces surface effects generally occurs in the upper 40 to 50 feet of the soil column, although the phenomenon is not restricted to depths of less than 50 feet.

As described in the Earth Materials section above, the soil profile consists primarily of interbedded granular alluvial deposits of sand and silty sand to depths of about 40 feet and interbedded silty to clayey sand, sandy clay, and silt from about 40 to 75 feet (Plates 3a and 3b). Groundwater was encountered at a depth of about 37 feet during field exploration for this study. Historic high groundwater levels summarized by the CGS (2000) are about 15 feet below the ground surface. SPT N-values from the upper 25 feet of the drill holes range from 2 to 15 bpf, indicating the granular soils are very loose to medium dense in that zone. The SPT N-values from 25 to 75 feet range from 12 to 22 bpf, indicating the granular soils are medium dense and the fine-grained silt and clay soils are medium stiff within that zone.

Research by Boulanger and Idriss[2] (2006) has indicated fine-grained silt and clay soils with Plasticity Index (PI) values of 6 or less can be susceptible to liquefaction and research by Bray and Sancio (2006) indicates low plasticity silt with a PI of up 12 can liquefy during strong earthquake ground shaking. Clay soils with PI of greater than 18 generally exhibit a clay-like behavior and are considered non-liquefiable based on the criteria developed by Bray and Sancio (2006). The fine-grained sandy clay and sandy to silty clay soil layers tested for this study (Appendix B) have fines contents (percent passing the number 200 sieve) of 50 to 63 percent and PI's of 6 to 9, suggesting those layers have low plasticity and may be susceptible to liquefaction in response to strong earthquake ground shaking.

Analyses of the CPT and SPT data were performed using the program GeoLogisMiki. The input values are summarized below and selected graphics from the analyses are presented in Appendix C:

- The seismic ground motion is 1.03g for a 2 percent probability of exceedance in 50 years for the project site.
- Historic high groundwater level of 15 feet below the ground surface.
- CPT evaluation using the procedure recommended by Robertson (2009).
- SPT data evaluation using the procedure recommended by Boulanger and Idriss (2014).

Overall, the liquefaction analyses indicate the very loose to loose granular soils at the site are susceptible to liquefaction below the groundwater and dry seismic settlement above the groundwater. The estimated vertical liquefaction and dry seismic settlements are summarized in Table 6.

Seismically induced settlement or collapse can occur in soils that are loose, soft, or that are moderately dense, but weakly cemented. The onsite very loose to loose granular and silty soils above the groundwater are susceptible to seismically induced settlement. The estimated seismically induced settlement in the upper 15 feet of site is summarized in Table 6. We note the groundwater is assumed to be at 15 feet; therefore, soils below that depth are subject to liquefaction potential in the analyses even though the groundwater depth encountered by our explorations was about 37 feet below the ground surface.

**Table 6. Summary of Estimated Vertical Seismic Settlement**

| Exploration Location | Estimated Liquefaction Settlement (inches) | Estimated Dry Seismic Settlement (inches) | Total Estimated Seismic Settlement (inches) | Estimated Lateral Displacement (inches) |
|---|---|---|---|---|
| CPT-1 | 7.5 | 6.9 | 14.4 | 200 inches |
| CPT-2 | 8.0 | 8.3 | 16.3 | 200+ inches |
| CPT-3 | 9.9 | 8.2 | 18.1 | 200+ inches |
| CPT-4 | 10.9 | 5.8 | 16.7 | 300+ inches |
| CPT-5 | 10.4 | 8.0 | 18.4 | 300+ inches |
| DH-1 | 13.8 | 34.0 | 37.8 | 108 inches |
| DH-2 | 9.4 | 2.4 | 11.8 | 72 inches |
| **Range (inches)** | **7.5 -13.8** | **2.4 - 34** | **11.8 – 37.8** | **-** |
| **Average Value (inches)** | **10** | **9.4** | **19** | **-** |

### 2.10.6 Data Summary

Review of the data plots in Appendix C indicates:

- The liquefaction and dry seismic settlements estimated from the five CPTs advanced for this study are fairly consistent, ranging from 7 to 11 inches and 6 to 8 inches, respectively.
- The estimated liquefaction and dry seismic settlement estimated from the SPT data ranges 9.4 to 13.8 inches and 2.4 to 34 inches, respectively. The estimated liquefaction settlements from the SPT data are fairly consistent with CPT data with a slightly higher value for estimated settlement in DH-1 which extended to 75 feet (25 feet deeper than DH-2).
- The procedures for estimating dry seismic settlement from blowcount data are sensitive to low N-values such as was encountered in the near surface soil in DH-1. In DH-1, a three-foot-thick zone from 3.5 to 6.5 feet with an SPT N-value of 2 accounts for half (17 inches) of the estimated dry seismic settlement in that drill hole.
- The analyses presented in Appendix C indicate the loose granular soils and soft low plasticity silt/clay layers have a seismic factor of safety of less than 1 and an associated liquefaction potential to a depth of 75 feet (maximum depth explored).
- A majority of the estimated settlement from the CPT data occurs between the ground surface and a depth of about 40 to 50 feet.
- Estimated liquefaction settlement below a depth of about 40 feet is about 2 to 4 inches based on the CPT data (Appendix C).
- The total estimated liquefaction settlement in DH-1 (75 feet deep) is 13.8 inches; 4 inches of the settlement is estimated below about 50 feet. The analyses for DH-1

conservatively assumes all zones below a depth of 15 feet could liquefy except for a medium stiff clay from 66 to 69 feet.

### 2.10.7 Lateral Movement

The occurrence of lateral spreading is generally associated with sites where liquefaction is possible and: 1) the ground surface is sloping, or 2) there is a free-face condition such as a road cut or riverbank. Existing analytical methods of assessing potential deformations caused by lateral spreading are based on a small number of case histories and generally involve layers of liquefiable soils of greater than about three feet (one meter). The procedures are generally considered reasonable in assessing risks where significant lateral deformations are possible (deformations of three feet or greater). The ability to reasonably predict small lateral spreading deformations is, however, considered significantly limited.

As depicted on the regional geologic/topographic map for the Moorpark Quadrangle (Dibblee, 1992), the ground surface in the vicinity of the project site slopes southward at a gradient of about 2.2 percent or less (six feet over 270 feet). From High Street southward, the regional slope gradient is one percent or less to the west. As described above, based on the CPT and drill holes advanced for this study, there is a potential for liquefaction, primarily in the upper 40 to 50 feet of the site. The lateral displacements estimated from the CPT and SPT data are summarized in Table 6 and range from 72 inches to greater than 300 inches.

CGS Special Publication 117A (CGS, 2008) defines large-scale ground displacements as areas that exceed one to three feet horizontally and four to six inches vertically. The estimated lateral displacements summarized in Table 6 range from six to 25 feet, and estimated vertical settlements (combined liquefaction and dry seismic settlement) in Table 6 average 19 inches. Based on both of those criteria, ground improvement of the subsurface soils will be required prior to construction to reduce the estimated lateral displacement to acceptable levels.

## 2.11 HYDROCONSOLIDATION (COLLAPSE) POTENTIAL

Research by several authors including and Houston et al. (1997; 2001) and Purdue University (Howayek, 2012) indicates hydroconsolidation (collapse) typically occurs in silty and granular soil materials with densities below 105 pcf, degree of saturation of less than 25 percent, and high void ratios. In the Ventura County area, our experience indicates hydroconsolidation is commonly associated with silty soils deposited in debris-flow type environments. The depositional environment with high collapse potential previously observed in Ventura, Camarillo, and Simi Valley consists of Holocene- to Late Pleistocene-age alluvial fan deposits above the groundwater. As noted above in the Site Conditions section of this report, the proposed site is located at the mouth of tributary drainage to Arroyo Simi and is underlain by younger to older alluvial deposits; those deposits are equivalent to the Holocene- to Late Pleistocene-age fan deposits.

Based on an evaluation of the laboratory index properties (soil density, moisture content, void ratio, and fines content), three samples were selected for collapse testing per ASTM D4546, Method B. The results of those tests are presented in Appendix B and are summarized in Table 7 below. Based on published criteria (ASTM D5333), a collapse index of two percent or less is classified as slight, two to six percent is moderate, six to ten percent is moderately

severe, and above 10 percent is severe. Based on the tested samples, the amount of hydroconsolidation ranges from 0.05 to 2.3 percent. The values of less than two percent are considered slight by ASTM D5333 classification and within background levels for soils in Ventura County based on our previous experience. The sample from DH-2 at 10 feet with 2.3 percent hydroconsolidation (collapse index) indicates a moderate degree of potential collapse settlement.

The typical procedure to mitigate shallow collapse potential is to overexcavate and recompact the soil. If ground improvement is performed at the site, the near-surface soils would be densified and, in our opinion, likely reduce the hydroconsolidation potential to an acceptable level (i.e., less than two percent).

**Table 7. Summary of Hydroconsolidation (Collapse) Potential of Onsite Soils**

| Location and Depth | Soil Type | Dry Density (pcf) | Moisture Content (%) | Degree of Saturation | Void Ratio (%) | Fines Content (%) | Measured Hydroconsolidation (%) |
|---|---|---|---|---|---|---|---|
| DH-2 10 feet | Silty Sand (SM) | 96.9 | 3.5 | 13 | 0.71 | 22 | 2.3 |
| DH-2 25 feet | Silty Sand (SM) | 89.9 | 5.6 | 18 | 0.84 | 29 | 0.05 |
| DH-1 30 feet | Sand w/Silt (SP-SM) | 102 | 2.5 | 11 | 0.62 | 7 | 0.43 |

## 2.12 EXPANSIVE SOILS

As described on the drill holes and laboratory data, the onsite surficial soils consist of sand and silty to clayey sand. The onsite granular soils are anticipated to have a low expansion potential.

# 3.0 OPINIONS AND RECOMMENDATIONS

## 3.1 SUMMARY OF SUBSURFACE SITE CONDITIONS

The geotechnical conditions for the proposed library site were evaluated based on the explorations advanced for this study supplemented by data from previous geotechnical reports from the project vicinity. Based on the work performed, the site conditions consist of:

- Generally granular sand and silty sand soil in the upper 40 feet underlain by thinly interbedded silt, clay, and clayey sand from 40 to 75 feet (maximum depth explored).
- SPT N-values from the upper 25 feet of the drill holes range from 2 to 15 bpf, indicating the granular soils are very loose to medium dense in that zone. The SPT N-values from 25 to 75 feet range from 12 to 22 bpf, indicating the granular soils are medium dense and the fine-grained silt and clay soils are medium stiff within that zone.
- Groundwater was encountered at a depth of about 37 feet during exploration. Historic high groundwater levels in the Moorpark area are about 15 feet below the ground surface.
- The site is not located within a fault rupture hazard zone as defined by the State of California, California Geological Survey.
- The site is located in a seismically active area of Ventura County and has an estimated peak ground acceleration $PGA_M$ of 1.03g.
- The plasticity index of fine grained soils ranges from 6 to 9. Research by Bray and Sancio (2006) indicates the fine grained soils could potentially liquefy during a seismic event.
- CPT and SPT data were evaluated (Appendix C) to estimate liquefaction and dry seismic settlement using the program GeoLogisMiki and the procedures developed by Robertson (2009) and Boulanger and Idriss (2014). The combined estimated liquefaction and dry seismic settlement ranges from about 12 to 34 inches with an average of about 19 inches in the upper 75 feet at the site.
- A majority of the estimated seismically induced settlement occurs in the granular soil layers in the upper 50 feet of the site; less than two to four inches of settlement is estimated to occur below 50 feet. Based on the liquefaction analyses, the fine-grained silt and clay soil layers do not contribute to liquefaction settlement.
- Estimated lateral spreading ranges from six feet to greater than 20 feet using the procedure developed by Robertson (2009) for CPT data and Boulanger and Idriss (2014) for SPT data.
- Estimated hydroconsolidation (collapse) potential ranges from 0.05 to 2.3 percent based on the laboratory testing on three samples of onsite soil.
- Nearby sites have estimated liquefaction/dry seismic settlement 2.5 inches (AHA Site; Geotechnologies, 2016) and 2 to 9 inches (Moorpark Apartments; Gorian, 2013). Liquefaction potential was identified to depths of about 60 feet with individual zones ranging from several feet to 18 feet thick.

- CGS Special Publication 117A (CGS, 2008) and the California Building Code (CBC) typically require projects to have seismic settlement of no more than two inches total and one inch of differential settlement. Sites with estimated settlements of more than two inches are normally required to mitigate settlement to about two inches with ground improvement. Potential ground improvement options are discussed in the following sections.

## 3.2 GROUND IMPROVEMENT OPTIONS

As discussed above, ground improvement of the soils at the proposed library site will be required to mitigate the amount of estimated settlement to near two inches of total settlement and one inch of differential settlement. To reduce the estimated settlement to near two inches will require improving the site to a depth of approximately 50 feet. We note a 50-foot thick treatment depth would reduce the estimated settlement to less than two inches for most of the exploration locations performed for this study with the exception of DH-1. The data and analyses for DH-1 indicates up to four inches of settlement could occur from depths of 50 to 75 feet. However, in our opinion, if the upper 50 feet of soil were densified/improved, the site would have a 50-foot-thick cap of non-liquefiable improved soil to dampen any settlement below 50 feet. If the treatment depth was limited to 50 feet, a mat-type foundation may be required to reduce differential settlement to an acceptable level for the structure. The alternative would be to select a ground improvement option that could treat soil to a depth of greater than 50 feet as discussed below.

The two primary ground improvement methods to mitigate seismically induced settlements to a depth of about 50 feet with groundwater at a depth of 37 feet are: 1) vibro replacement (VR, also referred to as “stone columns”), and 2) deep soil mixing (DSM). The VR procedure consists of advancing a 30-inch diameter steel mandrel to the selected depth (approximately 50 feet) using a combination of the weight of mandrel and vibration. Once the mandrel reaches the selected depth, ¾-inch crushed rock is used to backfill the hole. The gravel is vibrated and “rammed” into the soft soil. The stone columns are placed on a grid pattern with a spacing typically in the range of six to nine feet on center. The soil displaced by the mandrel is “pushed” laterally into the adjacent soil, densifying the soil mass at the site to the point where it will resist liquefying and settlement in response to earthquake ground shaking. CPTs are advanced between columns after the VR is performed to evaluate the increase in soil strength/resistance to liquefaction. VR is an effective method of densifying granular soils to a depth of about 50 feet, but the process does not significantly improve the density of fine-grained silt and clay soils or highly interbedded fine-grained and granular soils. In our opinion, VR will be most effective in the upper 40 feet at the proposed library site.

DSM uses a large diameter auger mounted to a large drill rig or crane to advance the auger to the target depth (approximately 50 feet for the library project). Cement is mixed into the soil at a regulated rate of around 10 percent and mixed by the auger using several up and down passes of the auger. The amount of cement added to the soil is determined by laboratory testing to optimize the soil strength versus amount of cement utilized. Once the cement and soil are uniformly mixed, the auger is withdrawn and moved to the next location. The DSM columns can be placed in a variety of patterns (grid, tangent, overlapping) depending on the project requirements. For the proposed library project, one option is to place the DSM columns on a

grid pattern with a center to center spacing of two to three diameters with a grade beam type foundation system supported on the columns. The column configuration will depend on the column diameter selected (typically three to six feet), cement percentage, soil type, and amount of soil improvement required. Once the columns are completed, a grade-beam type foundation can be installed on top of the DSM columns to support the structure. Other column configurations such as tangent columns, overlapping columns, etc. can be utilized depending on project requirements. The advantages of the DSM method are that it can installed to depths of greater than 50 feet and it can improve the strength of fine-grained soils.

The final design of the ground improvement system is typically performed by the specialty ground improvement contractor working with the project civil, structural, and geotechnical engineers. Other options could be considered pending an evaluation by a specialty ground improvement contractor. Both methods are established procedures and are considered feasible for the Moorpark Library site pending detailed site analyses of the proposed method and cost proposal from a qualified ground-improvement contractor. The pros and cons of the two primary methods are summarized in the following table.

**Table 8. Summary of Ground Improvement Methods**

| Ground Improvement Method | Pros | Cons | General Cost Range |
|---|---|---|---|
| Vibro Replacement (VR) / Stone Columns | • Established procedure, excepted by agencies<br>• Densifies granular soil between individual columns<br>• Provides conduit to dissipate buildup of water pressure during a seismic event<br>• multiple contractors perform procedure – multiple bids<br>• No spoil generated during installation | • Treatment depth limited to 50 feet<br>• Vibration could impact adjacent structures. Vibration monitoring recommended.<br>• Limited density improvement to fine-grained silt and clay soils from 40 to 50 feet below the ground surface.<br>• Treatment area usually extends out beyond building foundations<br>• Ground disturbance at surface requires upper several feet of site to be recompacted | • Mob/Demob - $60,000<br>• $30/ft of column<br>• Column center to center spacing typically 6 to 9 feet |
| Deep Soil Mixing (DSM) | • Established procedure excepted by agencies<br>• DSM columns can be extended to depths of 75 feet if required.<br>• Treatment area can be limited to building foundation footprint depending on site conditions | • More expensive mobilization and per foot of column cost than vibro replacement<br>• Does not densify soil between columns<br>• Soil between columns can settle requiring a grade-beam type foundation to span across columns<br>• About 20 percent spoil generated during installation that needs to be disposed of. | • Mob/Demob - $100,000 to $150,000<br>• $50/ft of column<br>• Replacement ratio 10% |

### 3.2.1 Ground Improvement Limits

Typically, ground improvement is performed beneath the building footprint for "habitable structures" plus a minimal distance outside the building footprint (generally one column spacing) to provide lateral support for the structure. Habitable structures are defined by the CGS as structures with 2,000 man-hours occupancy per year. The remainder of the site beneath auxiliary structures is generally not improved unless the structures are considered an essential facility (such as an emergency back-up generator). The area outside of the building footprints beneath auxiliary structures and paved areas would be overexcavated per the recommendations in this report.

### 3.2.2 Surface Treatment

Installation of VR columns typically causes the upper several feet of the ground surface to heave. Once the VR columns have been installed, the upper two feet of soil in the building foundation area should be over-excavated and recompacted to 90 percent relative compaction. The compacted material could consist of onsite granular soil or crushed rock.

For DSM projects, the loose disturbed soil in the upper portion of the site is removed to expose the upper part of the DSM columns. The surface treatment beneath the grade beam foundation treatment will be specified by the project civil and structural engineers based on the column and foundation configuration.

## 3.3 PRELIMINARY GRADING CONSIDERATIONS

### 3.3.1 General Site Clearing and Grubbing

Soil containing debris, organics, trees and root systems, and other unsuitable materials should be excavated and removed from improvement areas prior to commencing grading operations. Areas should be cleared of old foundations, slabs, pavement, abandoned utilities, and soils disturbed during the demolition process. Depressions or disturbed areas left from the removal of such material should be replaced with compacted fill.

### 3.3.2 Subgrade Preparation

For areas within the building foundation improved with VR, the ground surface should be overexcavated to a depth of two feet below the existing ground surface and replaced with compacted fill consisting of onsite granular soils or a blanket of crushed rock.

For improved areas outside of the building foundation ground improvement area, the ground surface should be overexcavated to a depth of two feet below the existing ground surface or two feet below footing depth, whichever is deeper. The resulting surface should be scarified to a depth of eight inches and compacted to 90 percent relative compaction (RC) and the fill placed above that level. Areas underlain by asphalt concrete pavement should be scarified to a depth of 12 inches and compacted to 95 percent RC.

### 3.3.3 Fill Material Selection

Recommended fill material selection requirements for subgrade fill, aggregate base, and use of onsite materials are presented below. Areas or zones where the various fill materials may be used are described below.

**Use of Onsite Materials.** As described above, the near-surface onsite materials consist of granular silty sand soils with some gravel and cobble-size rock fragments. The material generated from the site overexcavation can be utilized as compacted fill as long as those materials satisfy criteria for general fill.

**General Fill.** General fill should consist of granular soil materials (SP, SW, SP-SM, and SM) free of organics, oversize rock (greater than six inches in diameter), trash, debris, and other deleterious or unsuitable materials, and should have an expansion index less than 20. The fill materials should have less than 15 percent larger than three inches in diameter.

**Aggregate and Miscellaneous Base.** Base materials should consist of material conforming to Caltrans Standard Specifications for Class 2 Aggregate Base, Section 26-1.02 (Caltrans, 2015) or Section 200-2.5 of the Greenbook (2015) for Processed Miscellaneous Base.

**Imported Fill.** Although importing fill is not anticipated, if material is imported, the imported subgrade fill materials should comply with recommendations for general fill or as appropriate for its intended use. Imported fill should be reviewed by the geotechnical engineer prior to being transported to the site.

### 3.3.4 Dewatering

On the basis of our subsurface exploration and previous studies nearby, we do not anticipate groundwater will be encountered during site grading activities. Although we do not anticipate the need for dewatering, groundwater levels may vary seasonally and it is possible some seepage may be encountered in the excavations following rain events.

### 3.3.5 Fill Placement

Fill should be placed, moisture conditioned, and compacted to a minimum of 90 percent relative compaction. In general, we recommend the moisture content of the fill should be 0 to 2 percent above the optimum. We note the tested on-site soils have low moisture contents in the range of 2 to 8 percent. On the basis of the test results, water will need to be added during grading to bring the moisture content up near the optimum moisture content of about 10 to 11 percent. Each layer should be spread evenly and should be thoroughly blade-mixed during the spreading to provide relative uniformity of material within each layer. Soft or yielding materials should be removed and be replaced with properly compacted fill material prior to placing the next layer.

Rock, cobbles, and other oversized material greater than six inches in dimension in any direction should be removed from the fill material being placed. The contractor should be prepared to screen all native materials prior to placement as compacted fill. Rocks should not be nested and voids should be filled with compacted material. Organics, foreign matter, and other deleterious materials also should be removed from any material used in constructed fills.

Fill and backfill materials should be placed in layers that can be compacted with the equipment being used. Fill should be spread in lifts no thicker than approximately eight inches prior to being compacted. Fill and backfill materials may need to be placed in thinner lifts to achieve the recommended compaction depending on the equipment being used.

### 3.3.6 Compaction

Fill placement and grading operations should be performed according to the City of Moorpark, Greenbook Specification 300-4, and the grading recommendations of this report. Relative compaction should be assessed based on the latest approved edition of ASTM D1557. The building and general site improvement over-excavation and upper 1-foot of paved areas (subgrade plus base materials) should be compacted to 95 percent relative compaction. We recommend general fill be compacted to a minimum of 90 percent relative compaction. Recommended specified relative compaction should extend to a minimum of three feet horizontally beyond the limits of the improvements.

## 3.4 SHALLOW FOUNDATION DESIGN

The following sections describes preliminary shallow foundation design parameters for the site assuming the seismic geohazards have been mitigated through ground improvement. Depending on the level of improvement and building design criteria, it may be necessary so support the proposed structure on a mat type foundation. The decision on the preferred foundation type should be coordinated with the project civil and structural engineers based on building settlement tolerances. The following sections provides preliminary shallow foundation parameters consisting of isolated and continuous footings designed in accordance with current CBC and Greenbook requirements assuming that those values are suitable for the proposed structure.

### 3.4.1 Allowable Bearing Pressure

Continuous and isolated spread footings will be supported on recompacted onsite materials underlain by alluvium. For these conditions, we recommend shallow footings be designed using a maximum allowable bearing pressure of 1,500 pounds per square foot (psf). The allowable value incorporates a factor of safety of at least 3. The toe-pressure below retaining walls or eccentrically loaded footings can exceed the recommended bearing pressure, provided the resultant pressure is within the middle-third of the footing. In accordance with 2016 CBC Section 1806.1, the bearing values indicated above are for static loads (including the total of dead and frequently applied live loads), and may be increased for short duration loading (including the effects of wind or seismic forces) as allowed in 2016 CBC Section 1605.3.2.

### 3.4.2 Minimum Embedment Depth and Width

In general, footings should be embedded to at least two feet below the adjacent grade and have a minimum width of 18 inches. Isolated pad footings should be at least three feet in least-dimension.

### 3.4.3 Sliding and Passive Resistance

Ultimate sliding resistance (friction) generated at the interface of concrete foundations and compacted soils can be computed by multiplying the total dead weight structural load by a coefficient of 0.40. The ultimate net passive resistance developed from lateral bearing of foundations against compacted backfill or undisturbed native soil can be estimated using an equivalent fluid weight of 300 pcf. The passive resistance for the upper one-foot of soil should be neglected unless the soils are confined at the ground surface by slab-on-grade or pavement.

Sliding resistance and passive pressure may be used together without reduction, when used with the recommended minimum factors of safety. For static conditions, minimum factors of safety of 1.5 and 2.0 are recommended for foundation overturning and sliding, respectively. The factor of safety for sliding can be reduced to 1.5, if passive resistance is neglected. The factor of safety for transient (seismic, wind) conditions should be at least 1.1.

### 3.4.4 Settlements

**Static Settlements.** Static settlements will generally occur in response to foundation loads on the foundation support material. The structure should be designed to accommodate static differential settlements of at least one-half-inch over a distance of 30 feet (i.e., a distortion ratio of approximately 1/720) for similarly sized and loaded footings.

**Seismic Settlements.** Seismically induced settlements are discussed previously in this report. We anticipate the alluvial soils underlying the proposed excavation could experience seismic settlement of 19 inches without ground improvement and up to four inches with ground improvement to 50 feet with associated differential settlements of two-inches across the site.

## 3.5 SLAB-ON-GRADE

At-grade floor slab thickness should be designed by the structural engineer, but should not be less than six inches thick. Control joints should be specified by the project structural engineer. The structural engineer should determine reinforcement requirements, but, at a minimum, reinforcement of on-grade floor slabs should consist of No. 4 bars at 18 inches each way, placed above slab mid-height with preferably about 1½- to 2-inches of clear cover. Means should be provided to maintain reinforcement location during construction and concrete placement.

Proper concrete placement in accordance with applicable specifications and curing of concrete slabs inhibits moisture migration. The concrete slab water cement ratio should be maintained during concrete mixing and placement. The project architect and design engineer should select the desired concrete properties based on the concrete slab-on-grade performance requirements.

The slab-on-grade should incorporate a moisture seal beneath the slab in areas where the concrete slab will be covered with flooring. The moisture seal should be bedded in sand per ACI criteria.

## 3.6 CONSTRUCTION CONSIDERATIONS

### 3.6.1 Existing Utilities

We recommend any existing utilities be removed from the grading areas and relocated as necessary. The removal should consist of the excavation of the existing trench backfill and subsequent placement of new compacted fill. Excavation work required for the abandonment of utilities is anticipated to be relatively nominal but should be considered in the construction documents.

Trenches should be excavated no closer than a 1 horizontal to 1 vertical (1h:1v) projection up from the bottom of the excavation in areas where an existing utility/pipeline parallel's or subparallels the trench excavation. The minimum clear distance between an

existing utility and the trench should be evaluated by the contractor. We recommend existing utility/pipelines be supported/protected or the trench be shored to prevent loss of lateral support for existing utility/pipelines when: 1) the trench is closer than a 1h:1v projection to the existing utility, 2) the stability of the existing utility is in question, or 3) there is a potential for sloughing of the trench sidewalls adjacent to the existing utility.

### 3.6.2 Excavation Conditions

Subsurface materials encountered in our exploratory holes consisted of very loose to loose silty sand to sand (granular) sediments to the anticipated excavation depths. We expect excavations in those soils can be made using conventional heavy-duty equipment in good working order.

### 3.6.3 Temporary Slopes and Excavations

The contractor should be responsible for the design of temporary slopes. Subsurface materials encountered in our exploratory holes consisted of very loose to loose granular sediments to the anticipated excavation depths. Temporary slopes should be braced or sloped according to the requirements of OSHA.

As input to design, excavations without shoring that are shallower than 10 feet likely will be classified as Type C and should be sloped no steeper than 1.5h:1v as deemed appropriate based upon classification Type determined in the field per OSHA guidelines. OSHA requires excavations greater than 20 feet deep be designed by a qualified professional. We recommend all temporary excavations be monitored for signs of instability and appropriate actions (such as flattening the slope, providing shoring, and controlling groundwater, if encountered) should be undertaken if evidence of potential instability is observed

## 3.7 PRELIMINARY PAVEMENT DESIGN

### 3.7.1 Subgrade Preparation

The finished subgrade surface exposed after overexcavation should be scarified to a depth of 12 inches, moisture-conditioned to within 0 to 2 percent of optimum moisture, and compacted to a relative compaction of at least 90 percent (i.e., 90 percent of the maximum dry density determined from ASTM D1557).

### 3.7.2 Fill Material Selection

Recommended fill material selection requirements for subgrade fill, aggregate base, and use of onsite materials are presented below. Areas or zones where the various fill materials may be used are described below.

**Subgrade Fill.** General fill should be free of organics, oversize rock (greater than 3 inches in diameter), trash, debris, and other deleterious or unsuitable materials, and should have an expansion index less than 20.

**Aggregate and Miscellaneous Base.** Aggregate or miscellaneous base material should be placed below the asphalt pavement. Base materials should consist of imported material conforming to Caltrans Standard Specifications for Class 2 Aggregate Base, Section

26-1.02 (Caltrans, 2015) or Section 200-2.5 of the Greenbook (2015) for Processed Miscellaneous Base.

**Use of Onsite Materials.** Materials generated during excavation and grading in pavement areas are generally anticipated to consist primarily of granular soil materials. Material derived from the overexcavation can be used as subgrade as long as those materials satisfy criteria presented above for subgrade fill.

**Imported Fill.** Imported subgrade fill materials should comply with recommendations for subgrade fill or as appropriate for its intended use. Imported fill should be reviewed by the geotechnical engineer prior to being transported to the site.

### 3.7.3 Pavement Section

A flexible pavement design section was estimated using the County of Ventura pavement design procedures for assumed Traffic Index (TI) of 5, an R-value of 70 for the tested onsite sandy subgrade materials, and our experience. The recommended asphalt pavement sections based on the assumed TIs and the R-value test data are presented in the following table. Asphalt pavement materials should be compacted to at least 95 percent relative compaction.

**Table 9. Asphalt Pavement Section**

| R-Value | Traffic Index | Thickness of Asphalt Concrete (in) | Thickness of Aggregate Base (in) |
|---|---|---|---|
| 70 | 5 | 3 | 4 |

## 3.8 SITE DRAINAGE

Site grading should be provided such that positive drainage away from improvements is provided. Water should not be allowed to pond near the improvements; we recommend the construction of finish slopes of 1 to 2 percent away from improvements.

## 3.9 STORMWATER INFILTRATION

Recent regulatory agency requirements mandate stormwater generated on a new project site be infiltrated into the onsite soils. While this concept may have merit from an environmental standpoint, it increases the potential to cause foundation damage to onsite improvements due to higher groundwater levels, reduced soil strength, hydroconsolidation of onsite soils, and moisture infiltration into buried structures. If onsite stormwater disposal is implemented at the site, the design needs to consider the locations of existing and proposed structures and impacts to offsite improvements.

The liquefaction analyses performed for this study indicates up to about 12 inches of liquefaction related settlement could occur in response to the design seismic event. Infiltration of stormwater could increase groundwater levels beneath the site and reduce the shear strength of the soils which would increase the potential for liquefaction related settlement. In addition, the study indicated the potential for hydroconsolidation (collapse) of the onsite soil as high as 2.3 percent at a depth of 10 feet in areas not mitigated by ground improvement. A collapse of 2

percent over a depth of 35 feet (depth above current groundwater level) is equivalent to a collapse settlement of about 8 inches. Previous experience with collapse related settlements indicates concentrated water infiltration can cause hydroconsolidation of soils with collapse potential. Those concentrated settlements are typically associated with leaking water or sewer pipelines, but in our opinion, concentrated stormwater infiltration in a discrete basin has the potential to cause hydroconsolidation of the soils. The settlement contours from soil hydroconsolidation related settlement measured in previous forensic studies in the Ventura area documented a radial settlement pattern extending up to about 100 feet from the water infiltration source.

If storm water is infiltrated at the proposed library site, we suggest the project civil engineer consider the above factors in the design process. If concentrated stormwater infiltration is proposed in a discrete basin, that basin should be located away from project structural elements and offsite improvements (including buried utilities) that could be impacted by settlement. A setback distance of at least 100 feet from a discrete infiltration location is likely a reasonable starting point for infiltration design. Another alternative would be a diffuse infiltration system that does not concentrate infiltration in a specific location.

# 4.0 LIMITATIONS

## 4.1 REPORT USE

This preliminary report has been prepared for the exclusive use of the City of Moorpark for evaluation of the liquefaction potential and need for ground improvement to mitigate potential settlements that may occur as a result of earthquake-induced ground shaking at the library site. This preliminary report is intended to provide a summary of the site conditions, geohazard assessment, proposed ground improvement mitigations, and preliminary foundation recommendations. A supplemental geotechnical design report will be required as part of project design once the building type and location have selected, ground improvement option identified and foundation support conditions determined. The findings, conclusions, and recommendations presented herein were prepared in accordance with generally accepted geotechnical engineering practices of the project region. No other warranty, express or implied, is made.

Although information contained in this report may be of some use for other purposes, it may not contain sufficient information for other parties or uses. If any changes are made to the project as described in this report, the conclusions and recommendations in this report shall not be considered valid unless the changes are reviewed and the conclusions and recommendations of this report are modified or validated in writing by OGI.

## 4.2 HAZARDOUS MATERIALS

This report does not provide information regarding the presence of hazardous/toxic materials in the soil, surface water, groundwater, or atmosphere.

## 4.3 LOCAL PRACTICE

In performing our professional services, we have used generally accepted geologic and geotechnical engineering principles and have applied the degree of care and skill ordinarily exercised under similar circumstances by reputable geotechnical engineers currently practicing in this or similar localities. No other warranty, express or implied, is made as to the professional advice included in this report.

## REFERENCES

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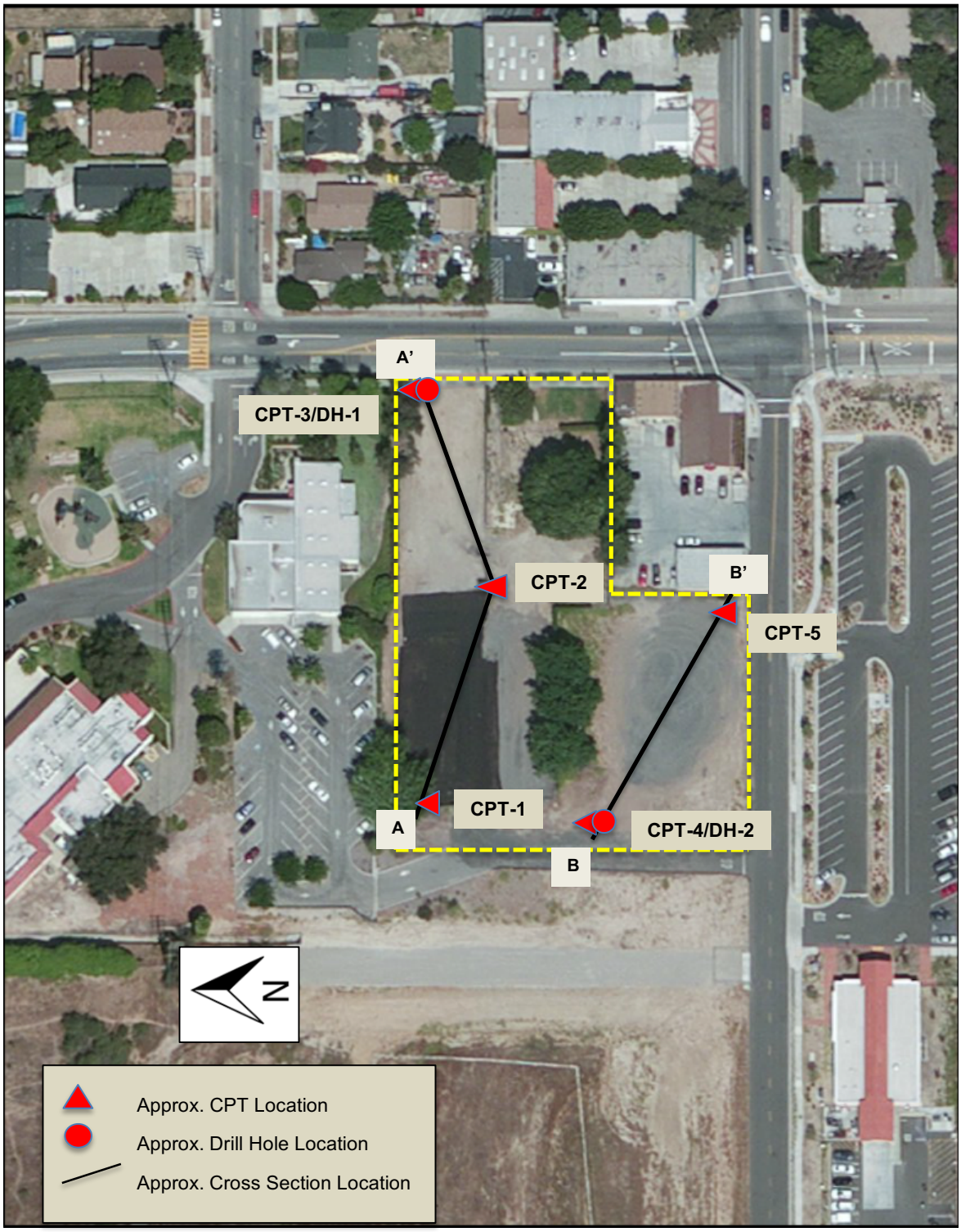
# PLATES

Source: Google Earth, 2017

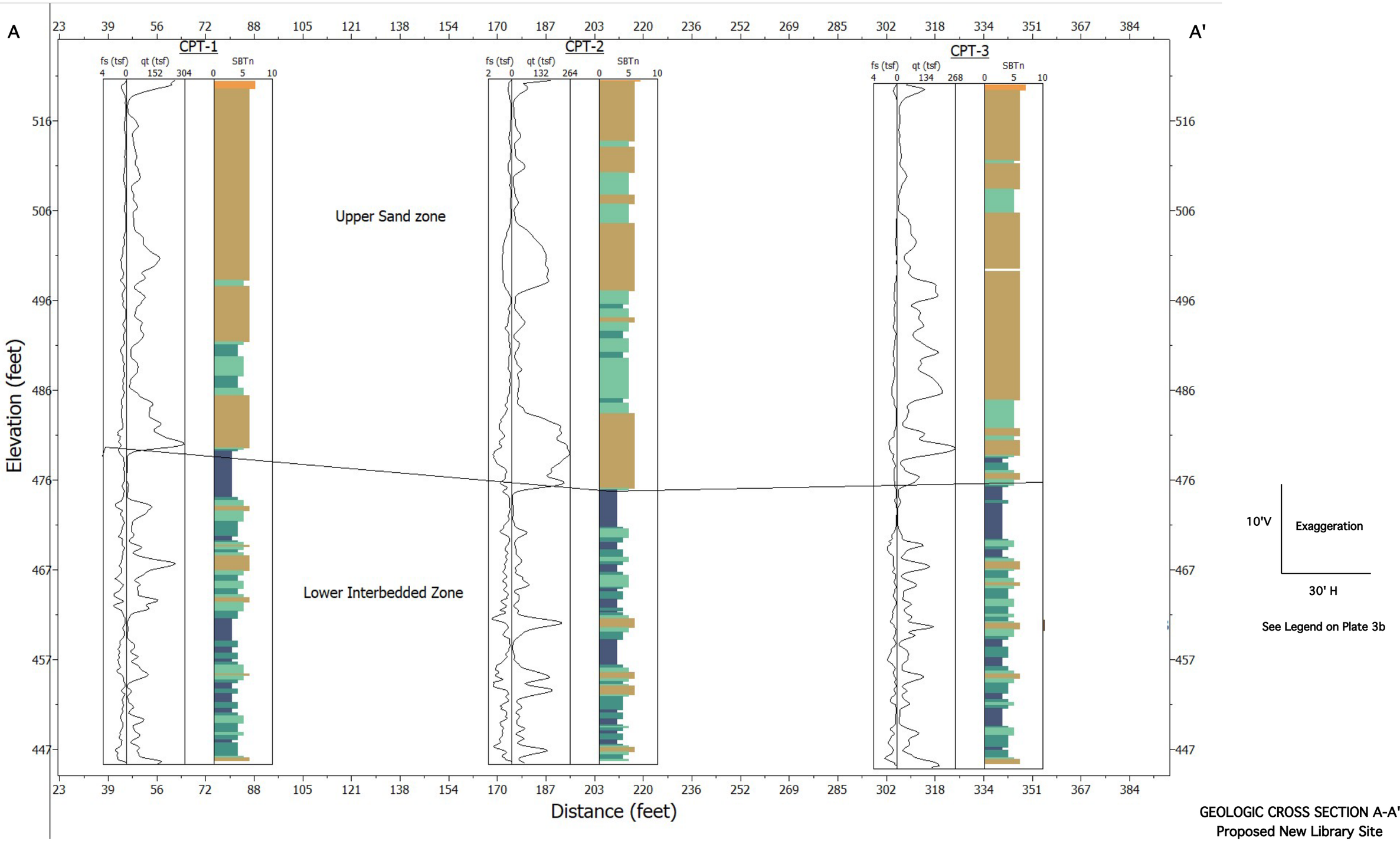
**VICINITY MAP**
**Proposed New Library Site**
**Moorpark, California**

PLATE 1




**EXPLORATION LOCATIONS**
**Proposed New Library Site**
**Moorpark, California**

PLATE 2

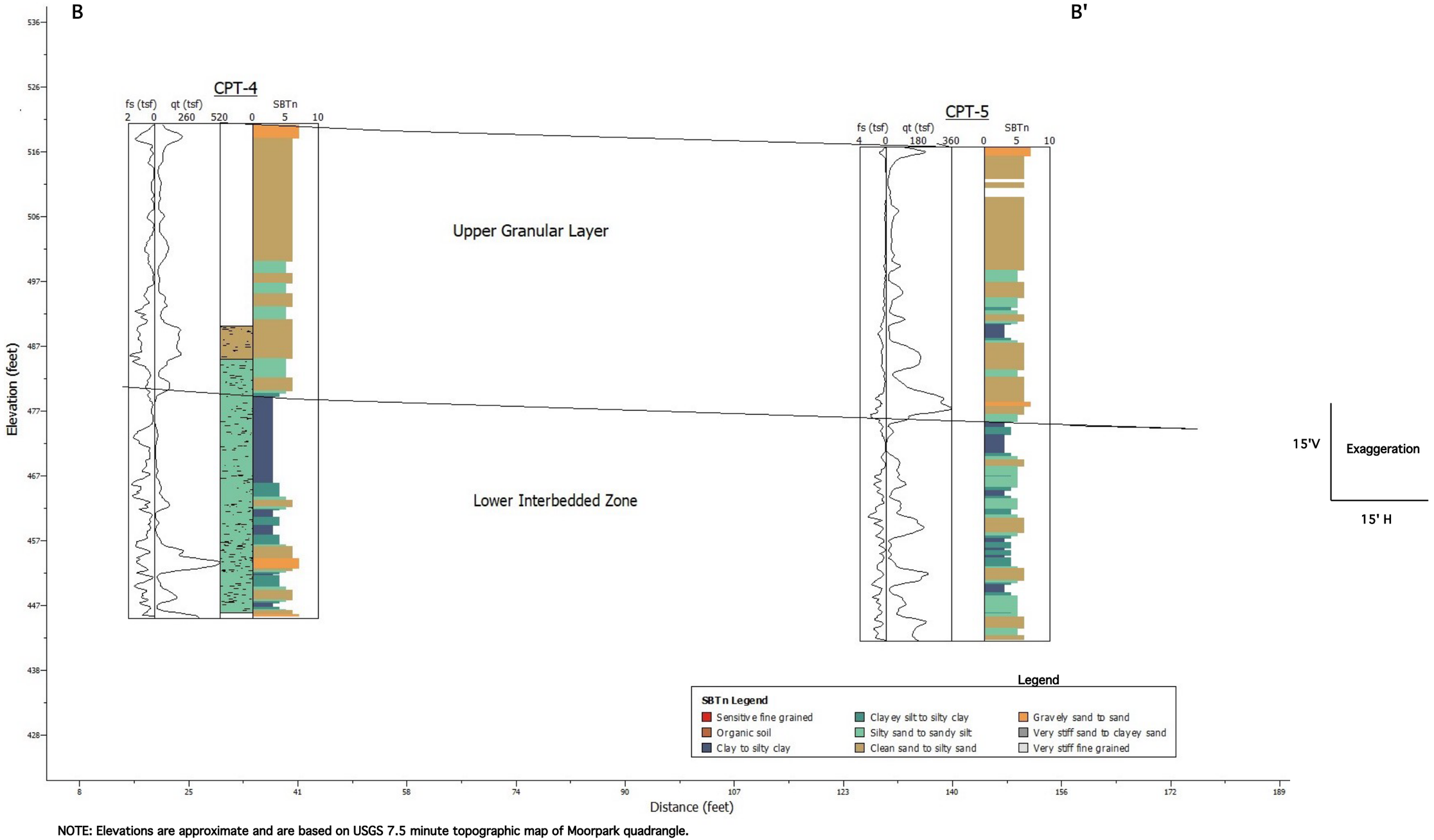



See Legend on Plate 3b

NOTE: Elevations are approximate and are based on USGS 7.5 minute topographic map of Moorpark quadrangle.

GEOLOGIC CROSS SECTION A-A'
Proposed New Library Site
Moorpark, California

PLATE 3a




NOTE: Elevations are approximate and are based on USGS 7.5 minute topographic map of Moorpark quadrangle.

GEOLOGIC CROSS SECTION B-B'
Proposed New Library Site
Moorpark, California

PLATE 3b

# APPENDIX A

## LOG OF DRILL HOLE DH-1

LOCATION: See Location Map

SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|
| | 1 | | **ARTIFICIAL FILL (af)**<br>Silty Fine SAND (SM): pale brown, dry, with gravel | | | | | |
| 2 | 2 | (5) | **ALLUVIUM (Qal)?**<br>SAND (SP): very loose, moderate yellowish brown, damp | 98 | 4 | | | |
| 4 | 3 | 2 | Fine SAND with Clay (SP-SC): very loose, dark brown, damp | | | | | |
| 6 | | | - loose, at 7' | | | | | |
| 8 | 4 | (7) | | 105 | 8 | | | |
| 10 | 5 | 4 | Silty Fine to Medium SAND (SM): very loose, moderate yellowish brown, damp, with scattered course grains, and with few fine rounded gravel to 1/2"-dia. | | 6 | | 15 | |
| 12 | 6 | (10) | Clayey SILT with Sand (ML): medium stiff, moderate to dark brown, damp | 111 | 15 | | | |
| 14 | 7 | 7 | SAND with Clay (SP-SC): loose, moderate brown, damp, with scattered coarse sand<br>SAND with Silt (SP-SM): loose, moderate yellowish brown, damp, with fine rounded gravel to 1/2"-dia. | | 5 | | 7 | |
| 16 | | | | | | | | |
| 18 | | | | | | | | |
| | 8 | (23) | - with medium dense, dark brown sand with clay, from 19' to 21.25' | 108 | 2 | | | |

| | | | |
|---|---|---|---|
| CONTRACTOR: | S/G Drilling, Inc. | TOTAL DEPTH (ft): | 75.5' |
| METHOD: | 8"-dia. Hollow-stem-auger | WATER DEPTH (ft): | 37.5' |
| BACKFILL: | Cuttings with Portland | LOGGED BY: | L Prentice |
| DATE: | May1-2, 2017 | CHECKED BY: | C Prentice |

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-1a**

## LOG OF DRILL HOLE DH-1 (Continued)

LOCATION: See Location Map

SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | MATERIAL SYMBOL | SAMPLE | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|
| 22 | | | | | | | | | | |
| 24 | | | 9 | 9 | Silty Fine to Medium SAND (SM): loose, pale yellowish brown, damp, with few scattered coarse sand and 3/4" gravel fragments | | 5 | | 23 | |
| 26 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 30 | | | 10 | (37) | Fine to Medium SAND with Silt (SP-SM): medium dense, pale yellowish brown, damp | 102 | 3 | | | |
| 32 | | | | | | | | | | |
| 34 | | | 11 | 20 | - with 1.5"-thick moderate yellowish brown clayey fine sand, at 34.5' | | 8 | | 7 | |
| 36 | | | | | | | | | | |
| 38 | | | 12 | 2 | Clayey SAND (SC)/Sandy CLAY (CL): very loose, moderate brown, wet; shut down after sampling for 5 min.; measured water at 37.5' | | 21 | | 50 | |

| | | | |
|---|---|---|---|
| CONTRACTOR: | S/G Drilling, Inc. | TOTAL DEPTH (ft): | 75.5' |
| METHOD: | 8"-dia. Hollow-stem-auger | WATER DEPTH (ft): | 37.5' |
| BACKFILL: | Cuttings with Portland | LOGGED BY: | L Prentice |
| DATE: | May1-2, 2017 | CHECKED BY: | C Prentice |

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-1b**

## LOG OF DRILL HOLE DH-1 (Continued)

LOCATION: See Location Map

SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | MATERIAL SYMBOL | SAMPLE | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|
| 42 | | | | | | | | | | |
| 44 | | | 13 | (12) | - loose, at 44'<br>- flowing/caving sand below 44'; adding water to augers prior to sampling below 49' | 112 | 19 | | | p 0.5 |
| 46 | | | | | | | | | | |
| 48 | | | | | | | | | | |
| 50 | | | 14 | (36) | Clayey SAND (SC): medium dense, moderate brown, wet<br>- sand slough in sampler, blow counts may be affected | 112 | 17 | | 25 | |
| 52 | | | | | | | | | | |
| 54 | | | 15 | 21 | Fine to Medium SAND (SP): loose to medium dense, pale yellowish brown, wet, with moderate brown clayey fine sand in sampler shoe; sand slough in sampler | | 14 | | 3 | |
| 56 | | | 15b | | | | | | | |
| 58 | | | | | | | | | | |
| | | | 16 | 14 | Clayey SAND (SC): medium dense, moderate brown, wet | | 16 | | 25 | |

| | | | |
|---|---|---|---|
| CONTRACTOR: | S/G Drilling, Inc. | TOTAL DEPTH (ft): | 75.5' |
| METHOD: | 8"-dia. Hollow-stem-auger | WATER DEPTH (ft): | 37.5' |
| BACKFILL: | Cuttings with Portland | LOGGED BY: | L Prentice |
| DATE: | May1-2, 2017 | CHECKED BY: | C Prentice |

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-1c**

## LOG OF DRILL HOLE DH-1 (Continued)

LOCATION: See Location Map

SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | MATERIAL SYMBOL | SAMPLE | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|
| 62 | | | | | | | | | | |
| 64 | | | | | | | | | | |
| 66 | | | 17 | 7 | Fine Sandy CLAY (CL): medium stiff, moderate to dark brown, wet slightly micaceous, silty | | 24 | | 63 | |
| 68 | | | | | | | | | | |
| 70 | | | 18 | 22 | Fine to Medium Clayey SAND (SC): medium dense, moderate brown, wet, with few coarse sand | | | | | |
| 72 | | | | | | | | | | |
| 74 | | | 19 | 20 | Silty Fine SAND (SM): medium dense, moderate brown, wet | | 25 | | 24 | |
| 76 | | | | | | | | | | |
| 78 | | | | | | | | | | |

| | | | |
|---|---|---|---|
| CONTRACTOR: | S/G Drilling, Inc. | TOTAL DEPTH (ft): | 75.5' |
| METHOD: | 8"-dia. Hollow-stem-auger | WATER DEPTH (ft): | 37.5' |
| BACKFILL: | Cuttings with Portland | LOGGED BY: | L Prentice |
| DATE: | May1-2, 2017 | CHECKED BY: | C Prentice |

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-1c**

## LOG OF DRILL HOLE DH-2

LOCATION: See Location Map
SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|
| | 1 | | **ARTIFICIAL FILL (af)**<br>Silty Fine SAND (SM): with gravel, medium dense, grayish brown, dry to damp | | | | | |
| 2 | 2 | 15 | | | | | | |
| | | | **ARTIFICIAL FILL (af)/ALLUVIUM (Qal)?**<br>Clayey SAND (SC): medium dense, dark brown, dry to damp | | | | | |
| 4 | 3 | (15) | **ALLUVIUM (Qal)**<br>Silty Fine SAND (SM): loose, moderate brown, dry to damp | 97 | 4 | | | |
| 6 | | | | | | | | |
| | 4 | 6 | - loose, damp, fine to medium grained, at 7' | | 4 | | 22 | |
| 8 | | | | | | | | |
| | 5 | (14) | - fine to medium grained, darker, at 9'<br>- with dark brown fine silty lenses, at 9.75' | 101 | 4 | | | |
| 10 | | | | | | | | |
| 12 | | | | | | | | |
| | 6 | 7 | Fine to Medium SAND with Silt (SP-SM): loose, moderate brown, damp | | 3 | | 12 | |
| 14 | | | | | | | | |
| | 7 | (15) | Silty Fine SAND (SM): loose, moderate brown, damp<br>- with medium stiff, moderate brown silt with slight mottling and few fine root hairs and minor fine caliche, at 14 to 15'<br>- fine to medium grained with few scattered coarse sand, at 15' | 106 | 5 | | 32 | |
| 16 | | | | | | | | |
| 18 | | | | | | | | |
| | 8 | 13 | medium dense, pale yellowish brown, at 19' | | | | | |

CONTRACTOR: S/G Drilling, Inc.
METHOD: 8"-dia. Hollow-stem-auger
BACKFILL: Cuttings with Portland
DATE: May1-2, 2017

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

TOTAL DEPTH (ft): 50.5'
WATER DEPTH (ft): 36'
LOGGED BY: L Prentice
CHECKED BY: C Prentice

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-2a**

## LOG OF DRILL HOLE DH-2 (Continued)

LOCATION: See Location Map

SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | MATERIAL SYMBOL | SAMPLE | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|
| 22 | | | | | | | | | | |
| 24 | | | 9 | (15) | - loose, at 24'<br>- with finely laminated sandy silt and silt in sampler shoe, at 25.5' | 90 | 6 | | 29 | |
| 26 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 30 | | | 10 | 21 | Fine to Medium SAND (SP): medium dense, pale yellowish brown, damp, with few coarse sand and few angular gravel fragments to about 1/2"-dia. | | | | | |
| 32 | | | | | | | | | | |
| 34 | | | 11 | (24) | Clayey Fine to Medium SAND (SC): medium dense, dark brown, moist to wet | 97 | 18 | | 27 | |
| 36 | | | | | Medium to Coarse SAND (SP): medium dense, moderate brown, moist to wet | | | | | |
| 38 | | | | | | | | | | |
| | | | 12 | WOH | Sandy Silty CLAY (CL-ML): very soft, dark brown, wet | | 21 | | 52 | p 0.1 |

| | | | |
|---|---|---|---|
| CONTRACTOR: | S/G Drilling, Inc. | TOTAL DEPTH (ft): | 50.5' |
| METHOD: | 8"-dia. Hollow-stem-auger | WATER DEPTH (ft): | 36' |
| BACKFILL: | Cuttings with Portland | LOGGED BY: | L Prentice |
| DATE: | May1-2, 2017 | CHECKED BY: | C Prentice |

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-2b**

## LOG OF DRILL HOLE DH-2 (Continued)

LOCATION: See Location Map

SURFACE EL. (ft): (ref. MSL datum)

| DEPTH (feet) | MATERIAL SYMBOL | SAMPLE | NUMBER | BLOW COUNT | MATERIAL DESCRIPTION | DRY DEN. (pcf) | MOISTURE CONTENT % | PLASTICITY (LL/PI) | % PASSING No. 200 | TV or PP (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | - shut down after sampling for 5 min.; measured water at 36' | | | | | |
| | | | | | - very stiff, at 41' | | | | | |
| 42 | | | 13 | (27) | Medium to Coarse Clayey SAND (SC): medium dense, dark brown, wet | 118 | 16 | | 47 | p 2.3<br>p 2.7 |
| 44 | | | NR | (10) | - no recovery after sampling at 44' | | | | | |
| 46 | | | | | | | | | | |
| 48 | | | | | | | | | | |
| 50 | | | 14 | (19) | - no recovery after sampling at 49'; recovered sample with SPT. | | 17 | | 27 | |
| 52 | | | | | | | | | | |
| 54 | | | | | | | | | | |
| 56 | | | | | | | | | | |
| 58 | | | | | | | | | | |

| | | | |
|---|---|---|---|
| CONTRACTOR: | S/G Drilling, Inc. | TOTAL DEPTH (ft): | 50.5' |
| METHOD: | 8"-dia. Hollow-stem-auger | WATER DEPTH (ft): | 36' |
| BACKFILL: | Cuttings with Portland | LOGGED BY: | L Prentice |
| DATE: | May1-2, 2017 | CHECKED BY: | C Prentice |

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE A-2c**

## Summary of Sampling Details

| Symbol | Number | Blowcount Push, or grab | Sampler Type |
|---|---|---|---|
| | 1 | Bulk | Bulk Sample |
| | 2 | 23 | Standard Penetration Test (SPT) Sampler (1-3/8" ID/2" OD) driven |
| | 3 | (23) | Modified California Liner Sampler driven ( 2-3/8" ID/3" OD) |
| | 4 | Push | Thin-walled sampler pushed ( 2-7/8" ID/3" OD) |

**Blowcount Informtion**

| Blowcount | Description |
|---|---|
| 63 | 63 blows for 1' penetration after initial 6" seating |
| 89/11 | 89 blows for 11" penetration after initial 6" seating |
| 33/6 | 33 blows for 6" drive after initial 6" seating |
| Ref | >50 blows for initial 6" seating |
| (23) | Blowcounts for modified California sampler |

### Material Symbols and Classifications

- LEAN CLAY (CL)
- FAT CLAY (CH)
- Sandy CLAY (CL)
- SILT (ML)
- Sandy SILT (ML)
- ELASTIC SILT (MH)
- Sandy SILT (ML)
- Silty SAND (SM)
- SAND with Silt (SP-SM)
- SAND with Clay (SP-SC)
- SAND (SP)
- Clayey SAND (SC)
- GRAVEL (GP)
- CLAYSTONE
- SILTSTONE
- SANDSTONE
- VOLCANIC
- DOLOMITIC
- SILICEOUS
- PAVING AND BASE MATERIALS
- CONCRETE

**Other Symbols**

- Groundwater
- Strata break

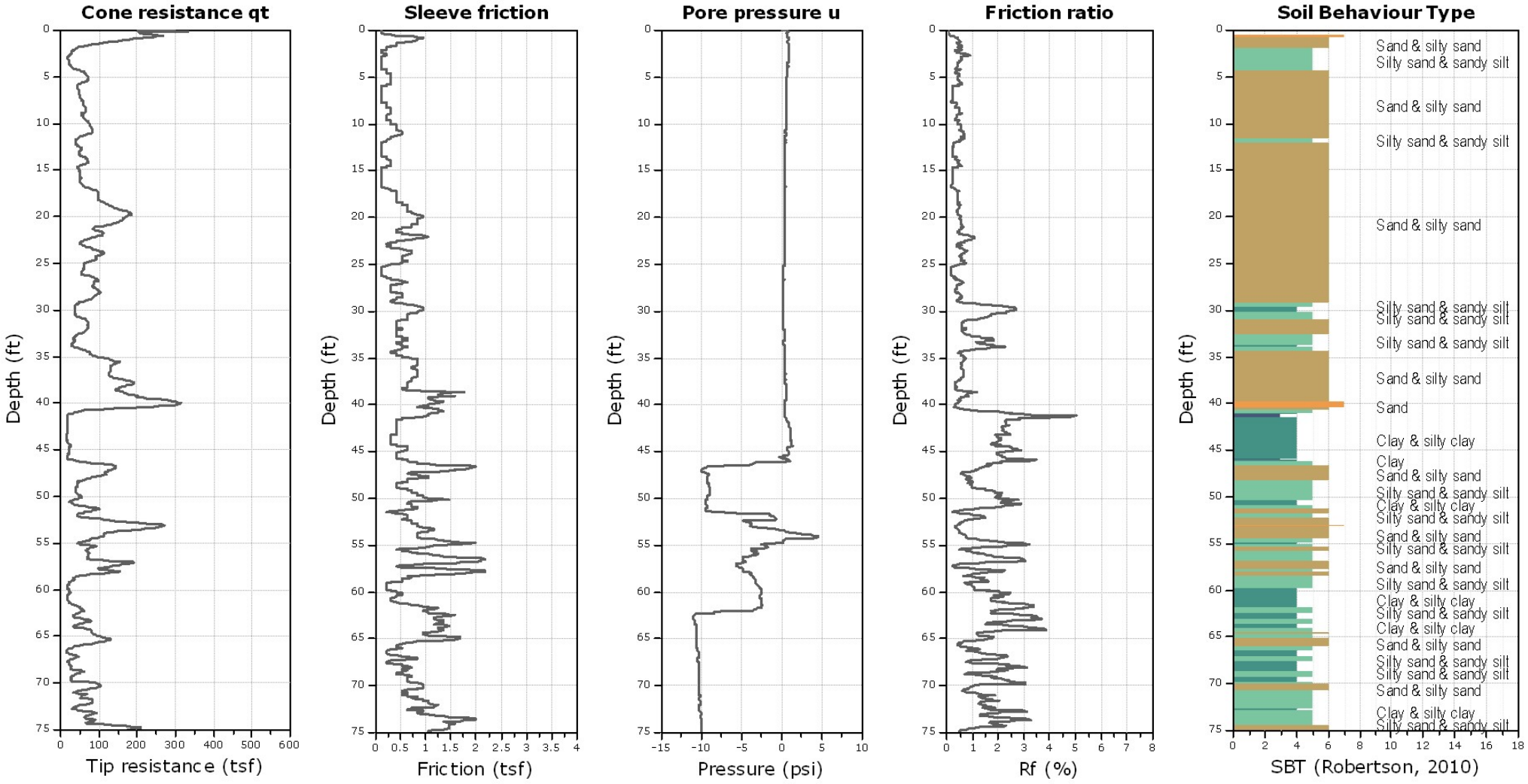
## SUMMARY OF TERMS AND SYMBOLS USED ON LOGS

**Kehoe Testing and Engineering**
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com

**CPT-1**

**Project:** **Oakridge Geoscience, Inc./MoorPark Library Project**
**Location:** **W. High St & Moorpark Ave Moorpark, CA**

Total depth: 75.29 ft, Date: 4/27/2017
Cone Type: Vertek

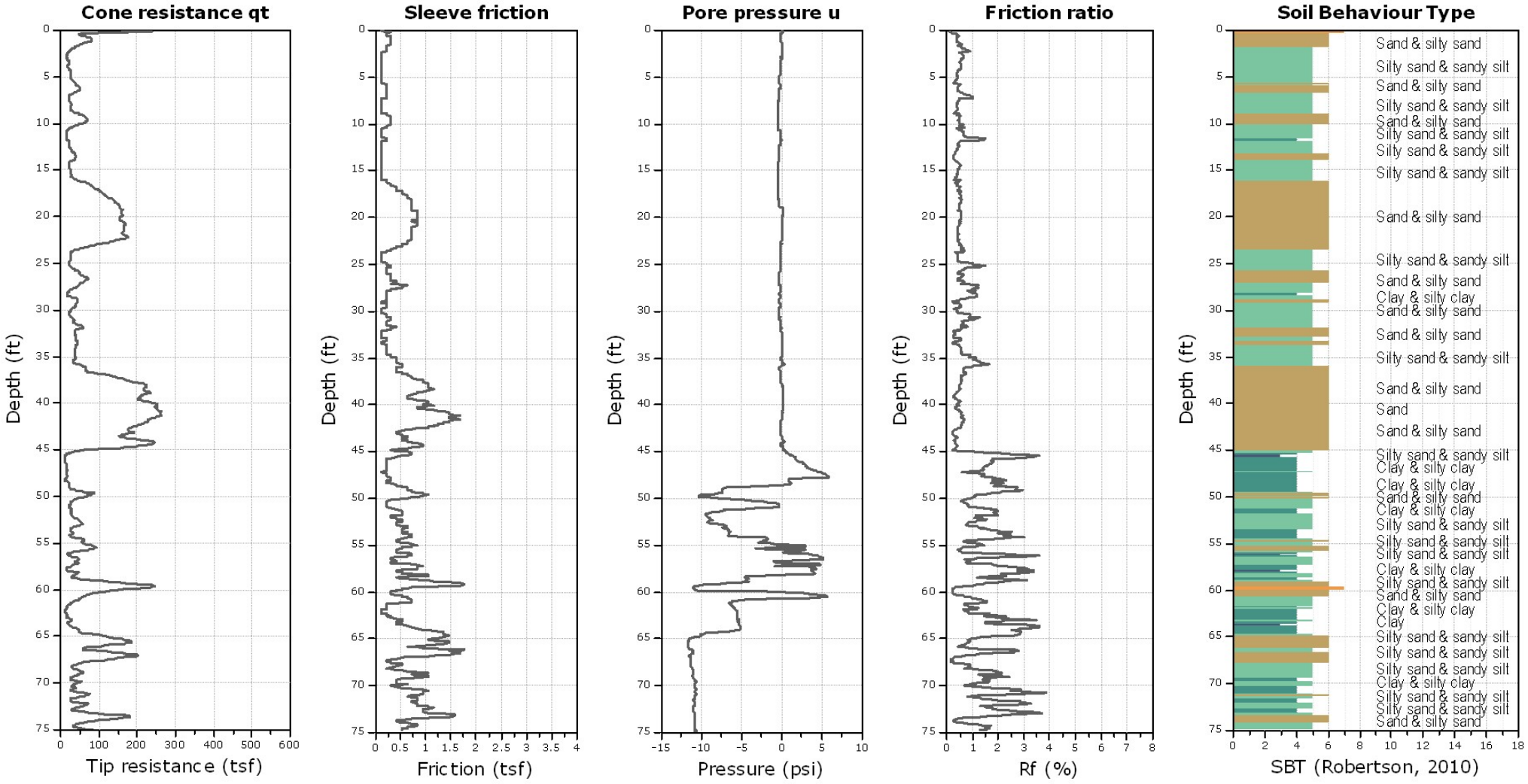


**Kehoe Testing and Engineering**
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com

**CPT-2**

**Project:** **Oakridge Geoscience, Inc./MoorPark Library Project**
**Location:** **W. High St & Moorpark Ave Moorpark, CA**

Total depth: 75.14 ft, Date: 4/27/2017
Cone Type: Vertek

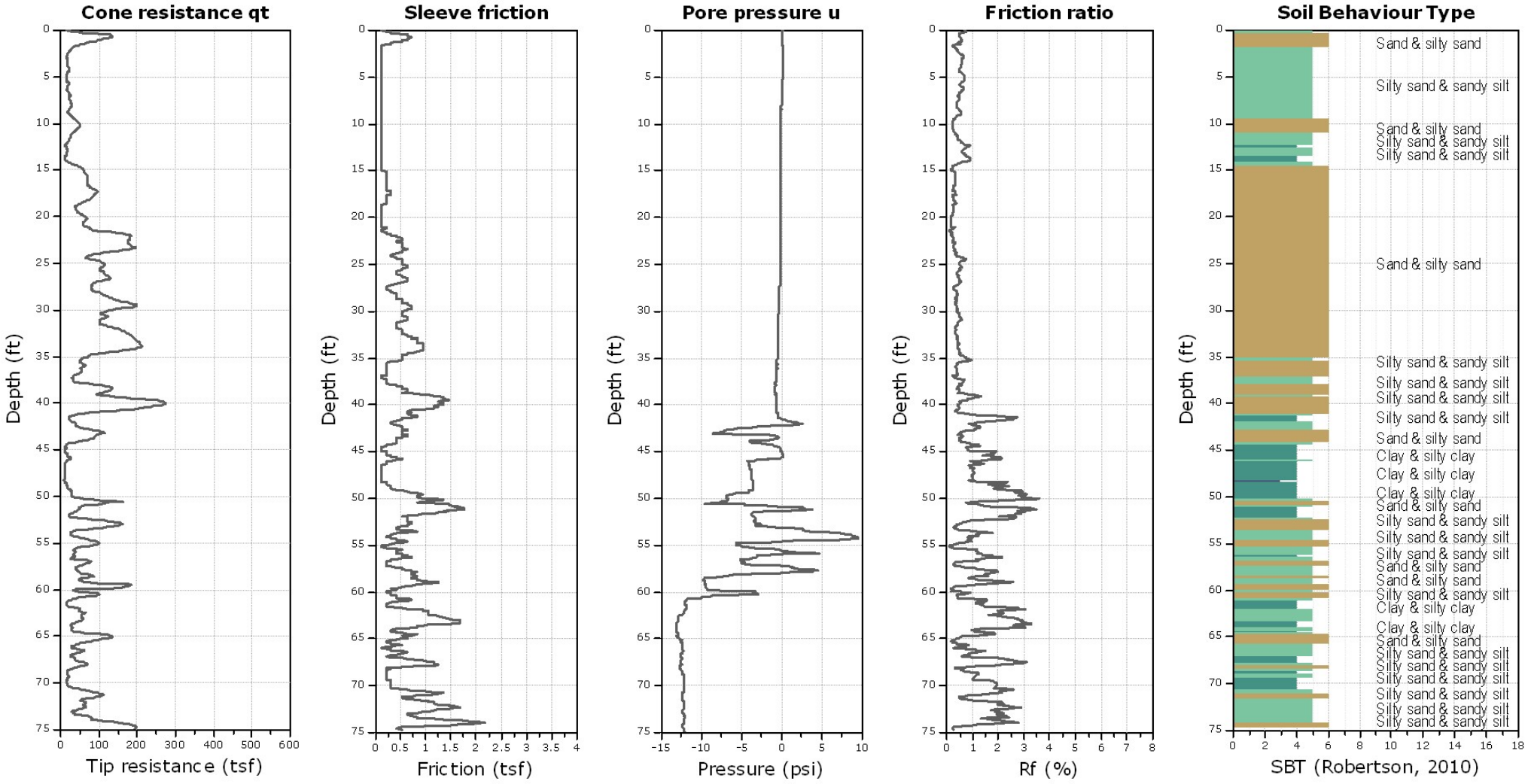


**Kehoe Testing and Engineering**
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com

**CPT-3**

**Project:** **Oakridge Geoscience, Inc./MoorPark Library Project**
**Location:** **W. High St & Moorpark Ave Moorpark, CA**

Total depth: 75.07 ft, Date: 4/27/2017
Cone Type: Vertek

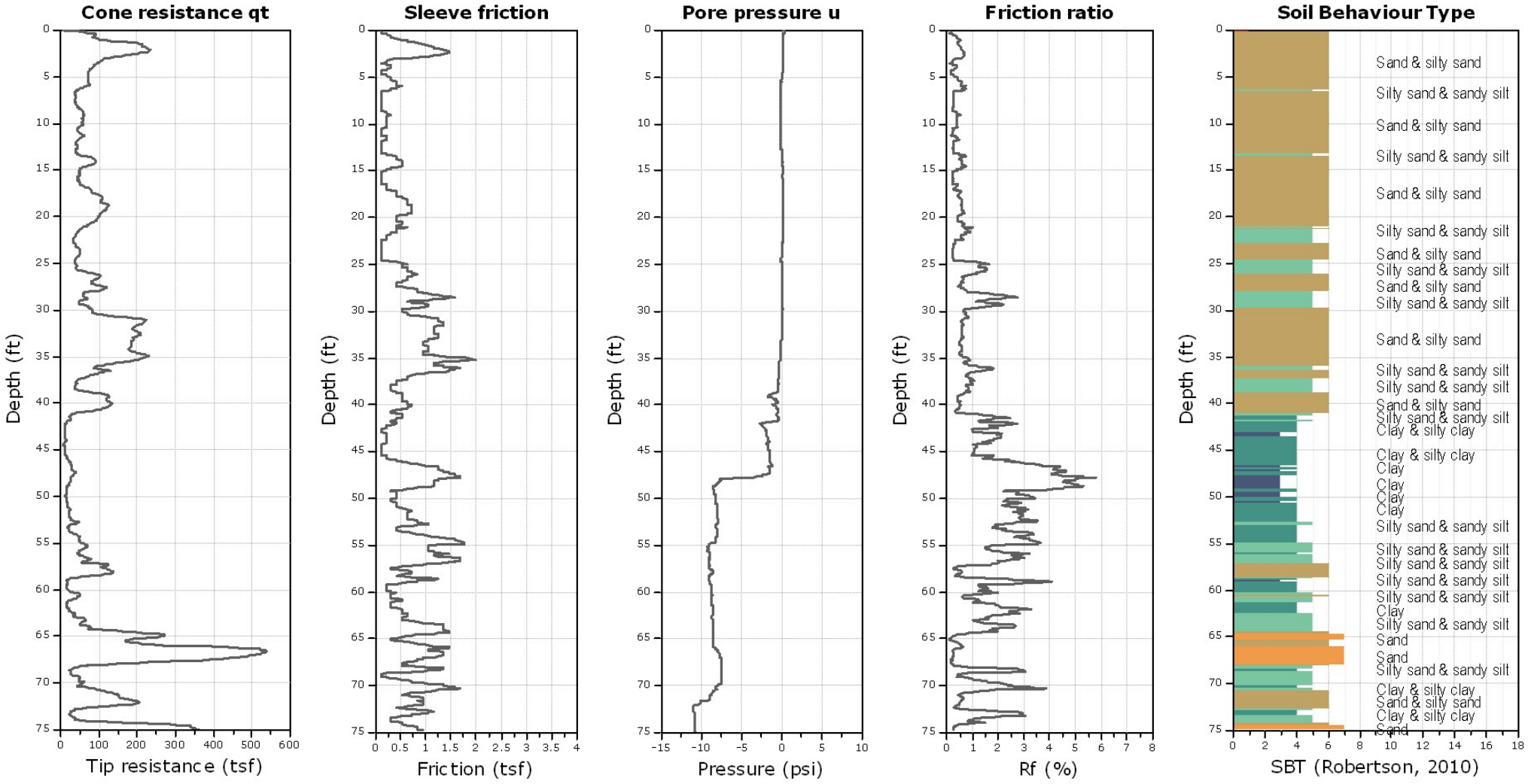


**Kehoe Testing and Engineering**
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com

**CPT-4**

**Project:** **Oakridge Geoscience, Inc./MoorPark Library Project**
**Location:** **W. High St & Moorpark Ave Moorpark, CA**

Total depth: 75.16 ft, Date: 4/27/2017
Cone Type: Vertek

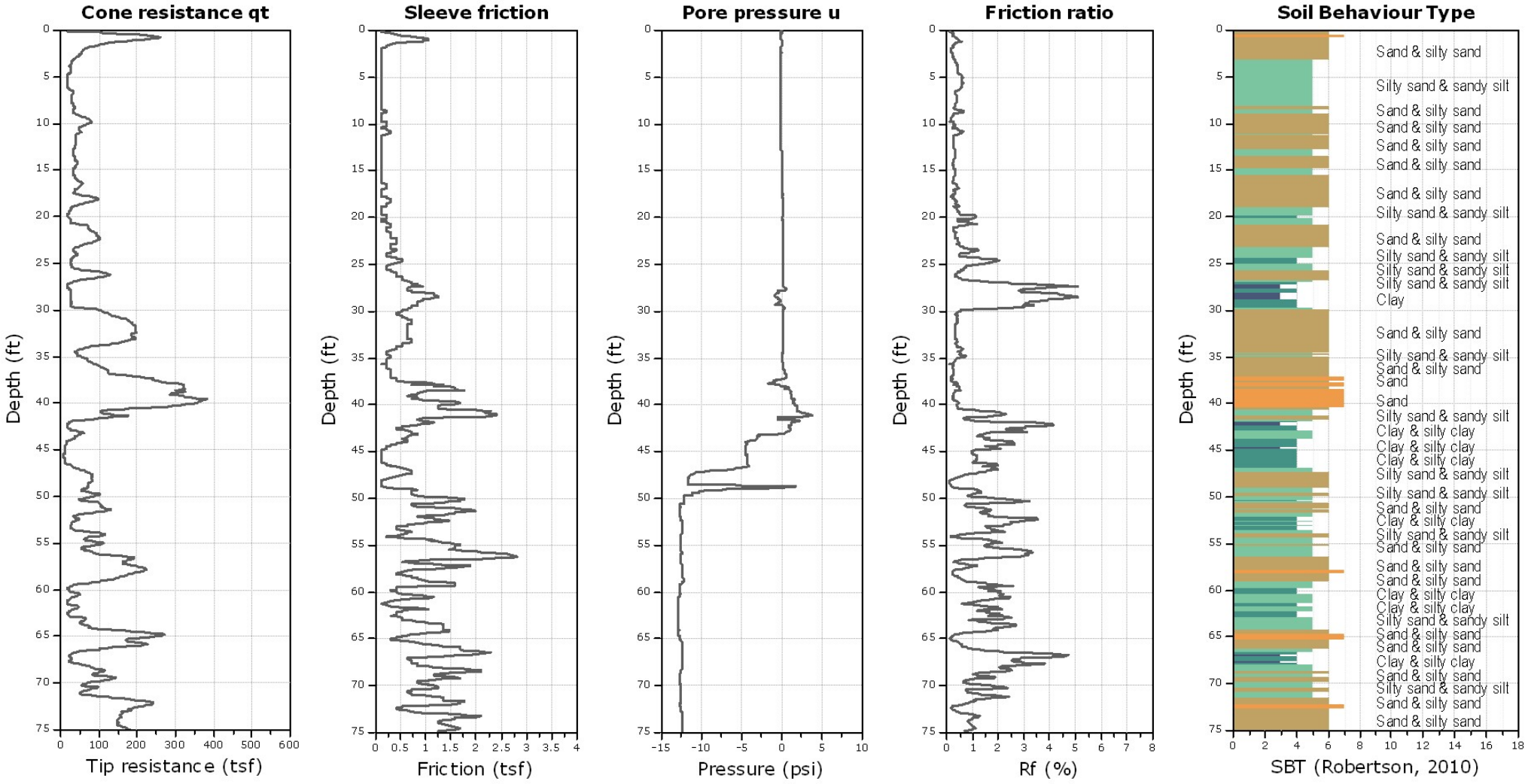


**Kehoe Testing and Engineering**
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com

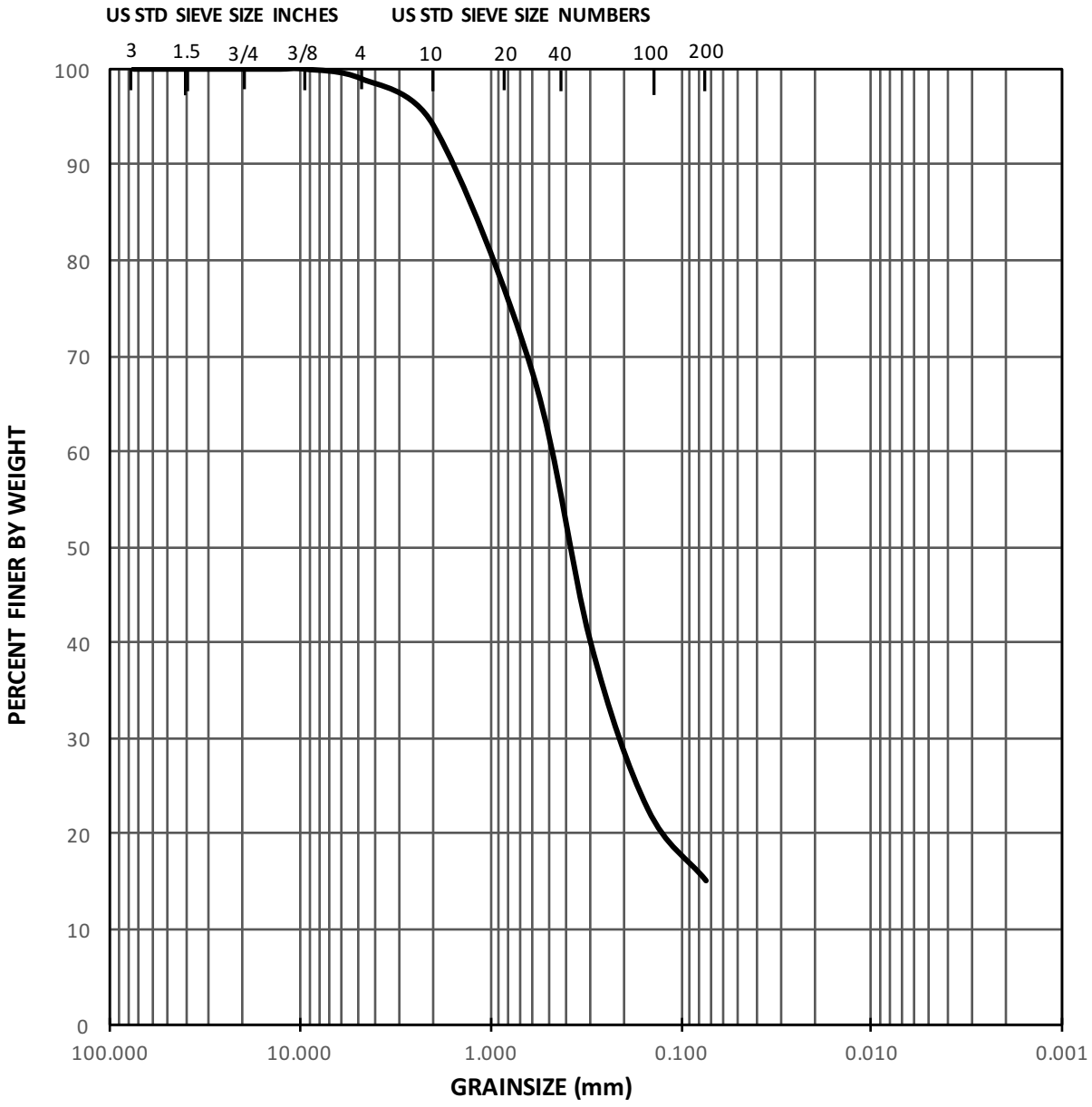
**CPT-5**

**Project:** **Oakridge Geoscience, Inc./MoorPark Library Project**
**Location:** **W. High St & Moorpark Ave Moorpark, CA**

Total depth: 75.27 ft, Date: 4/27/2017
Cone Type: Vertek



# APPENDIX B

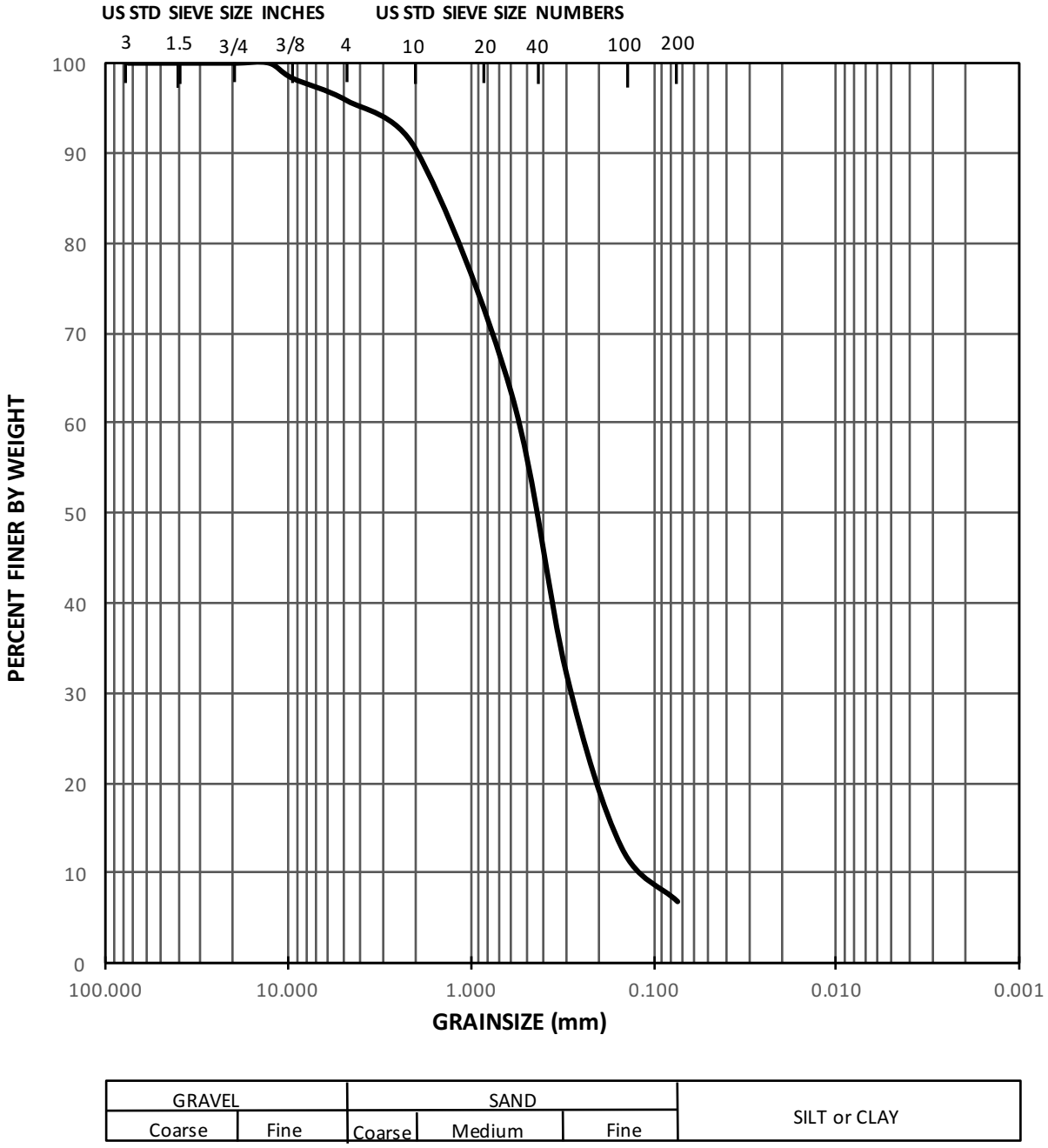



| LOCATION | DH-1 |
|---|---|
| DEPTH | 10' |

| CLASSIFICATION | PASSING NO. 200 (%) |
|---|---|
| Silty Fine to Medium SAND (SM) | 15 |

**GRAINSIZE DISTRIBUTION**
**Moorpark Library**
**Moorpark, California**

**PLATE B-1a**



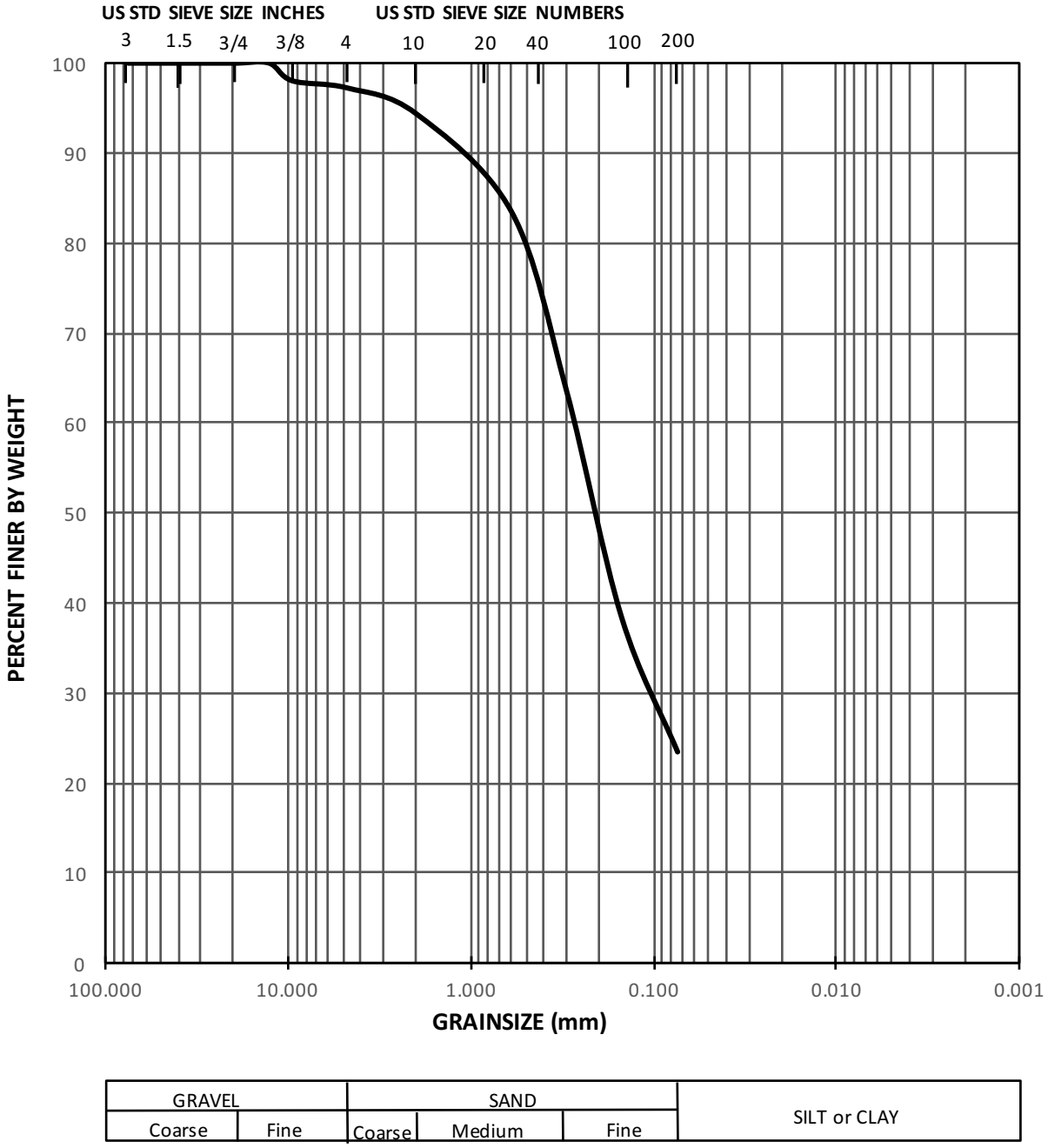

| | |
|---|---|
| LOCATION | DH-1 |
| DEPTH | 15' |

**CLASSIFICATION**
Fine to Medium SAND with Silt (SP-SM)

**PASSING NO. 200 (%)**
7

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

**PLATE B-1b**



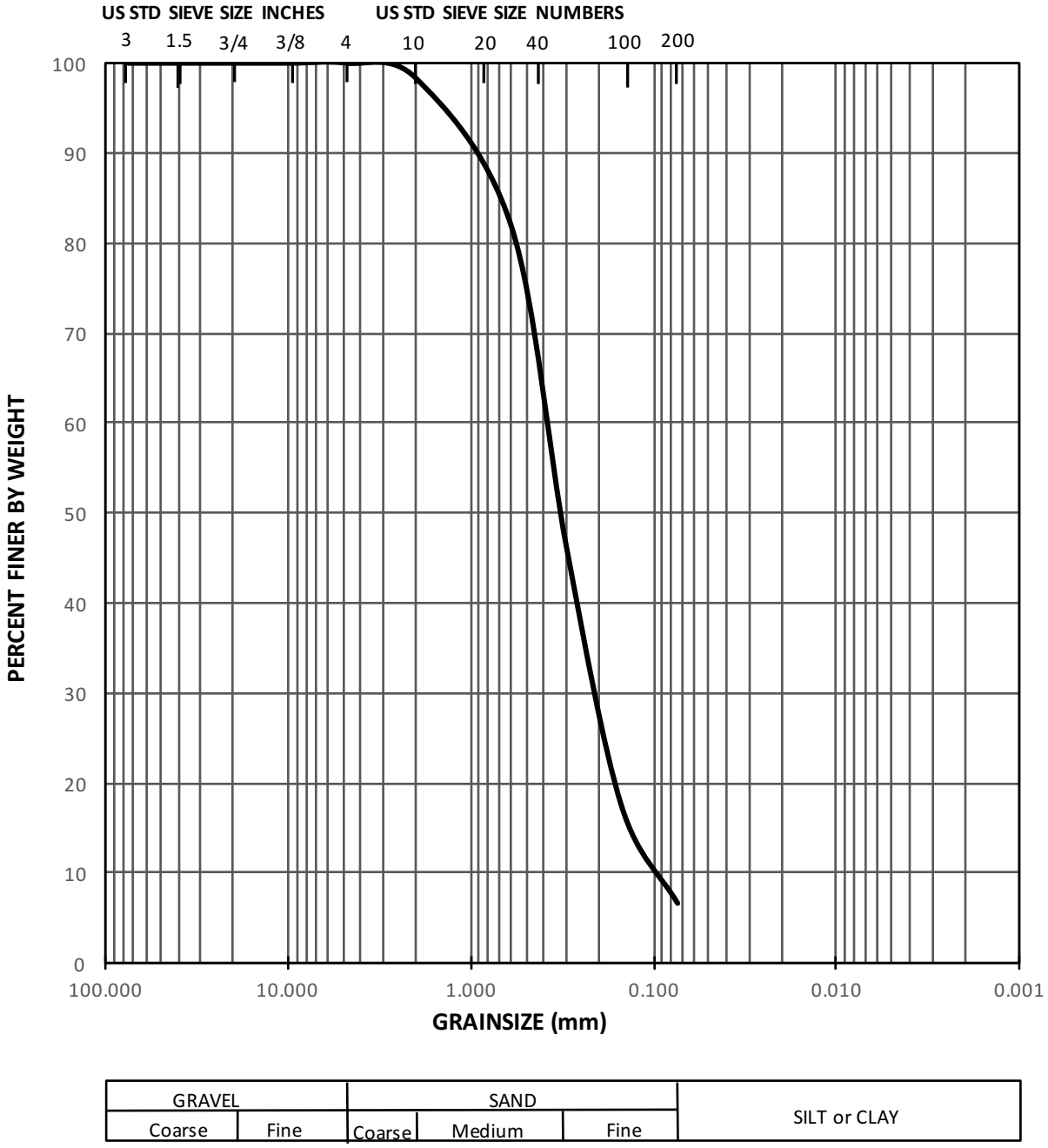

| LOCATION | DH-1 |
|---|---|
| DEPTH | 25' |

**CLASSIFICATION**
Silty Fine to Medium SAND (SM)

**PASSING NO. 200 (%)**
23

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

**PLATE B-1c**



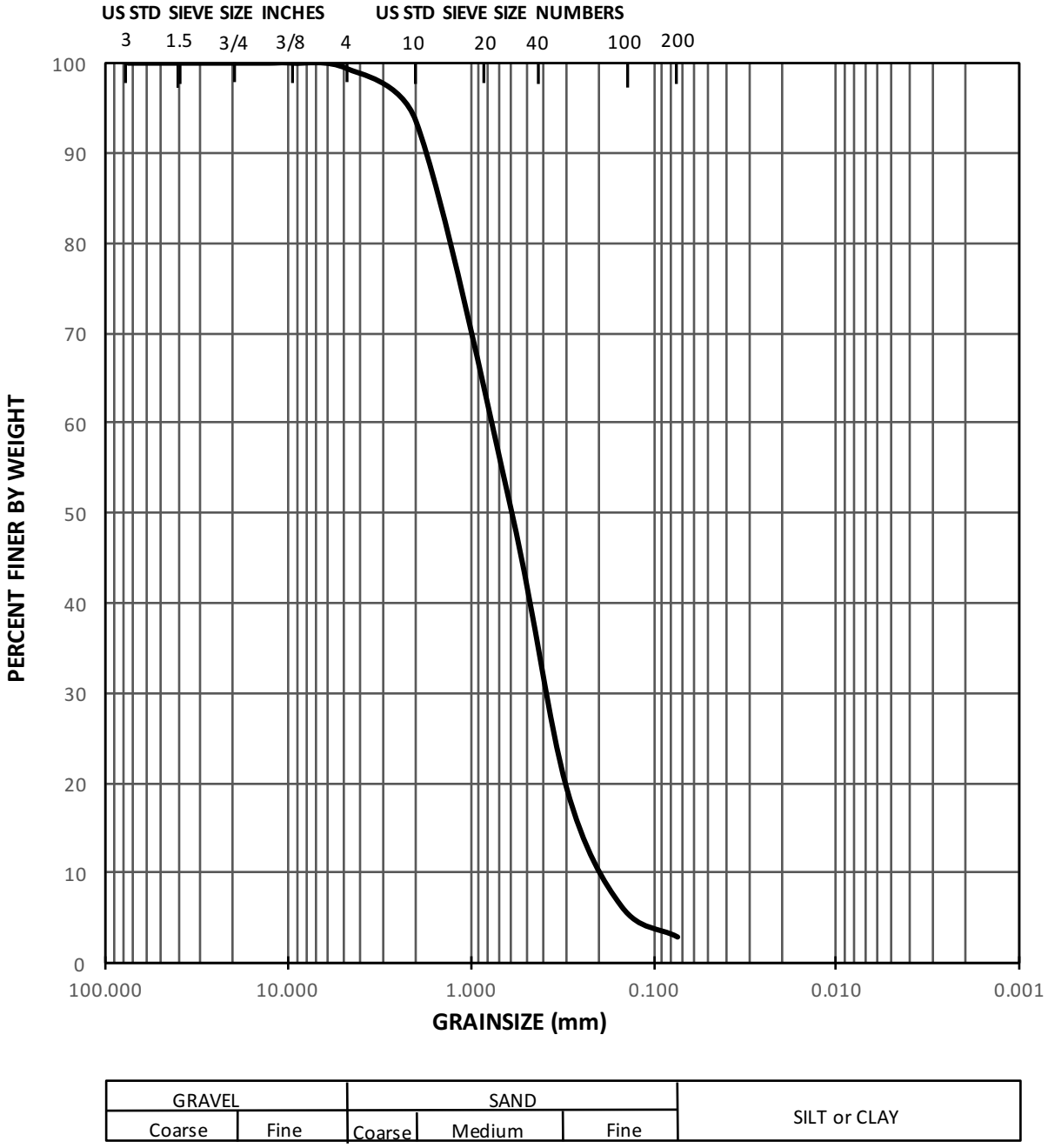

| | |
|---|---|
| LOCATION | DH-1 |
| DEPTH | 35' |

**CLASSIFICATION**
Fine to Medium SAND with Silt (SP-SM)

**PASSING NO. 200 (%)**
7

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

**PLATE B-1d**



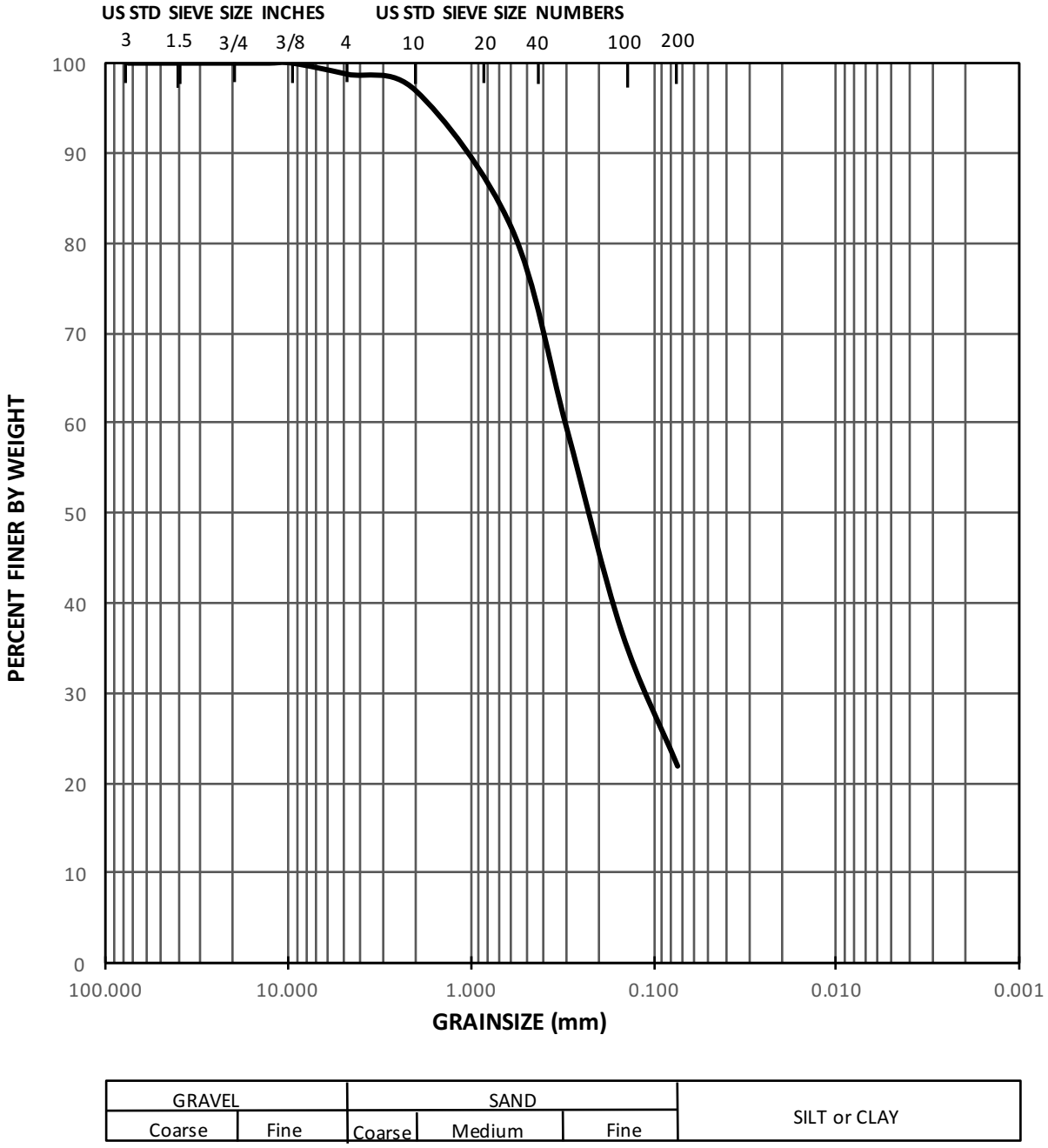

| | |
|---|---|
| LOCATION | DH-1 |
| DEPTH | 55' |

**CLASSIFICATION**
Fine to Medium SAND (SP)

**PASSING NO. 200 (%)**
3

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

**PLATE B-1e**



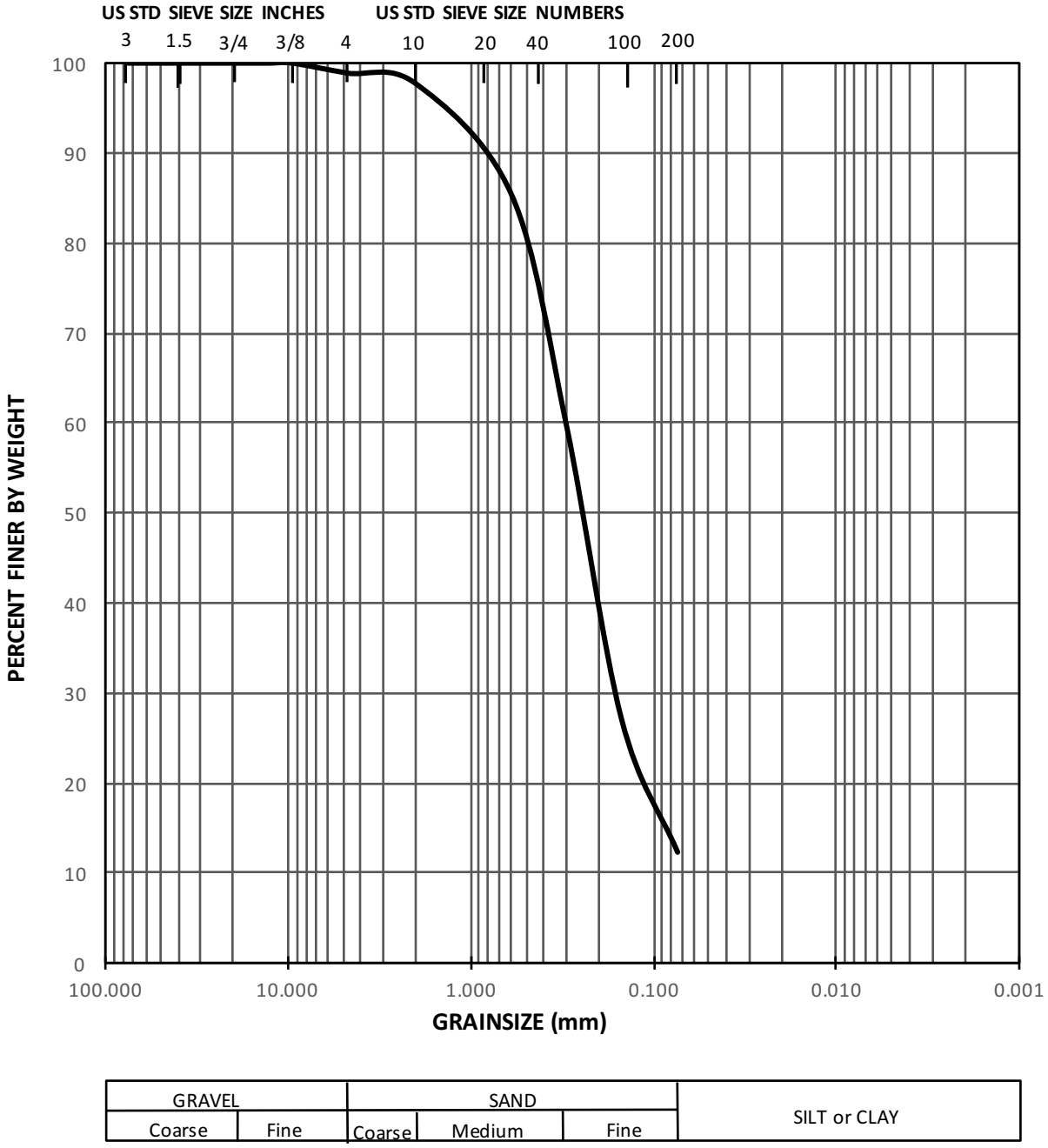

| LOCATION | DH-2 |
|---|---|
| DEPTH | 8' |

**CLASSIFICATION**
Silty Fine to Medium SAND (SM)

**PASSING NO. 200 (%)**
22

**GRAINSIZE DISTRIBUTION**
**Moorpark Library**
**Moorpark, California**

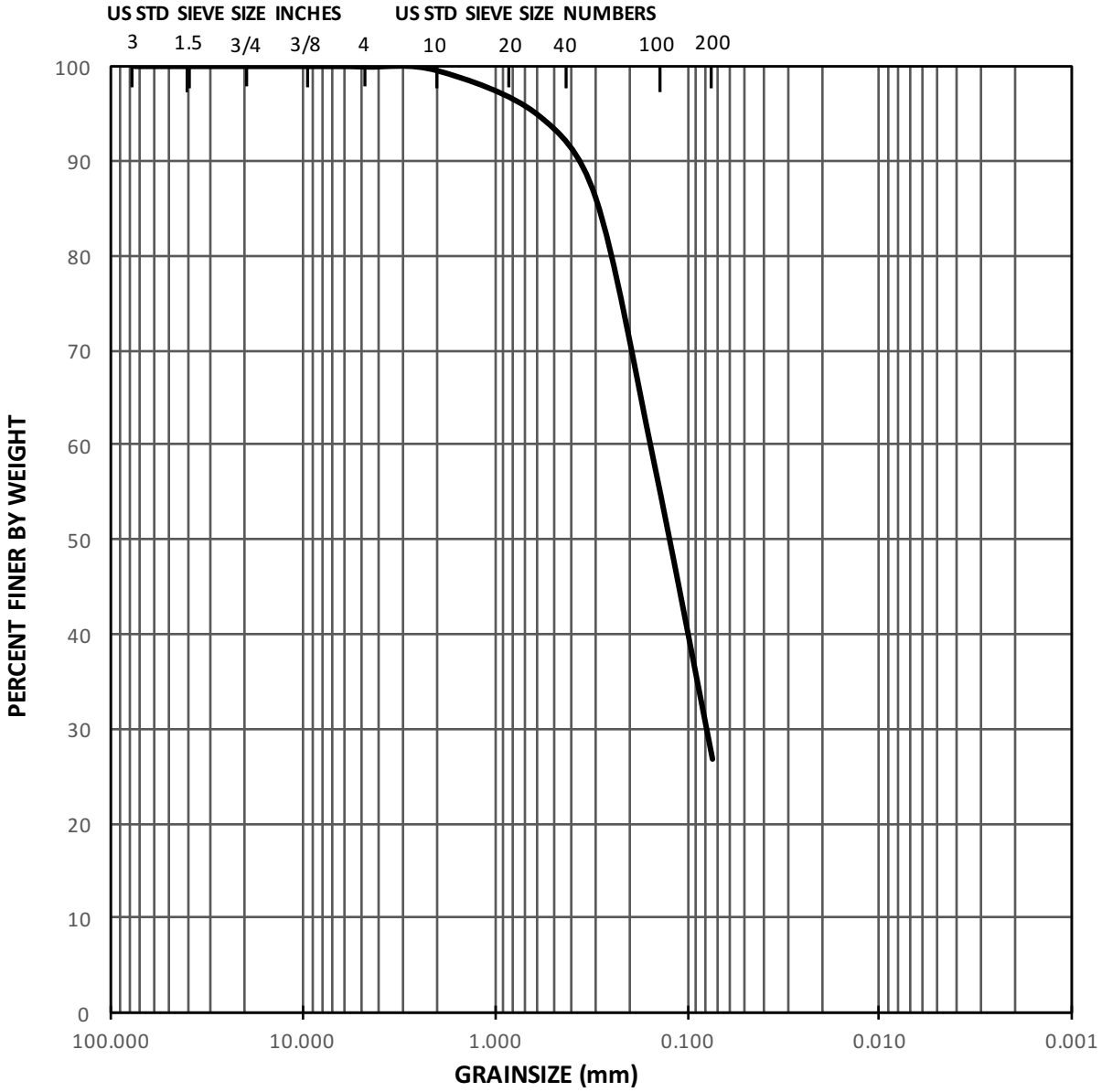
**PLATE B-1e**




| | | | |
|---|---|---|---|
| LOCATION | DH-2 | **CLASSIFICATION** | **PASSING NO. 200 (%)** |
| DEPTH | 13' | Fine to Medium SAND with Silt (SP-SM) | 12 |

**GRAINSIZE DISTRIBUTION**
**Moorpark Library**
**Moorpark, California**

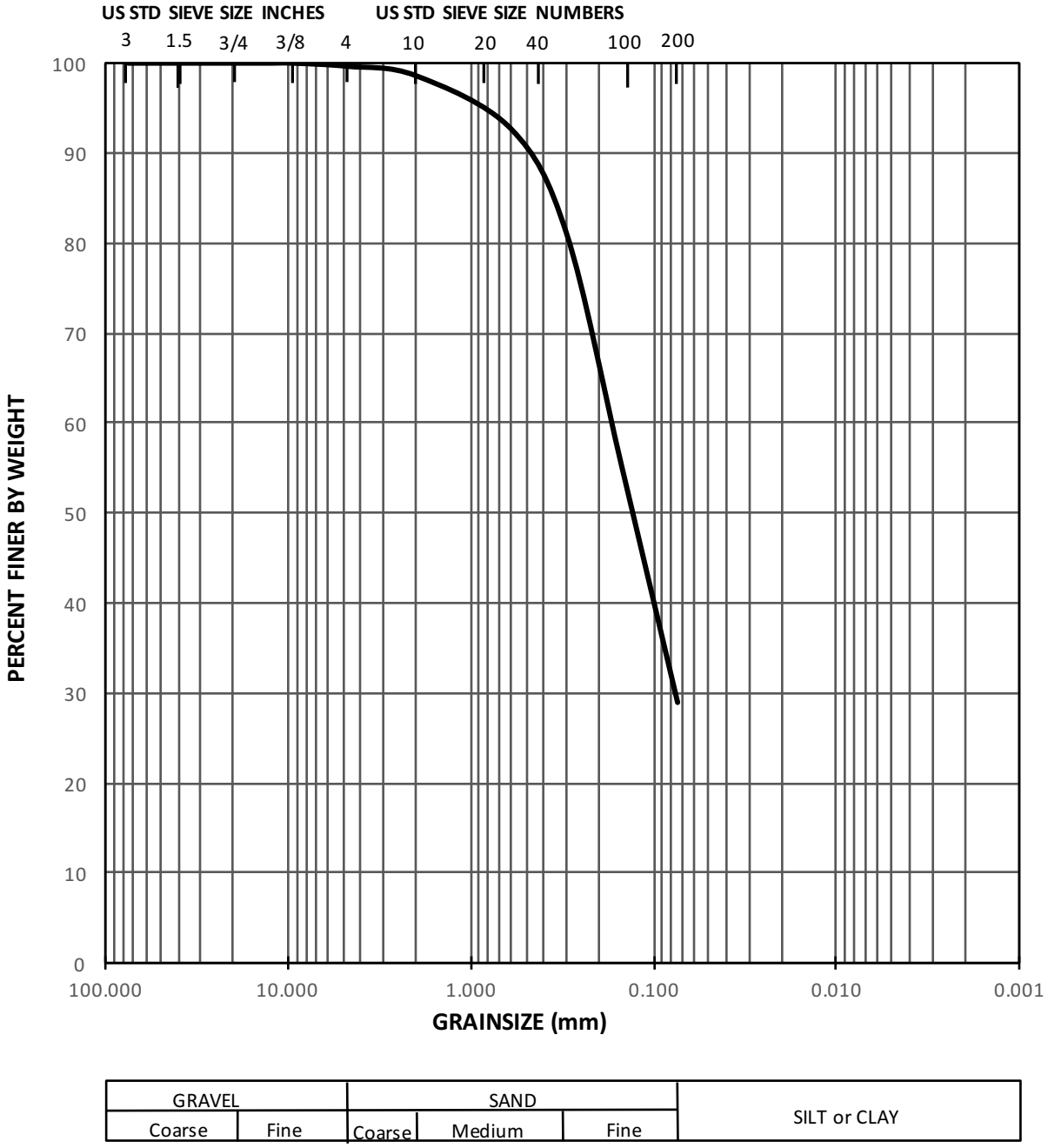
**PLATE B-1e**




| | | | |
|---|---|---|---|
| LOCATION | DH-2 | **CLASSIFICATION** | **PASSING NO. 200 (%)** |
| DEPTH | 15' | Silty Fine SAND (SM) | 27 |

**GRAINSIZE DISTRIBUTION**
**Moorpark Library**
**Moorpark, California**

**PLATE B-1f**



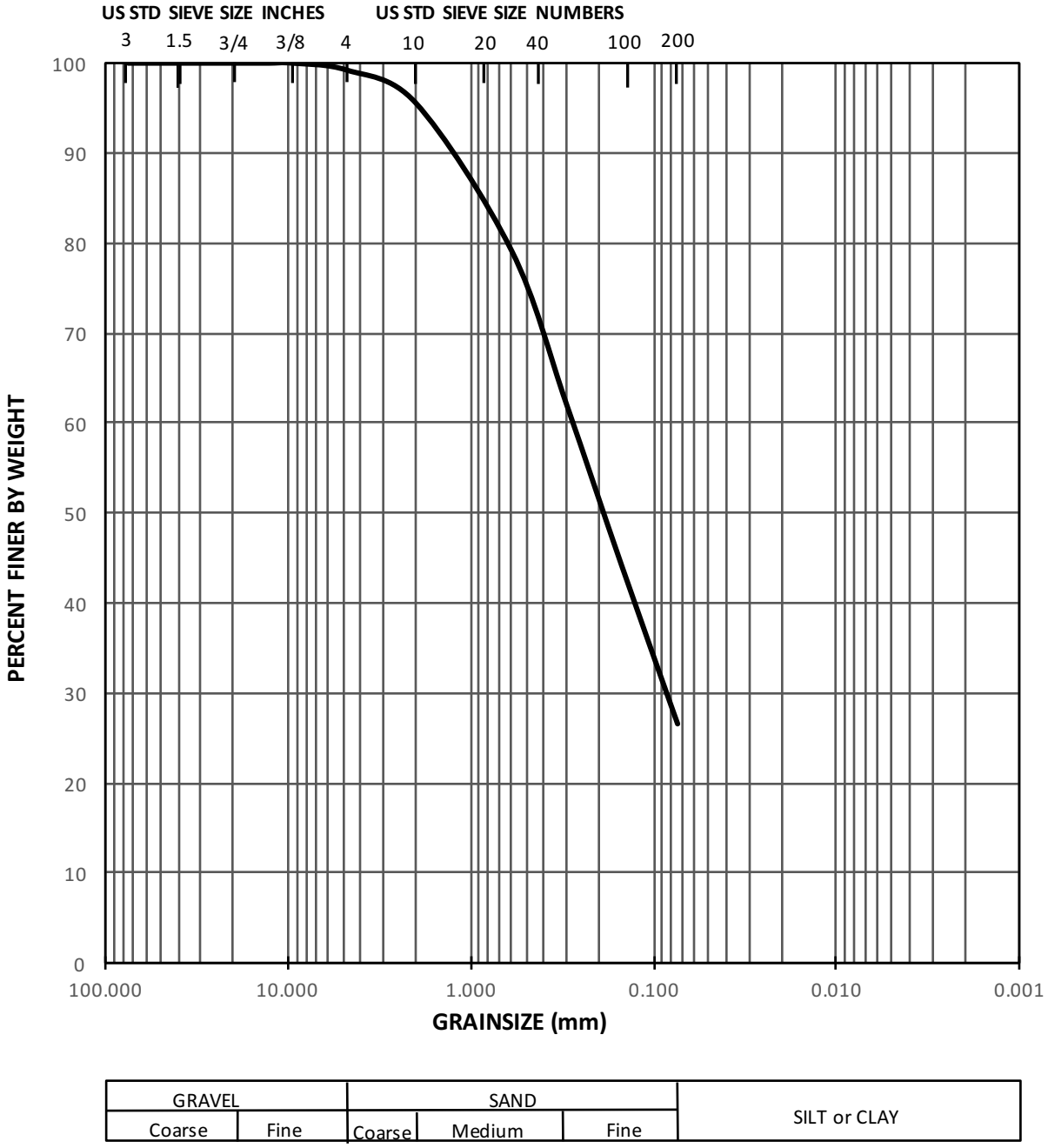

| LOCATION | DH-2 |
|---|---|
| DEPTH | 25' |

**CLASSIFICATION**
Silty Fine SAND (SM)

**PASSING NO. 200 (%)**
29

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

**PLATE B-1g**



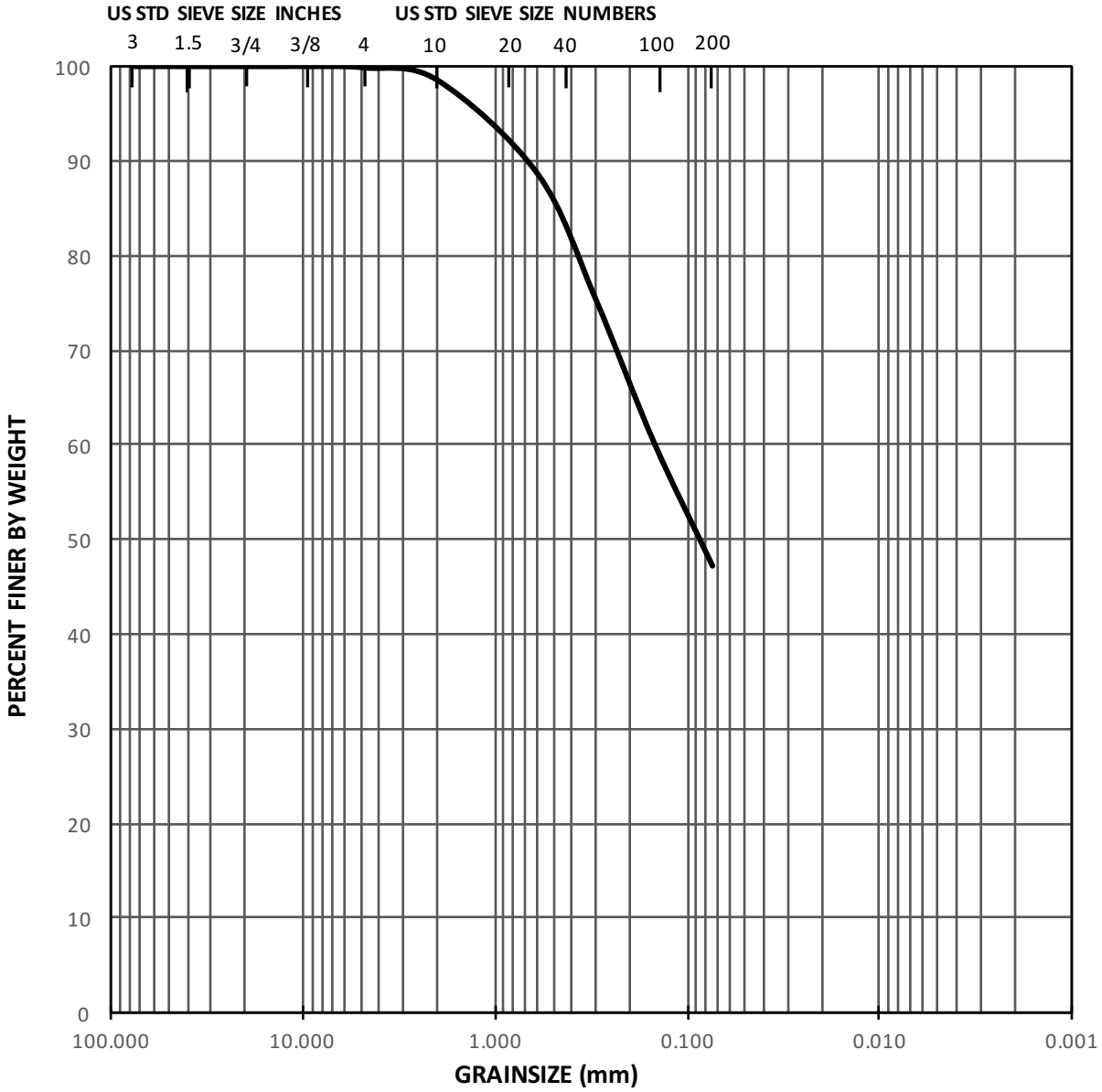

| | |
|---|---|
| LOCATION | DH-2 |
| DEPTH | 34' |

**CLASSIFICATION**
Clayey Fine to Medium SAND (SC)

**PASSING NO. 200 (%)**
27

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

**PLATE B-1h**



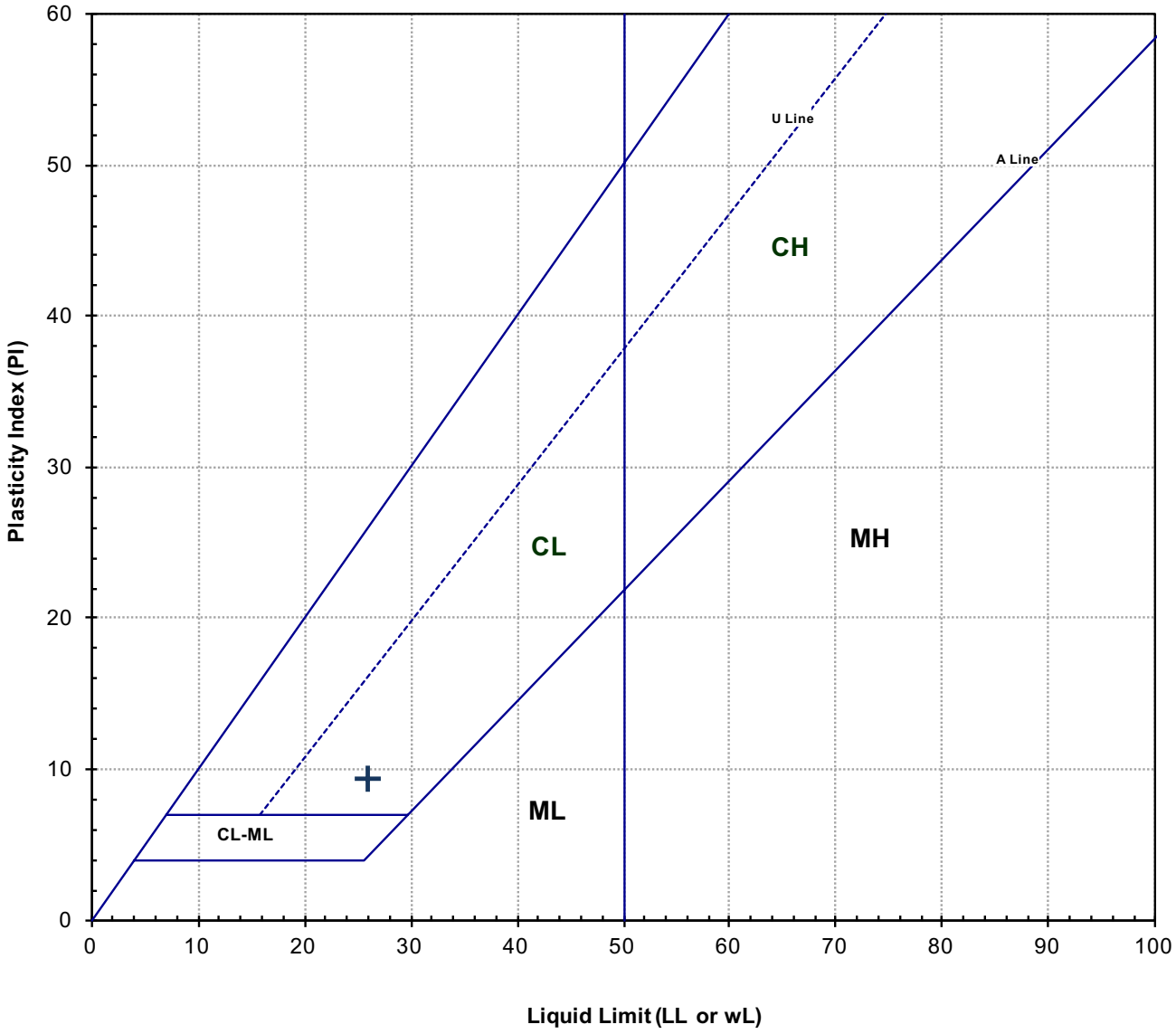

| | |
|---|---|
| LOCATION | DH-2 |
| DEPTH | 42' |

**CLASSIFICATION**
Sandy Silty CLAY (CL-ML)

**PASSING NO. 200 (%)**
47

## GRAINSIZE DISTRIBUTION
## Moorpark Library
## Moorpark, California

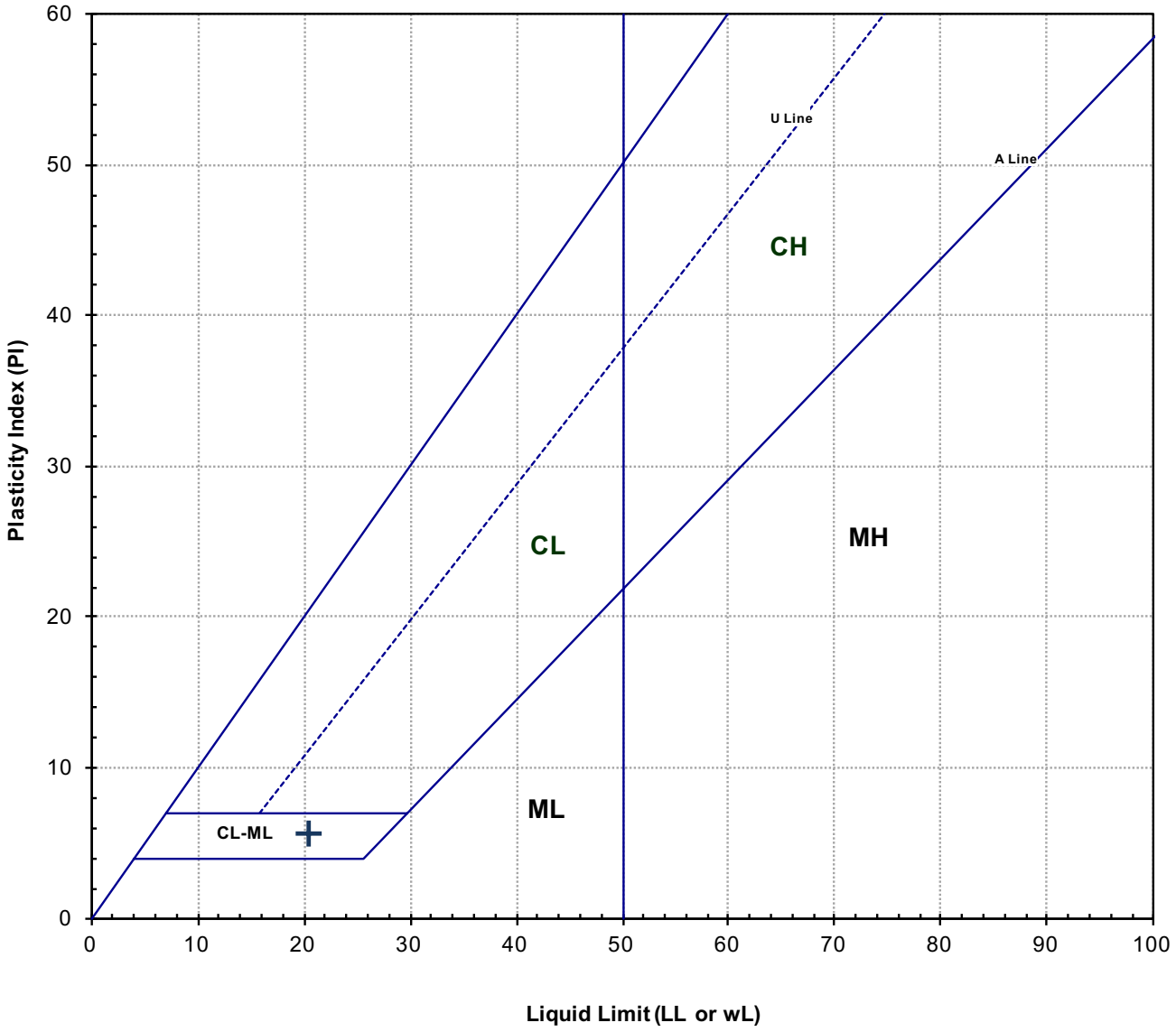
**PLATE B-1i**




| | | CLASSIFICATION | LIQUID LIMIT (LL) | PLASTIC LIMIT (PL) | PLASTICITY INDEX (PI) |
|---|---|---|---|---|---|
| **LOCATION** | DH-1 | | | | |
| **DEPTH** | 67' | Clayey SAND (SC) | 26 | 17 | 9 |

**MOORPARK LIBRARY**
**Moorpark, California**

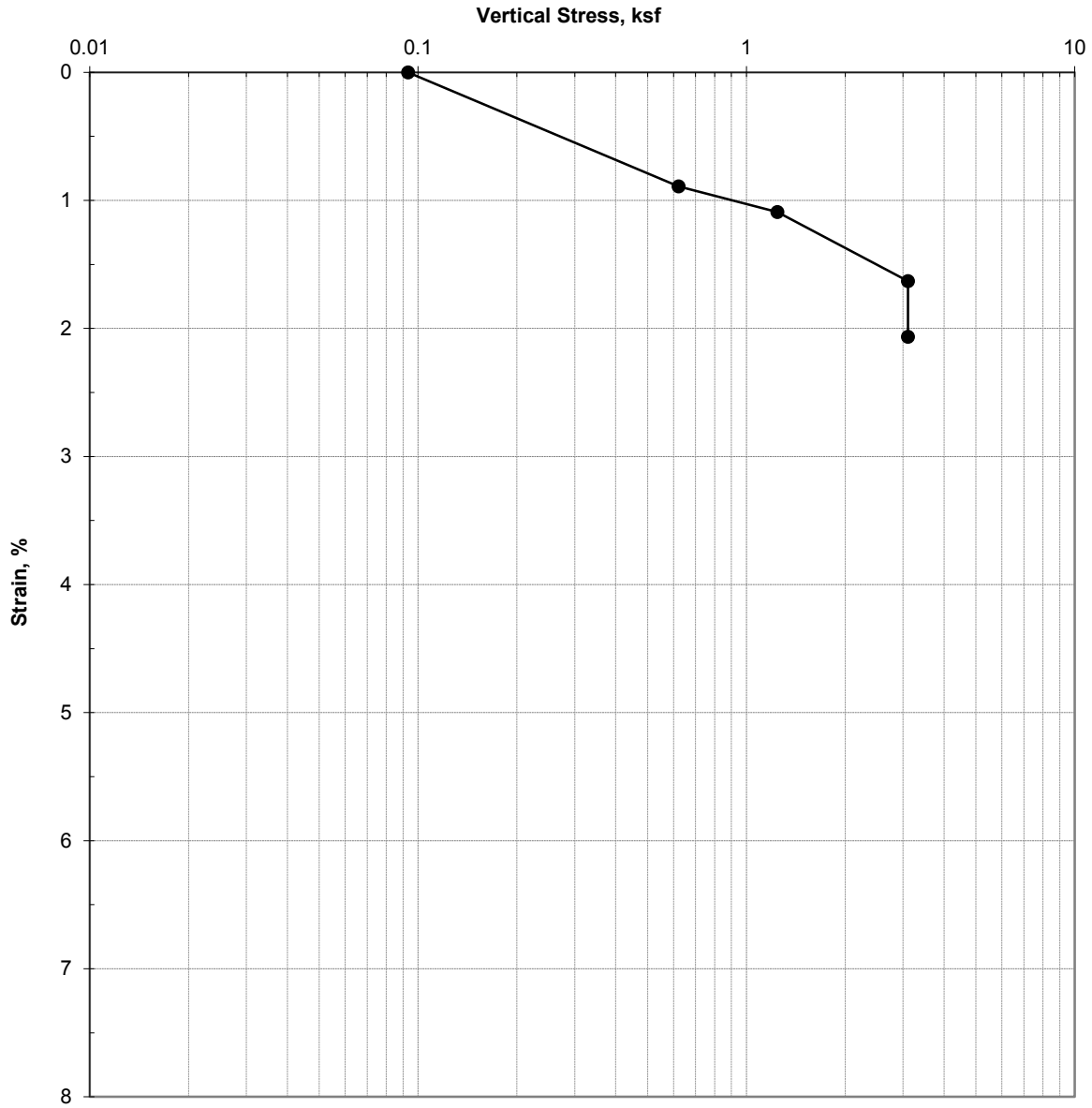
**PLATE B-2a**




| LOCATION | DEPTH | CLASSIFICATION | LIQUID LIMIT (LL) | PLASTIC LIMIT (PL) | PLASTICITY INDEX (PI) |
|---|---|---|---|---|---|
| DH-2 | 40' | Sandy Silty CLAY (CL-ML) | 21 | 15 | 6 |

**MOORPARK LIBRARY**
**Moorpark, California**

**PLATE B-2b**




| SAMPLE ID | | | |
|---|---|---|---|
| | Boring, Sample #, Depth | DH-1 , #10 , 30.0 ft | |
| | USCS Classification: | Poorly-graded SAND (SP): yellow, dry | |

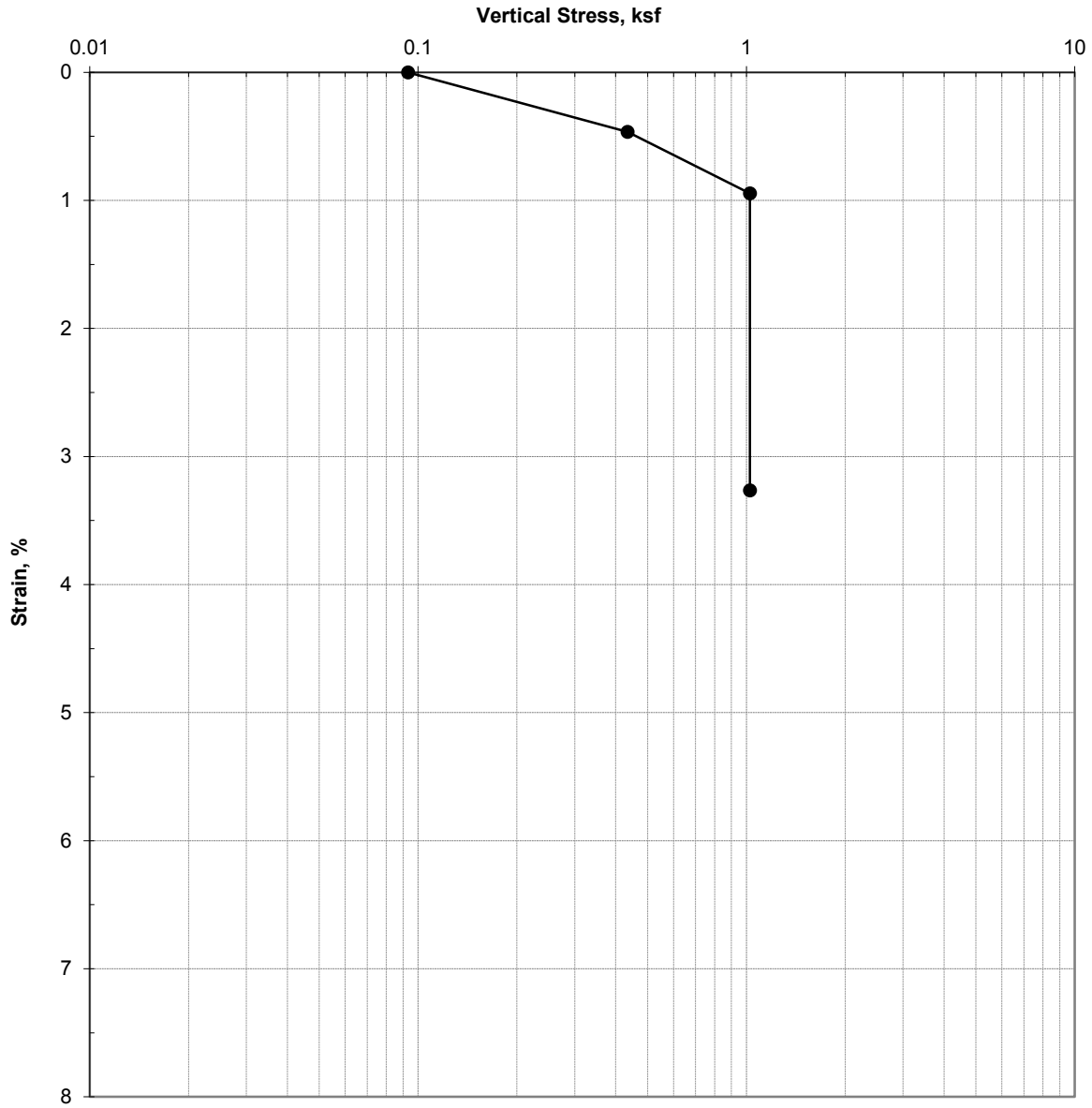
| PROPERTIES | Initial | Final |
|---|---|---|
| Water Content, % | 2.5% | 18.6% |
| Dry Unit Weight, pcf | 102.0 | 104.1 |
| Saturation, % | 11% | 84% |
| Void Ratio | 0.62 | 0.59 |
| Diameter, in | 2.42 | 2.42 |
| Height, in | 1.00 | 0.98 |

| SUMMARY | |
|---|---|
| Preconsolidation Pressure, ksf | --- |
| Inundation Increment, ksf | 3.11 |
| Liquid Limit | --- |
| Plastic Limit | --- |
| Plasticity Index | --- |
| Passing #200 | --- |
| Estimated Gs | 2.65 |

| REMARKS |
|---|
| Test Method: ASTM D4546, Method B<br>030.003 - Moorpark Library<br>After adding water the specimen collapsed 0.43% at a stress of 3.11ksf. |

## ONE DIMENSIONAL COLLAPSE TEST

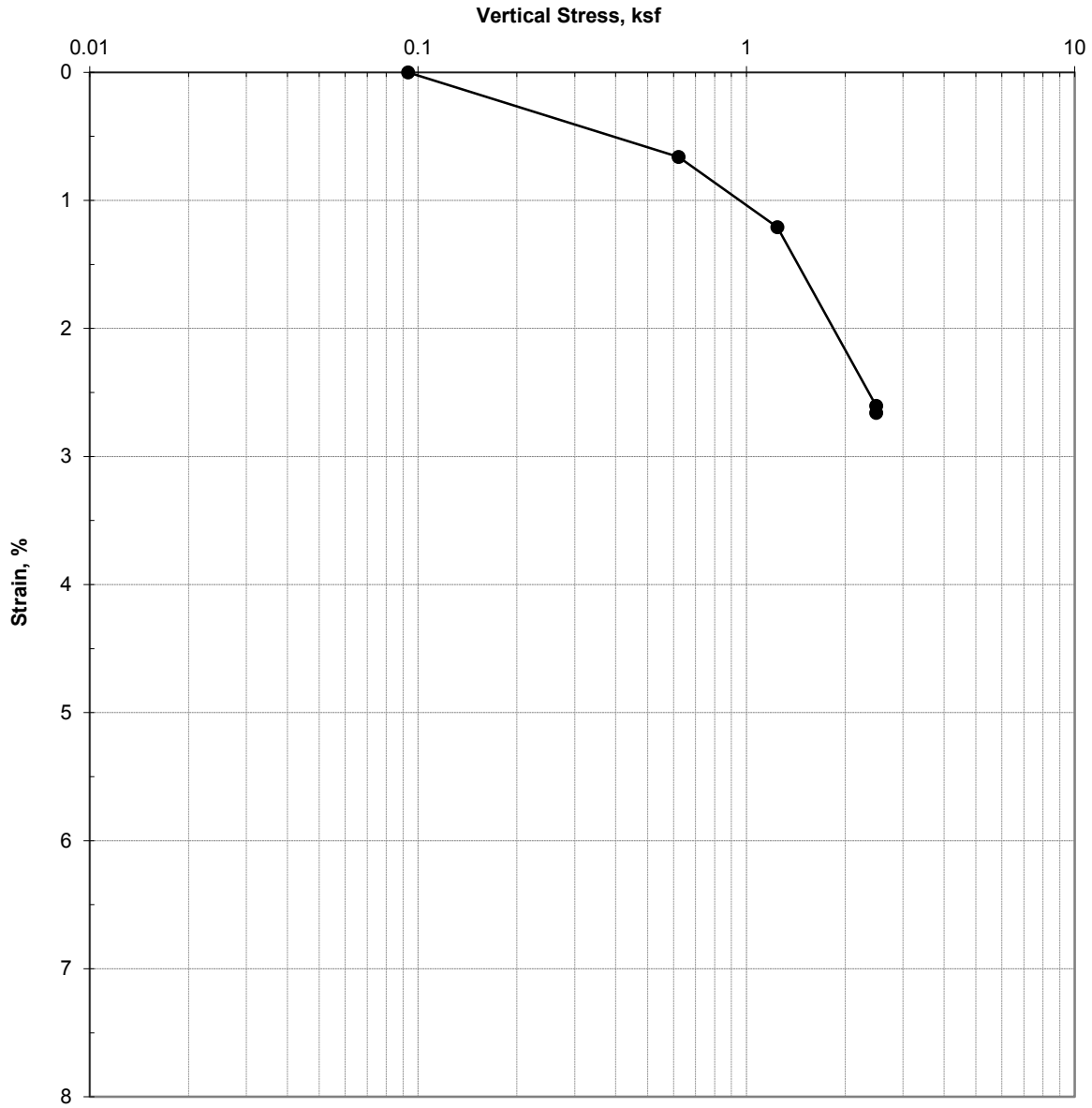
**PLATE B-3a**




| | | | | | |
|---|---|---|---|---|---|
| SAMPLE ID | Boring, Sample #, Depth | DH-2 , #5 , 10.0 ft | | SUMMARY | Preconsolidation Pressure, ksf --- |
| | USCS Classification: | Poorly-graded SAND with silt (SP-SM): light brown, dry, lightly cemented | | | Inundation Increment, ksf 1.03 |
| PROPERTIES | | Initial | Final | | Liquid Limit --- |
| | Water Content, % | 3.5% | 21.0% | | Plastic Limit --- |
| | Dry Unit Weight, pcf | 96.9 | 100.1 | | Plasticity Index --- |
| | Saturation, % | 13% | 85% | | Passing #200 --- |
| | Void Ratio | 0.71 | 0.65 | | Estimated Gs 2.65 |
| | Diameter, in | 2.42 | 2.42 | REMARKS | Test Method: ASTM D4546, Method B |
| | Height, in | 1.00 | 0.97 | | 030.003 - Moorpark Library |
| | | | | | After adding water the specimen collapsed 2.32% at a stress of 1.03ksf. |

## ONE DIMENSIONAL COLLAPSE TEST

**PLATE B-3b**




| SAMPLE ID | | |
|---|---|---|
| Boring, Sample #, Depth | DH-2 , #9 , 25.0 ft | |
| USCS Classification: | Poorly-graded SAND (SP): yellow brown, moist, fine | |

| PROPERTIES | Initial | Final |
|---|---|---|
| Water Content, % | 5.6% | 24.6% |
| Dry Unit Weight, pcf | 89.9 | 92.4 |
| Saturation, % | 18% | 82% |
| Void Ratio | 0.84 | 0.79 |
| Diameter, in | 2.42 | 2.42 |
| Height, in | 1.00 | 0.97 |

| SUMMARY | |
|---|---|
| Preconsolidation Pressure, ksf | --- |
| Inundation Increment, ksf | 2.49 |
| Liquid Limit | --- |
| Plastic Limit | --- |
| Plasticity Index | --- |
| Passing #200 | --- |
| Estimated Gs | 2.65 |

| REMARKS | |
|---|---|
| Test Method: ASTM D4546, Method B<br>030.003 - Moorpark Library<br>After adding water the specimen collapsed 0.05% at a stress of 2.49ksf. | |

## ONE DIMENSIONAL COLLAPSE TEST

**PLATE B-3c**

# R-value Test Report (Caltrans 301)

| | | | | | |
|---|---|---|---|---|---|
| **Job No.:** | 903-017 | **Date:** | 05/22/17 | **Initial Moisture,** | 6.6 |
| **Client:** | Oakridge Geoscience | **Tested** | PJ | **R-value** | **70** |
| **Project:** | Moorpark Library - 030.003 | **Reduced** | RU | | |
| **Sample** | DH-1 @ 0-5' | **Checked** | DC | **Expansion Pressure** | **0** psf |
| **Soil Type:** | Brown SAND w/ Silt | | | | |

| **Specimen Number** | A | B | C | D |
|---|---|---|---|---|
| **Exudation Pressure, psi** | 200 | 360 | 478 | |
| **Prepaired Weight, grams** | 1200 | 1200 | 1200 | |
| **Final Water Added, grams/cc** | 60 | 50 | 45 | |
| **Weight of Soil & Mold, grams** | 3137 | 3143 | 3132 | |
| **Weight of Mold, grams** | 2083 | 2090 | 2089 | |
| **Height After Compaction, in.** | 2.50 | 2.50 | 2.42 | |
| **Moisture Content, %** | 11.9 | 11.0 | 10.6 | |
| **Dry Density, pcf** | 114.2 | 115.0 | 118.2 | |
| **Expansion Pressure, psf** | 0 | 0 | 0 | |
| **Stabilometer @ 1000** | | | | |
| **Stabilometer @ 2000** | 34 | 26 | 22 | |
| **Turns Displacement** | 4.90 | 4.95 | 5.15 | |
| **R-value** | 65 | 72 | 74 | |

**Remarks:**

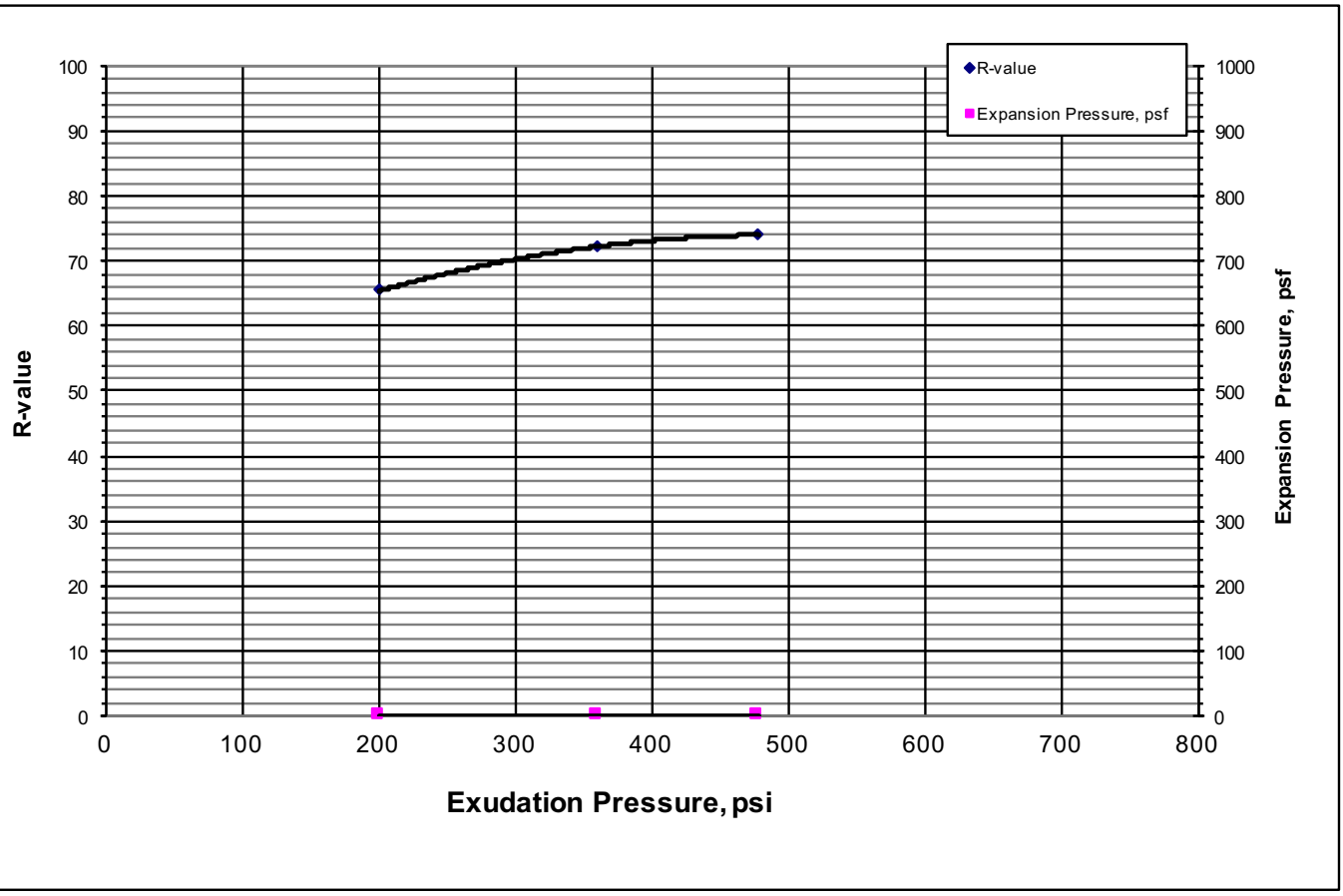



**PLATE B-4**

# Corrosivity Tests Summary

**CTL #** 903-017 **Date:** **Tested By:** PJ **Checked:** PJ
**Client:** Oakridge Geoscience **Project:** Moorpark Library **Proj. No:** 030.003
**Remarks:**

| Sample Location or ID | | | Resistivity @ 15.5 °C (Ohm-cm) | | | Chloride | Sulfate | | pH | ORP (Redox) | | Sulfide | Moisture | Soil Visual Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | As Rec. | Min | Sat. | mg/kg | mg/kg | % | | | | Qualitative | At Test | |
| | | | | | | Dry Wt. | Dry Wt. | Dry Wt. | | $E_H$ (mv) | At Test | by Lead | % | |
| Boring | Sample, No. | Depth, ft. | ASTM G57 | Cal 643 | ASTM G57 | ASTM D4327 | ASTM D4327 | ASTM D4327 | ASTM G51 | ASTM G200 | Temp °C | Acetate Paper | ASTM D2216 | |
| DH-1 | 1 | 0-5 | - | - | 16,319 | 2 | 6 | 0.0006 | 7.5 | - | - | - | 3.3 | Brown SAND w/ Silt |
| | | | | | | | | | | | | | | |
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**PLATE B-5**

# APPENDIX C

**GeoLogismiki**
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http://www.geologismiki.gr

# LIQUEFACTION ANALYSIS REPORT

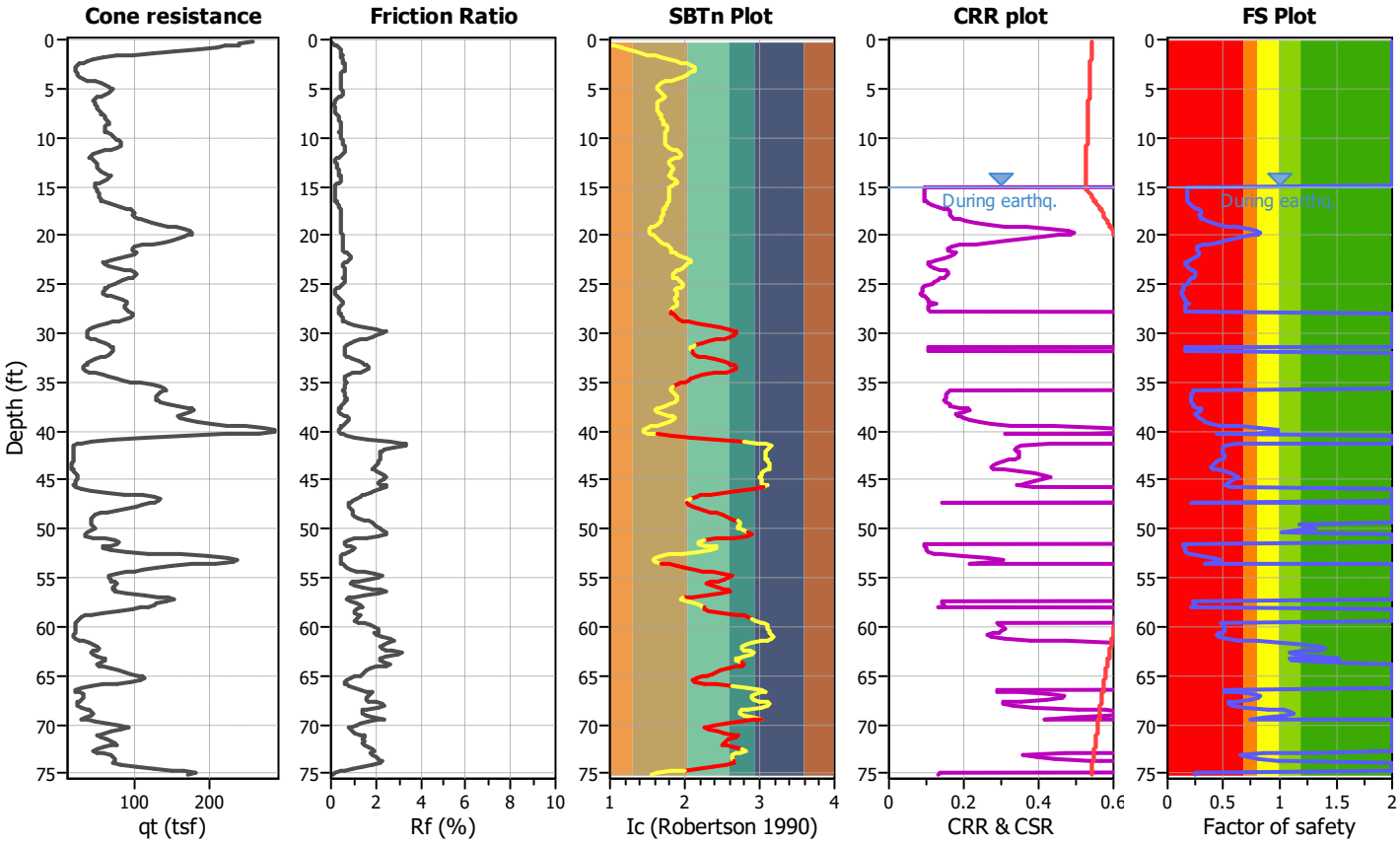
**Project title : Moorpark Library**

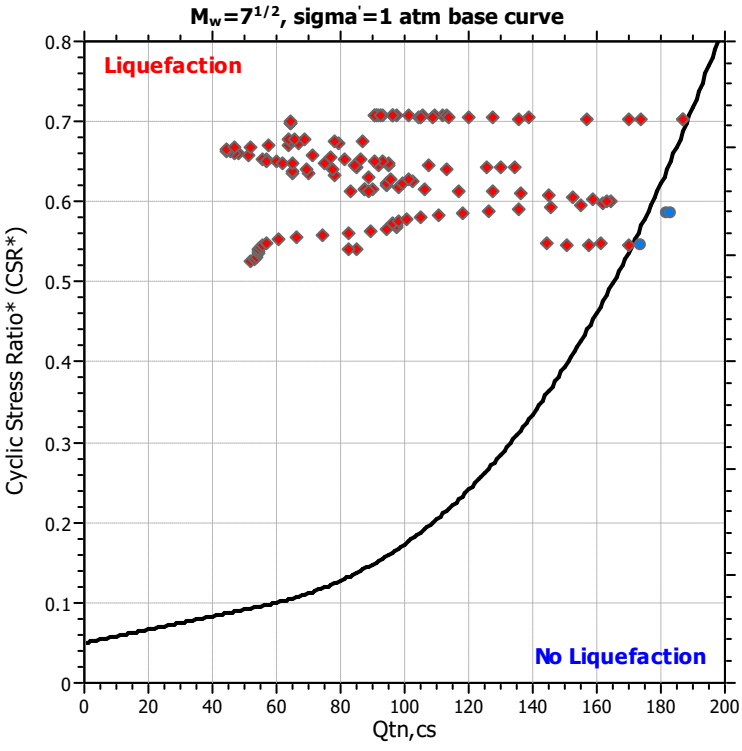
**Location : High Street and Moorpark Avenue, Moorpark, Caliornia**

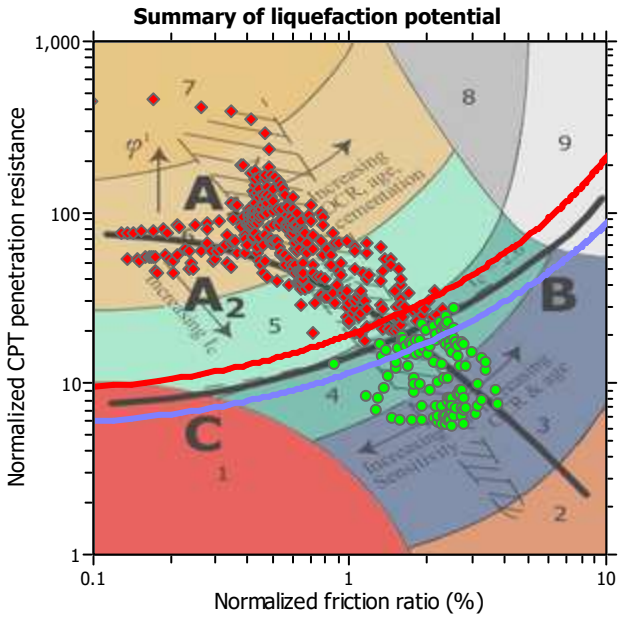
**CPT file : CPT-1**

**Input parameters and analysis data**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | G.W.T. (in-situ): | 37.50 ft | Use fill: | No | Clay like behavior applied: | All soils |
| Fines correction method: | Robertson (2009) | G.W.T. (earthq.): | 15.00 ft | Fill height: | N/A | Limit depth applied: | No |
| Points to test: | Based on Ic value | Average results interval: | 5 | Fill weight: | N/A | Limit depth: | N/A |
| Earthquake magnitude $M_w$: | 6.90 | Ic cut-off value: | 2.60 | Trans. detect. applied: | Yes | MSF method: | Method based |
| Peak ground acceleration: | 1.03 | Unit weight calculation: | Based on SBT | $K_\sigma$ applied: | No | | |

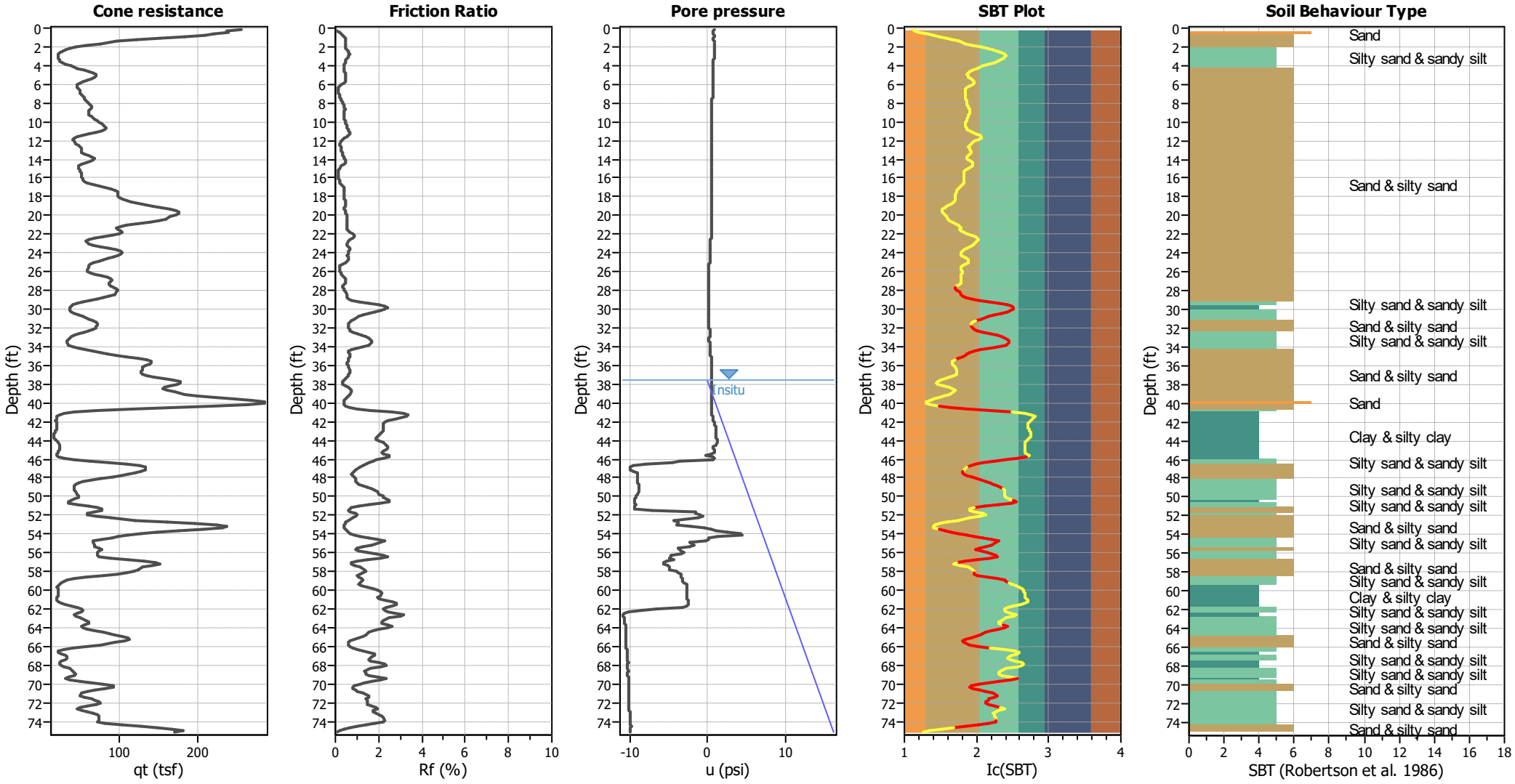



Zone $A_1$: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone $A_2$: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

# CPT basic interpretation plots



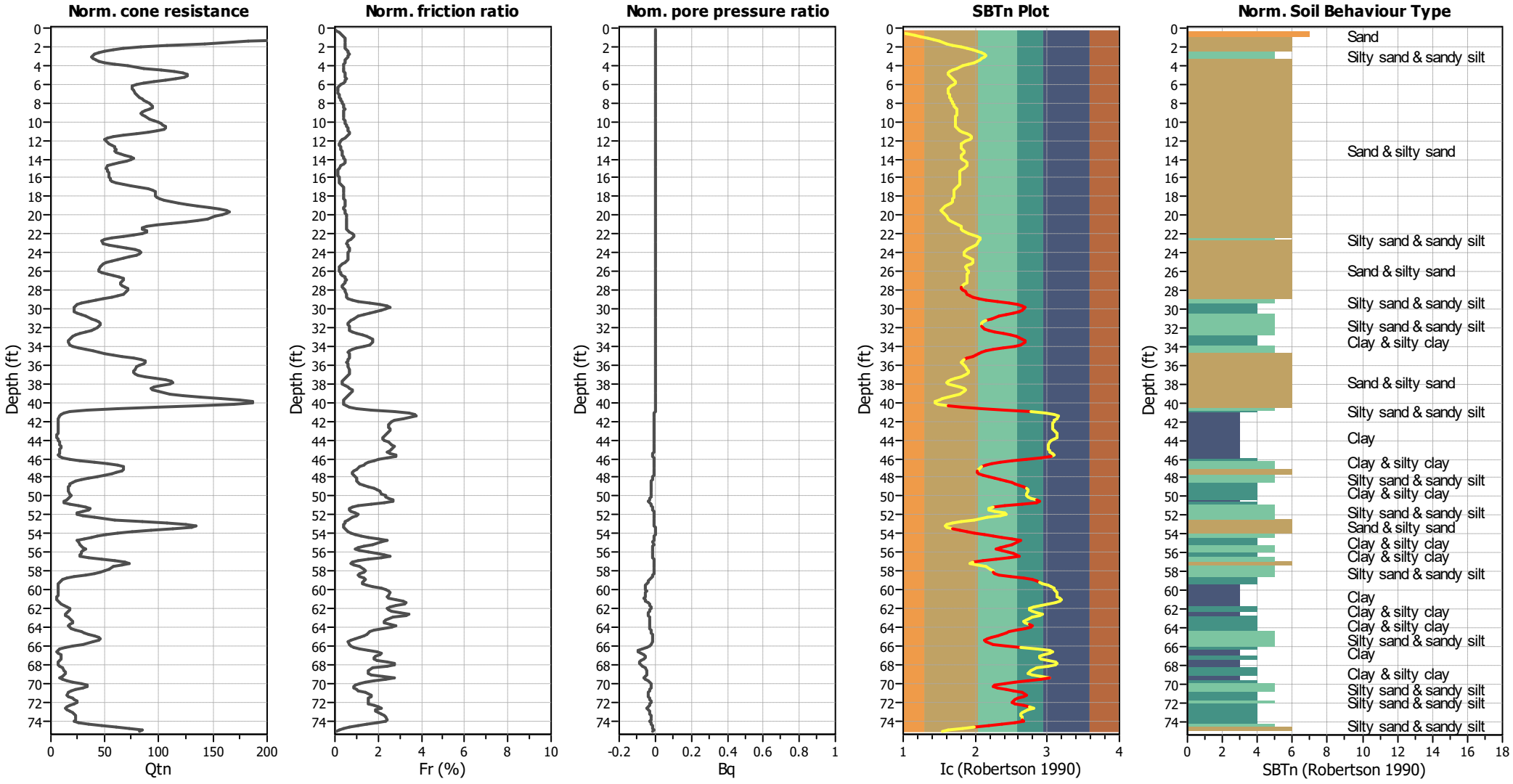

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBT legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# CPT basic interpretation plots (normalized)



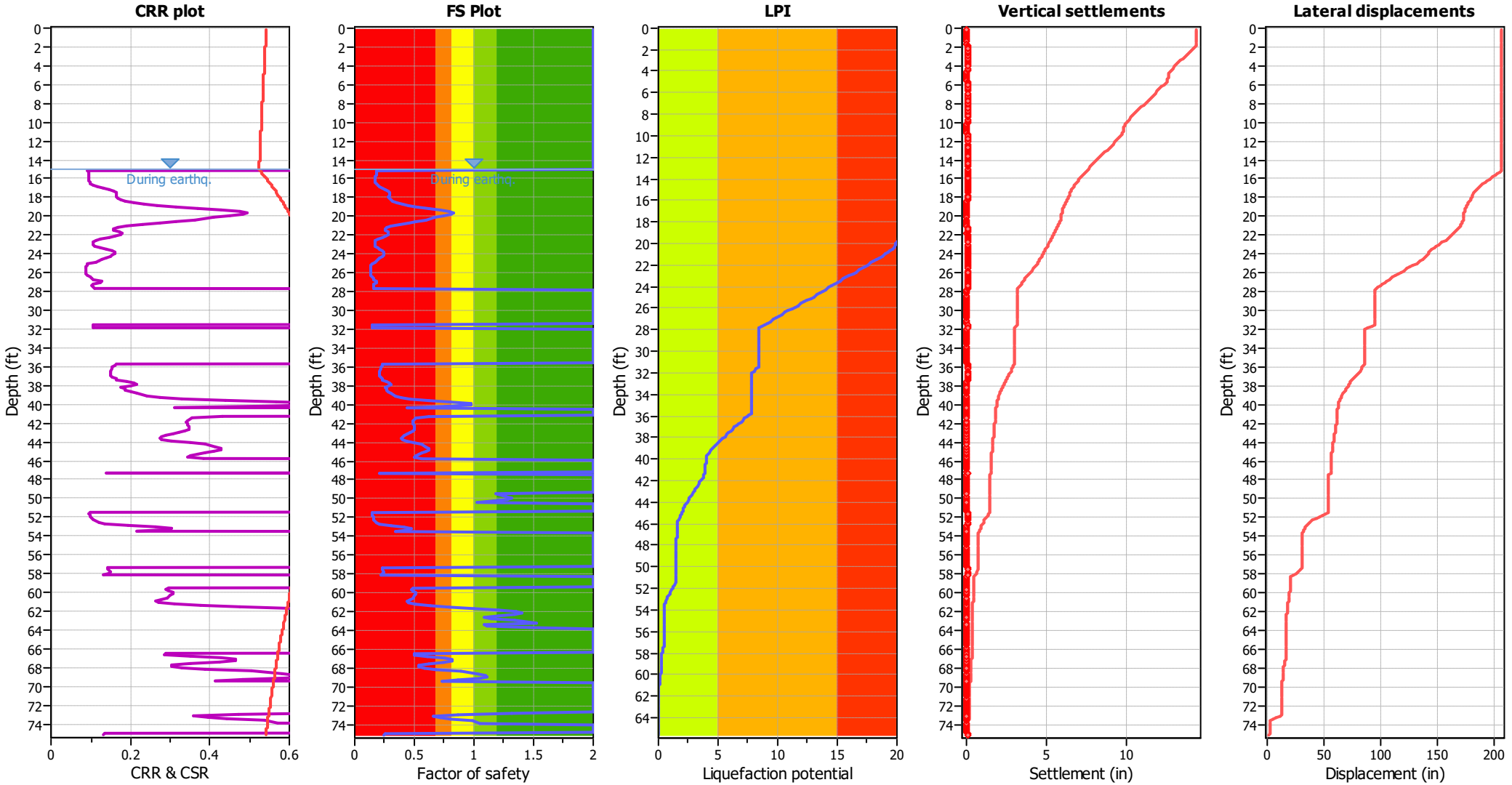

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBTn legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# Liquefaction analysis overall plots




## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**F.S. color scheme**

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**LPI color scheme**

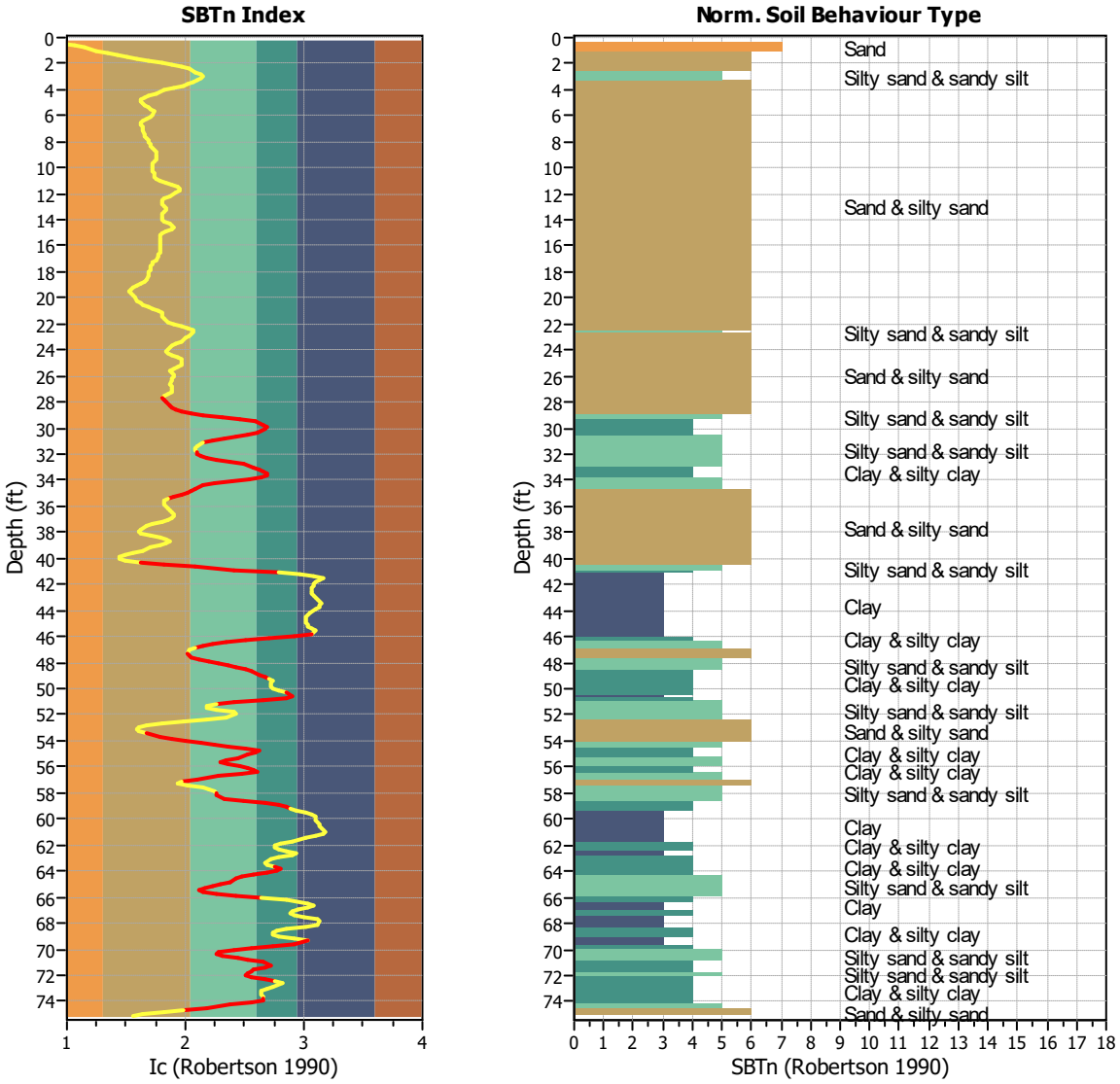
- Very high risk
- High risk
- Low risk

# TRANSITION LAYER DETECTION ALGORITHM REPORT
## Summary Details & Plots

**Short description**

The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of $I_c$ values over which the transition will be defined (typically somewhere between $1.80 < I_c < 3.0$) and a rate of change of $I_c$. Transitions typically occur when the rate of change of $I_c$ is fast (i.e. delta $I_c$ is small).

The $SBT_n$ plot below, displays in red the detected transition layers based on the parameters listed below the graphs.



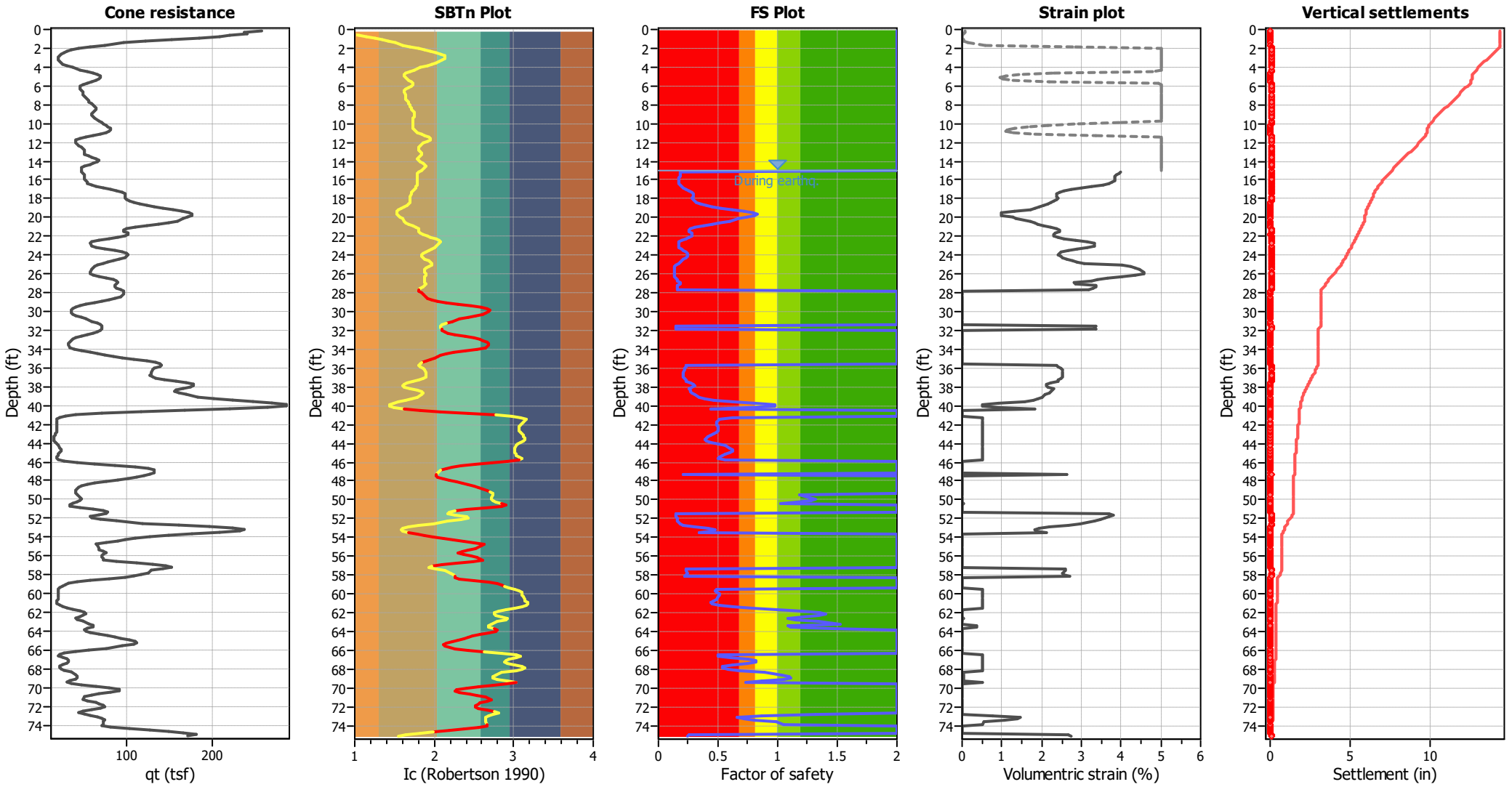

**Transition layer algorithm properties**

| | |
|---|---|
| $I_c$ minimum check value: | 1.70 |
| $I_c$ maximum check value: | 3.00 |
| $I_c$ change ratio value: | 0.0100 |
| Minimum number of points in layer: | 4 |

**General statistics**

| | |
|---|---|
| Total points in CPT file: | 458 |
| Total points excluded: | 156 |
| Exclusion percentage: | 34.06% |
| Number of layers detected: | 20 |

## Estimation of post-earthquake settlements

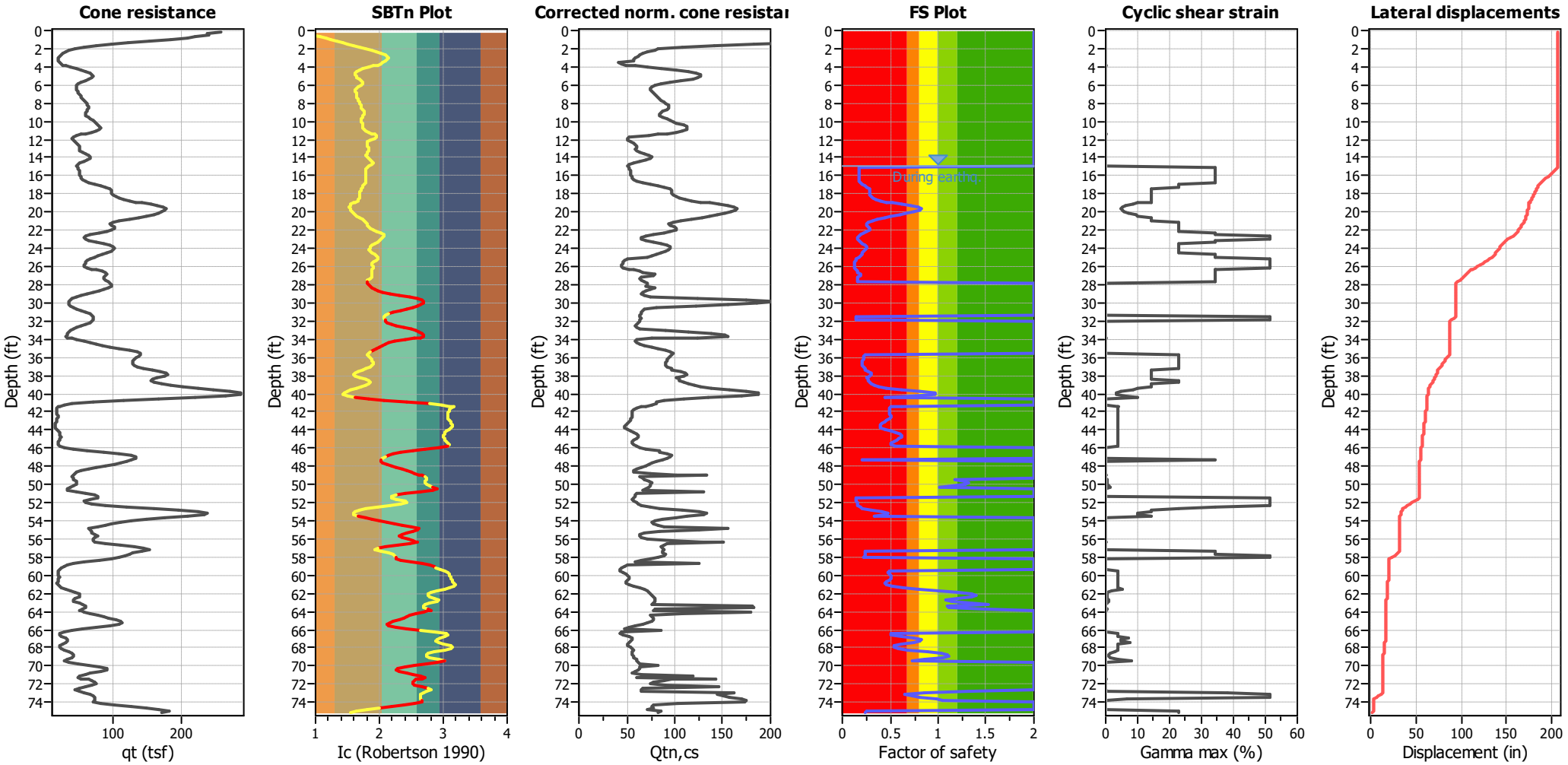



**Abbreviations**

| | |
|---|---|
| $q_t$: | Total cone resistance (cone resistance $q_c$ corrected for pore water effects) |
| $I_c$: | Soil Behaviour Type Index |
| FS: | Calculated Factor of Safety against liquefaction |
| Volumentric strain: | Post-liquefaction volumentric strain |

# Estimation of post-earthquake lateral Displacements

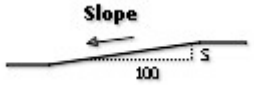
**Geometric parameters: Gently sloping ground without free face (Slope 2.50 %)**




**Abbreviations**

$q_t$: Total cone resistance (cone resistance $q_c$ corrected for pore water effects)
$I_c$: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
$\gamma_{max}$: Maximum cyclic shear strain
LDI: Lateral displacement index

**Surface condition**



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# LIQUEFACTION ANALYSIS REPORT

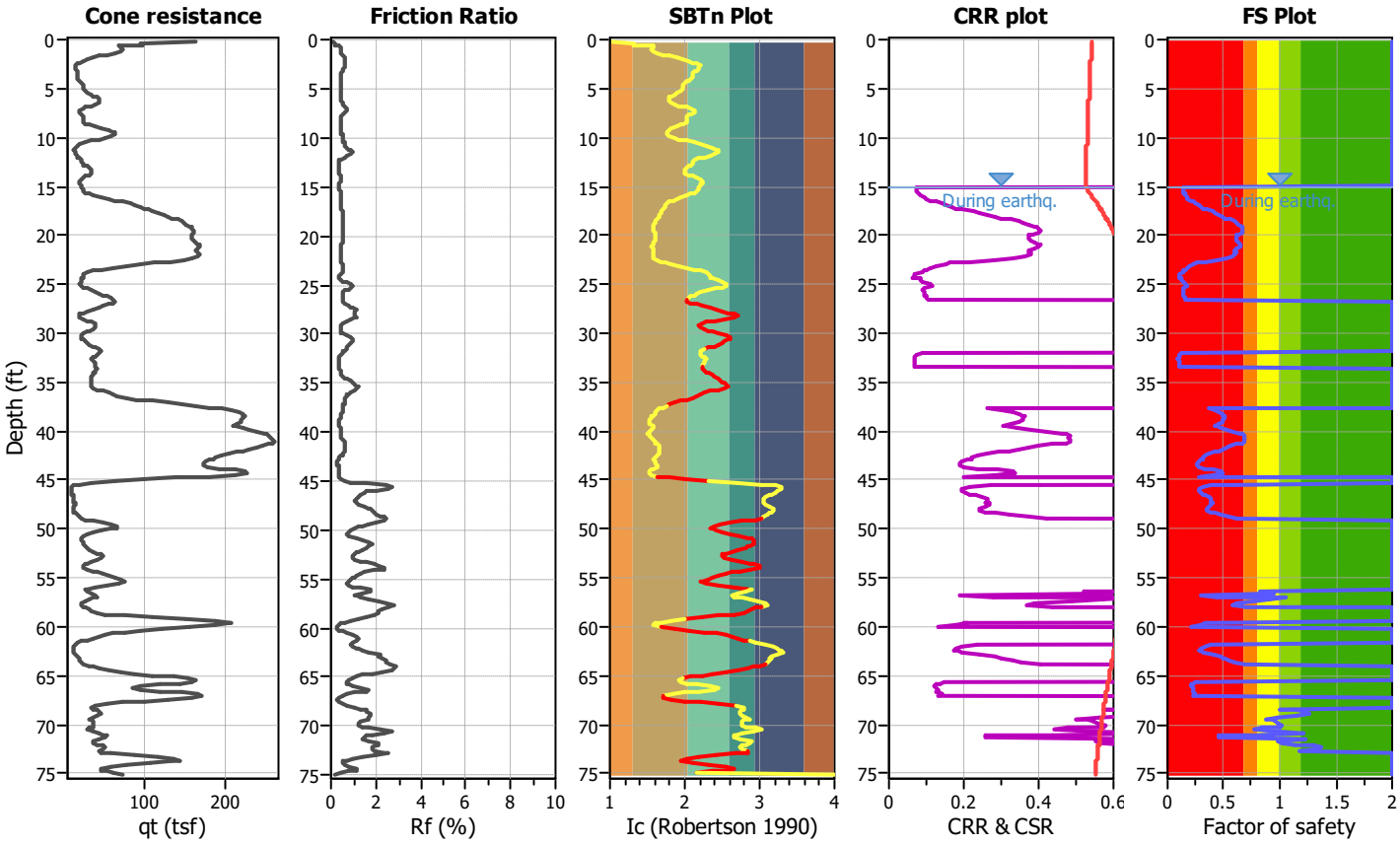
**Project title : Moorpark Library**

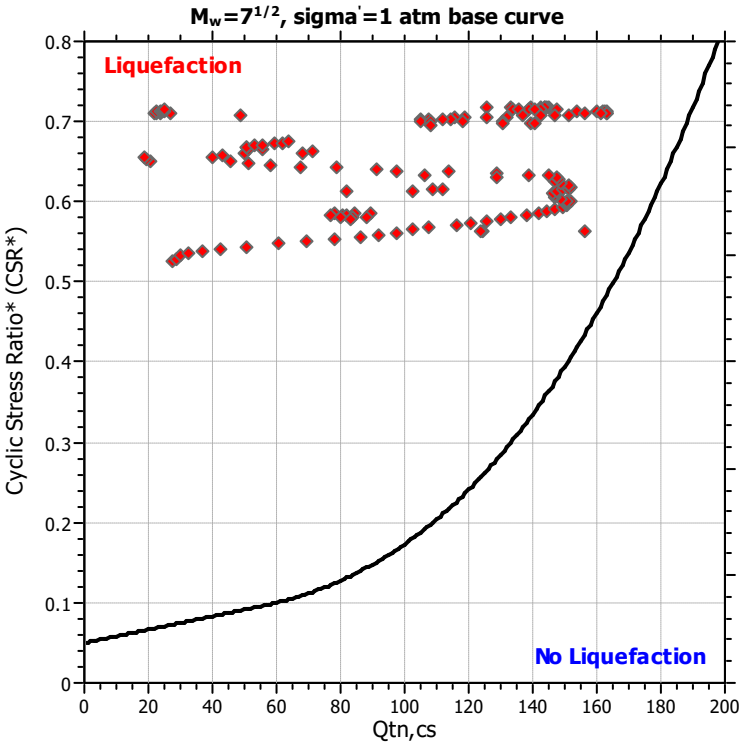
**Location : High Street and Moorpark Avenue, Moorpark, Caliornia**

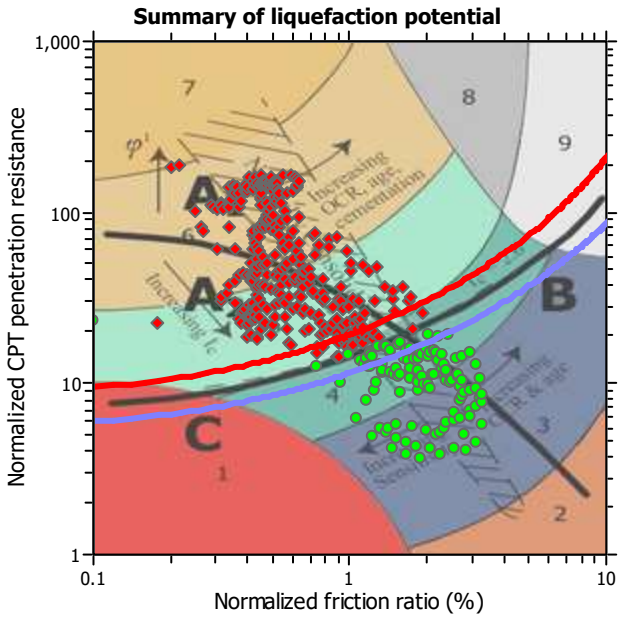
**CPT file : CPT-2**

**Input parameters and analysis data**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | G.W.T. (in-situ): | 37.50 ft | Use fill: | No | Clay like behavior applied: | All soils |
| Fines correction method: | Robertson (2009) | G.W.T. (earthq.): | 15.00 ft | Fill height: | N/A | Limit depth applied: | No |
| Points to test: | Based on Ic value | Average results interval: | 5 | Fill weight: | N/A | Limit depth: | N/A |
| Earthquake magnitude $M_w$: | 6.90 | Ic cut-off value: | 2.60 | Trans. detect. applied: | Yes | MSF method: | Method based |
| Peak ground acceleration: | 1.03 | Unit weight calculation: | Based on SBT | $K_\sigma$ applied: | No | | |

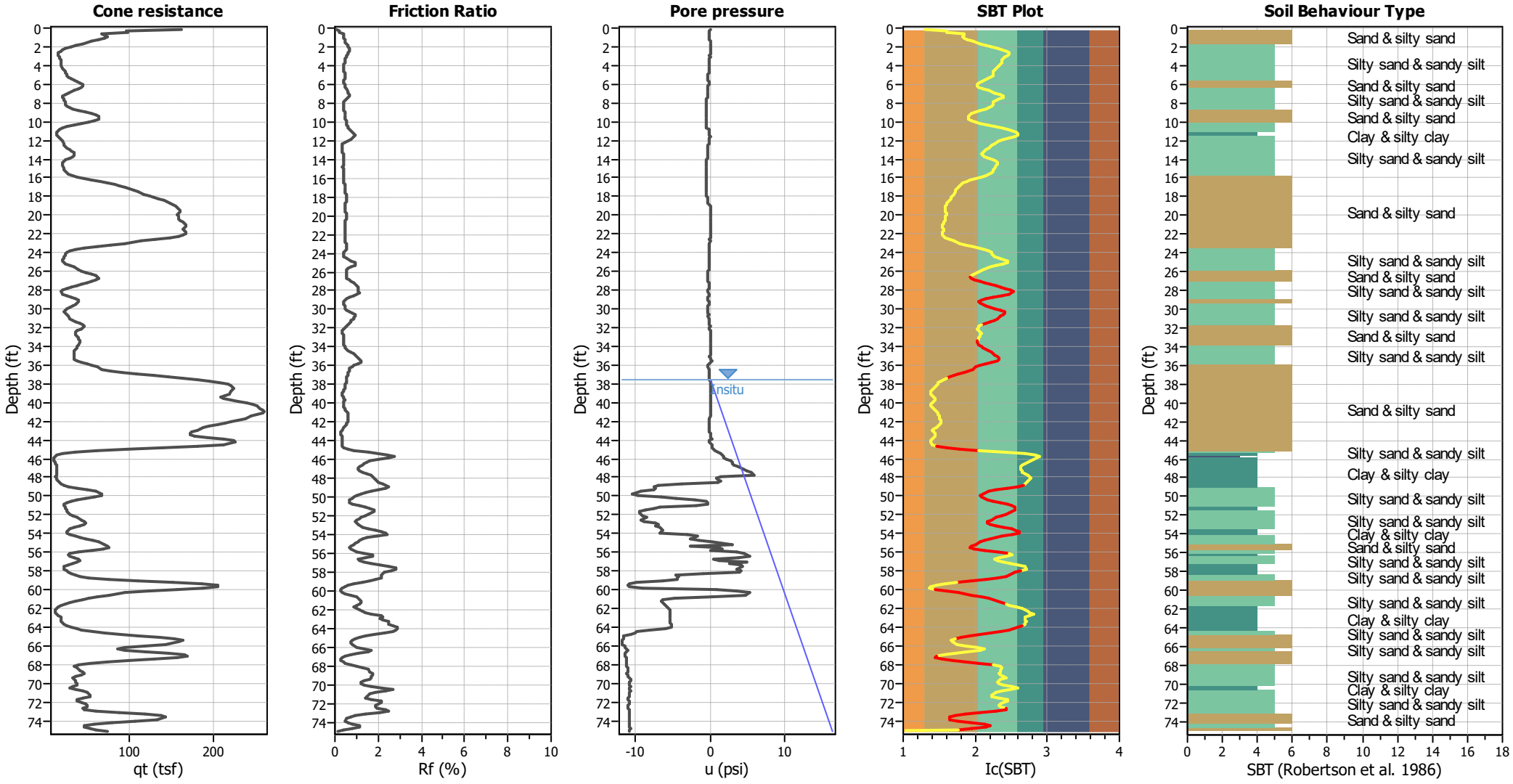



Zone $A_1$: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone $A_2$: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

# CPT basic interpretation plots



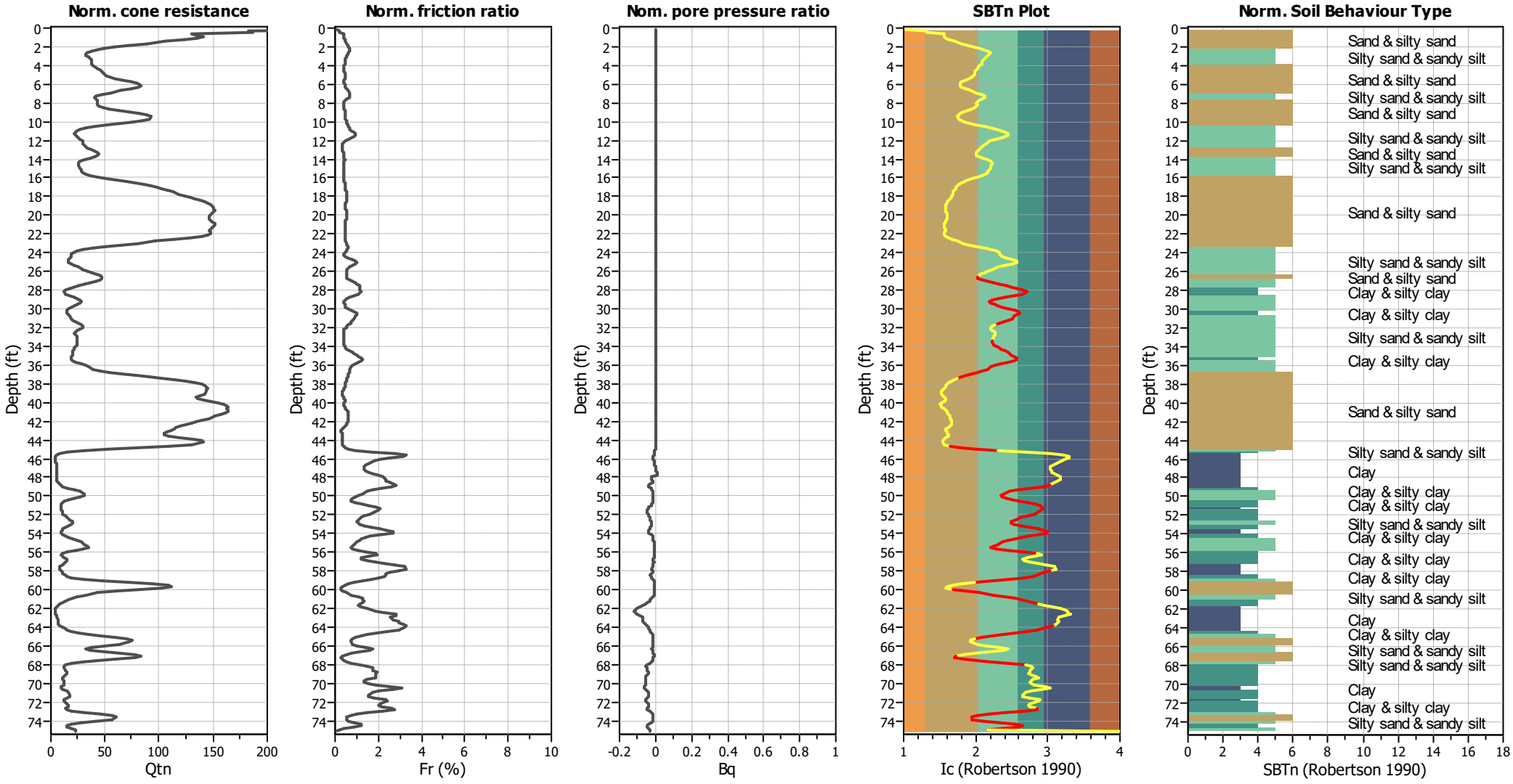

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBT legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# CPT basic interpretation plots (normalized)



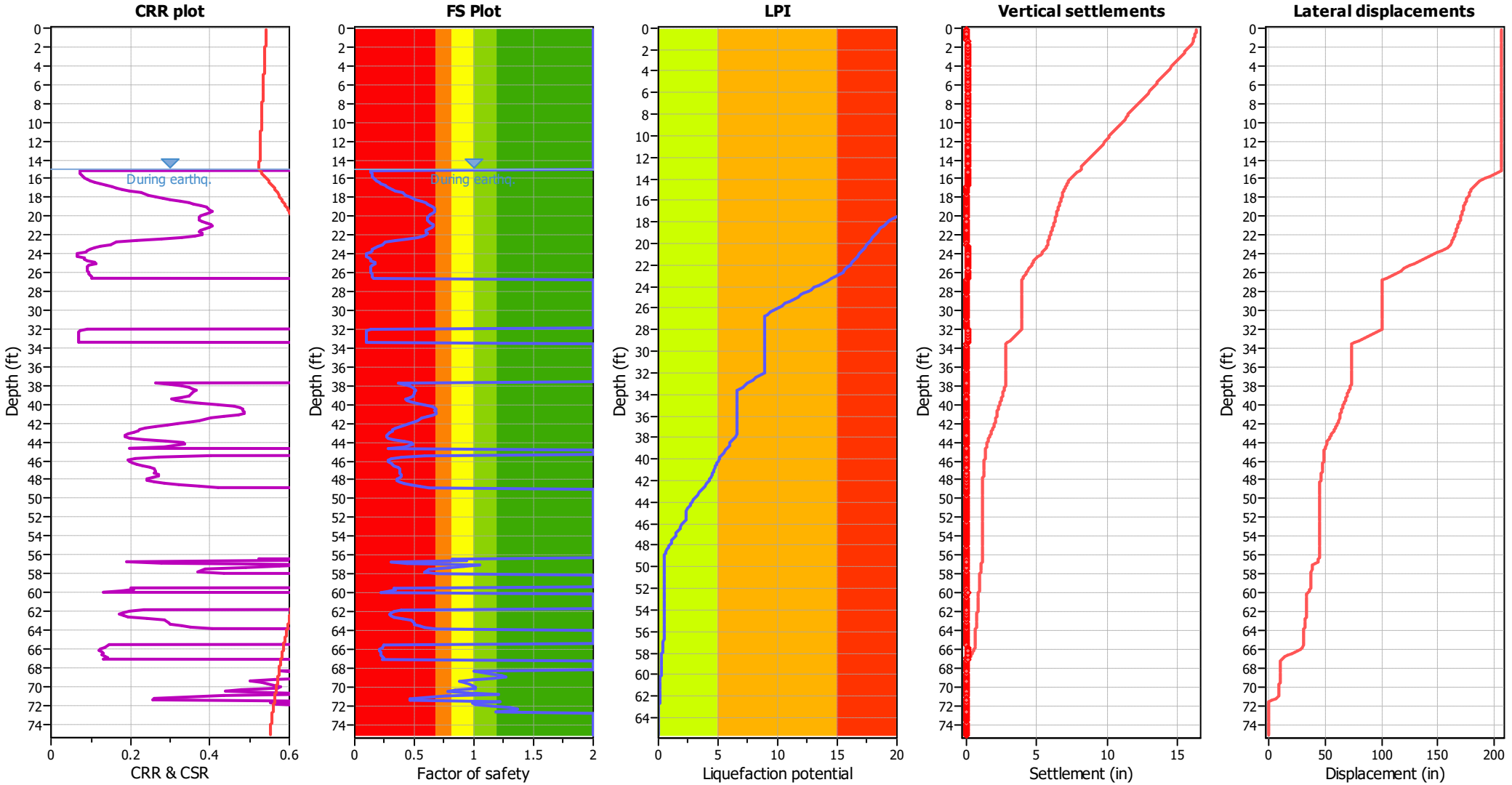

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBTn legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# Liquefaction analysis overall plots




## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**F.S. color scheme**

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**LPI color scheme**

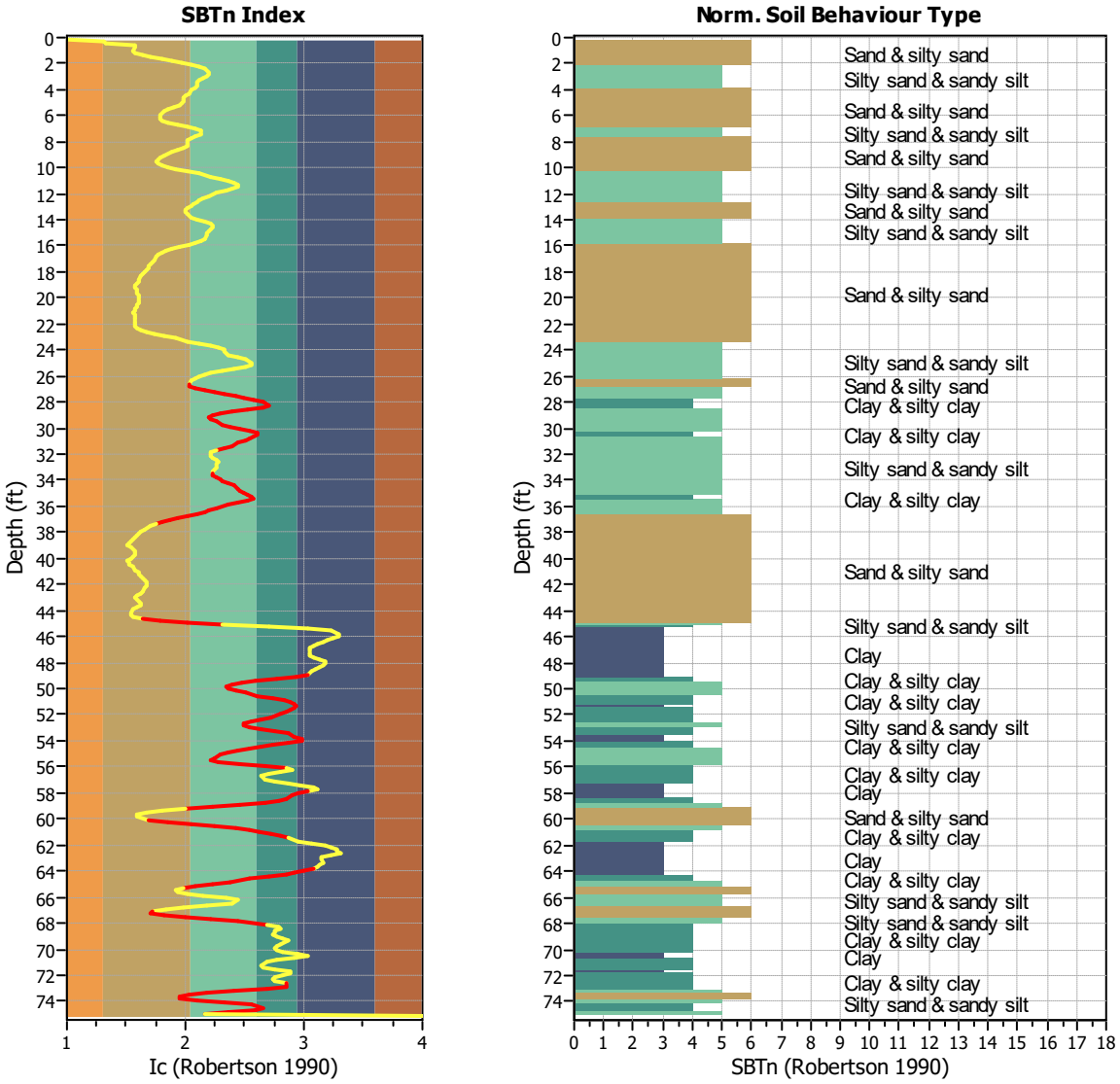
- Very high risk
- High risk
- Low risk

# TRANSITION LAYER DETECTION ALGORITHM REPORT
## Summary Details & Plots

**Short description**

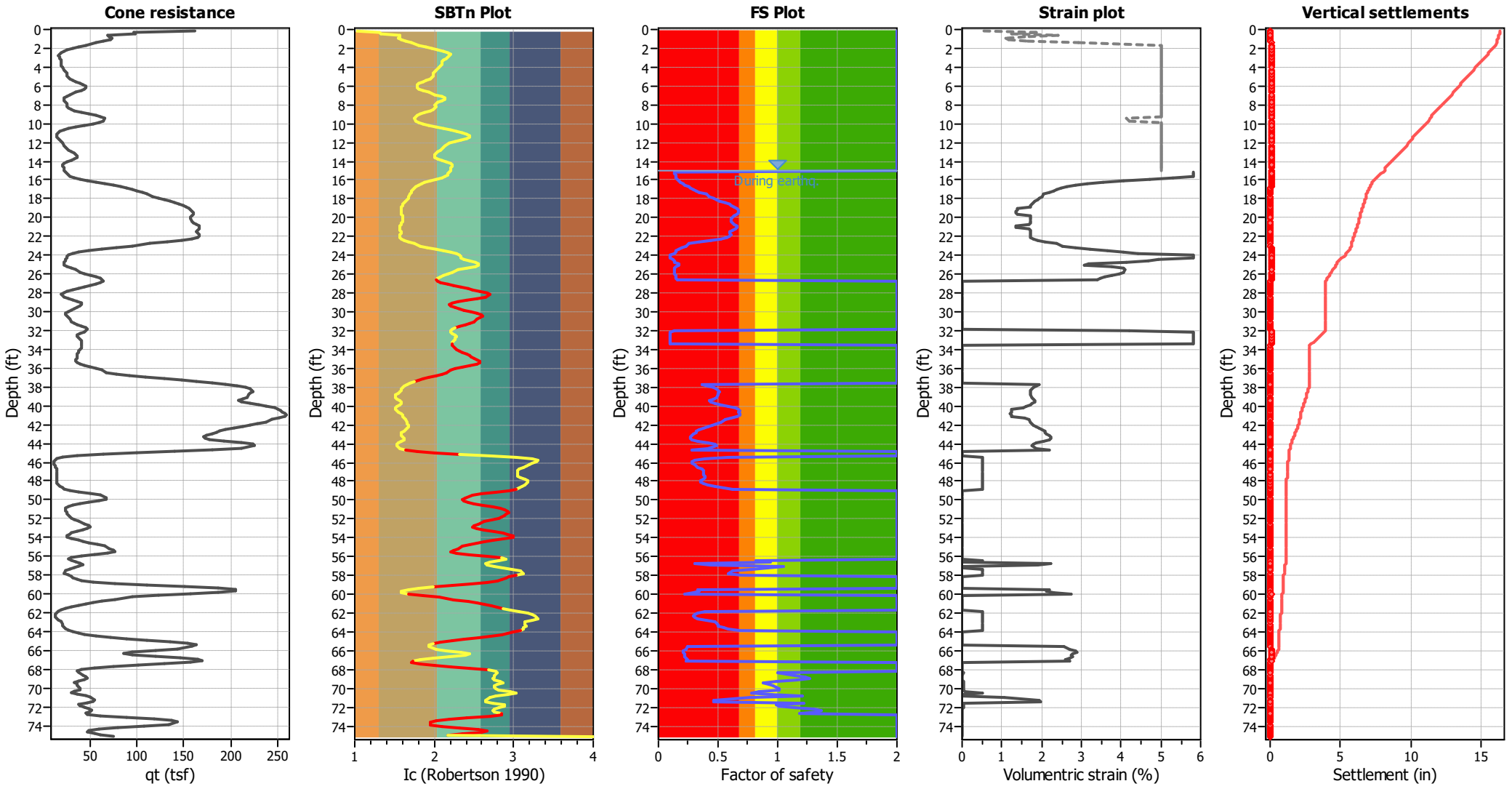
The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of $I_c$ values over which the transition will be defined (typically somewhere between 1.80 < $I_c$ < 3.0) and a rate of change of $I_c$. Transitions typically occur when the rate of change of $I_c$ is fast (i.e. delta $I_c$ is small).

The $SBT_n$ plot below, displays in red the detected transition layers based on the parameters listed below the graphs.




| Transition layer algorithm properties | | General statistics | |
|---|---|---|---|
| $I_c$ minimum check value: | 1.70 | Total points in CPT file: | 458 |
| $I_c$ maximum check value: | 3.00 | Total points excluded: | 160 |
| $I_c$ change ratio value: | 0.0100 | Exclusion percentage: | 34.93% |
| Minimum number of points in layer: | 4 | Number of layers detected: | 20 |

## Estimation of post-earthquake settlements

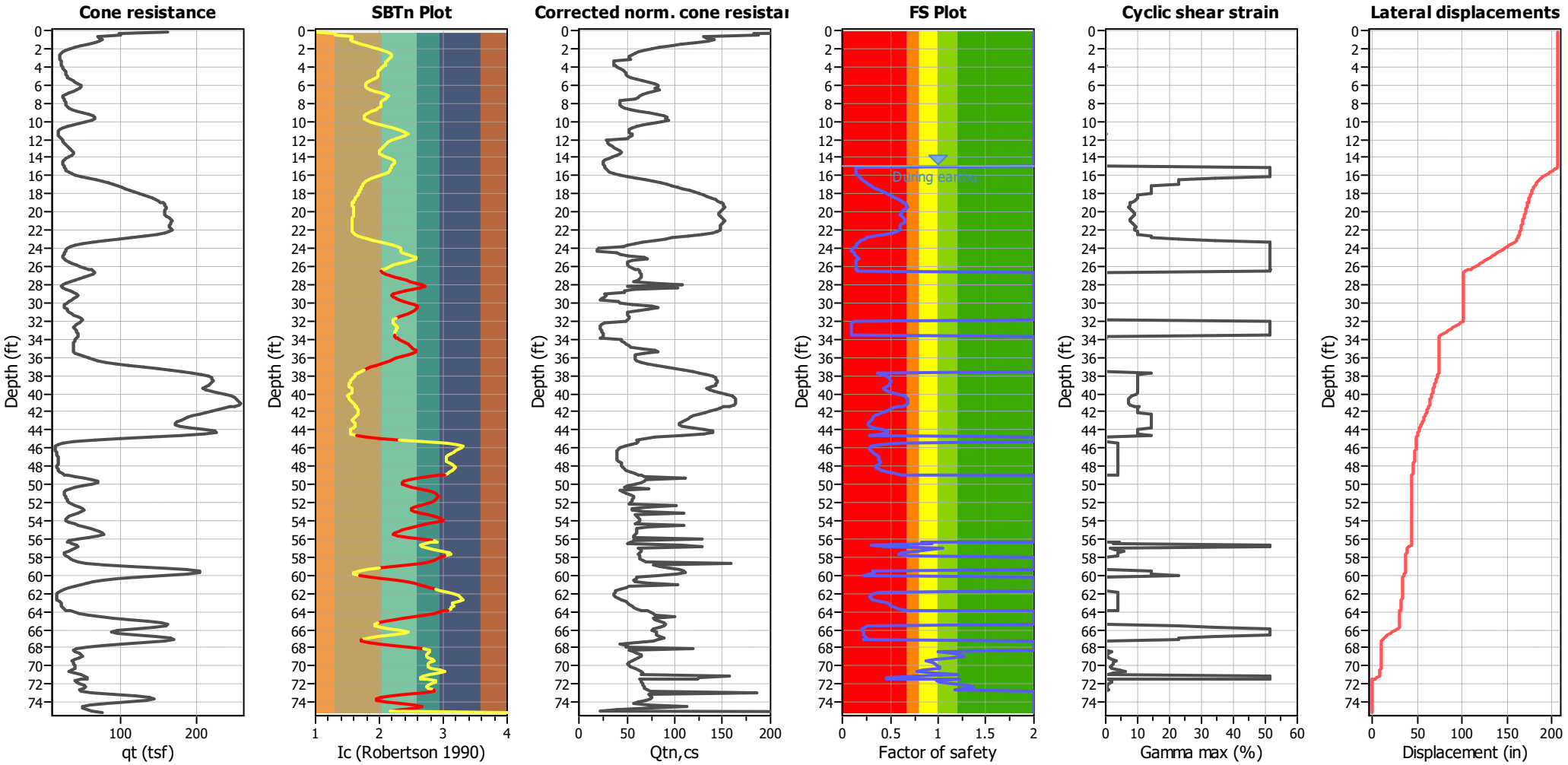



**Abbreviations**

| | |
|---|---|
| $q_t$: | Total cone resistance (cone resistance $q_c$ corrected for pore water effects) |
| $I_c$: | Soil Behaviour Type Index |
| FS: | Calculated Factor of Safety against liquefaction |
| Volumentric strain: | Post-liquefaction volumentric strain |

# Estimation of post-earthquake lateral Displacements

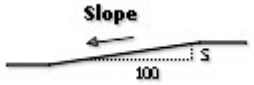
**Geometric parameters: Gently sloping ground without free face (Slope 2.50 %)**




**Abbreviations**

$q_t$: Total cone resistance (cone resistance $q_c$ corrected for pore water effects)
$I_c$: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
$\gamma_{max}$: Maximum cyclic shear strain
LDI: Lateral displacement index

**Surface condition**



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Merarhias 56
http://www.geologismiki.gr

# LIQUEFACTION ANALYSIS REPORT

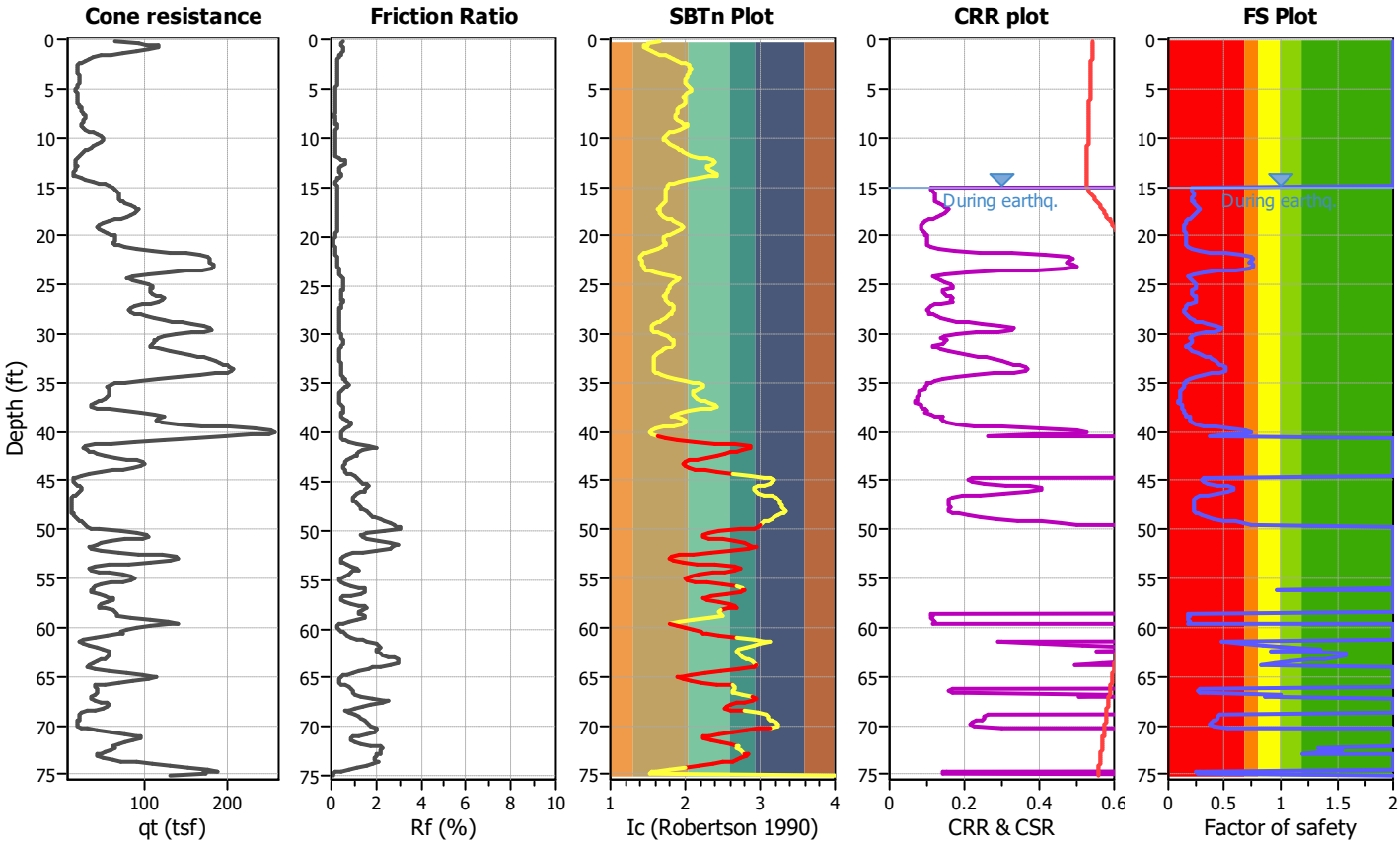
**Project title : Moorpark Library**

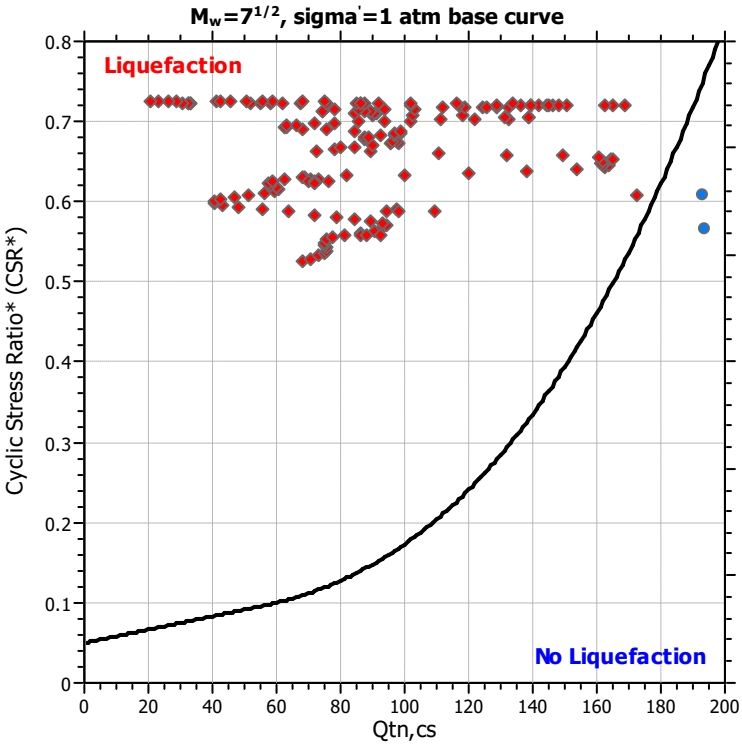
**Location : High Street and Moorpark Avenue, Moorpark, Caliornia**

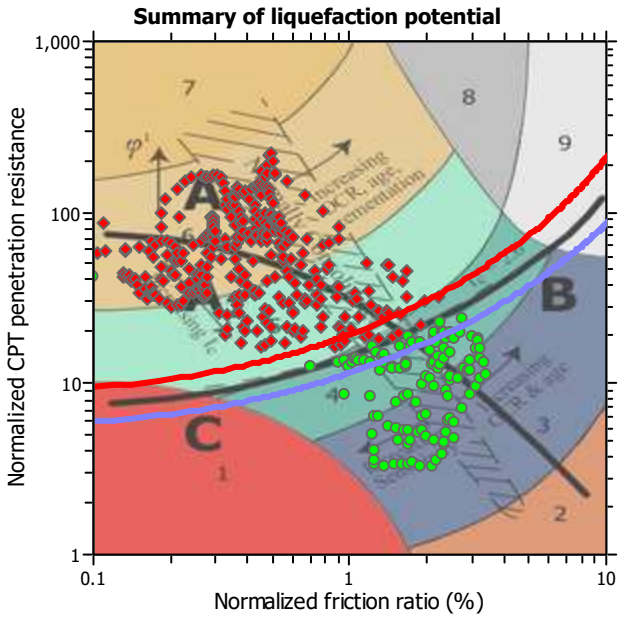
**CPT file : CPT-3**

**Input parameters and analysis data**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | G.W.T. (in-situ): | 37.50 ft | Use fill: | No | Clay like behavior applied: | All soils |
| Fines correction method: | Robertson (2009) | G.W.T. (earthq.): | 15.00 ft | Fill height: | N/A | Limit depth applied: | No |
| Points to test: | Based on Ic value | Average results interval: | 5 | Fill weight: | N/A | Limit depth: | N/A |
| Earthquake magnitude $M_w$: | 6.90 | Ic cut-off value: | 2.60 | Trans. detect. applied: | Yes | MSF method: | Method based |
| Peak ground acceleration: | 1.03 | Unit weight calculation: | Based on SBT | $K_\sigma$ applied: | No | | |

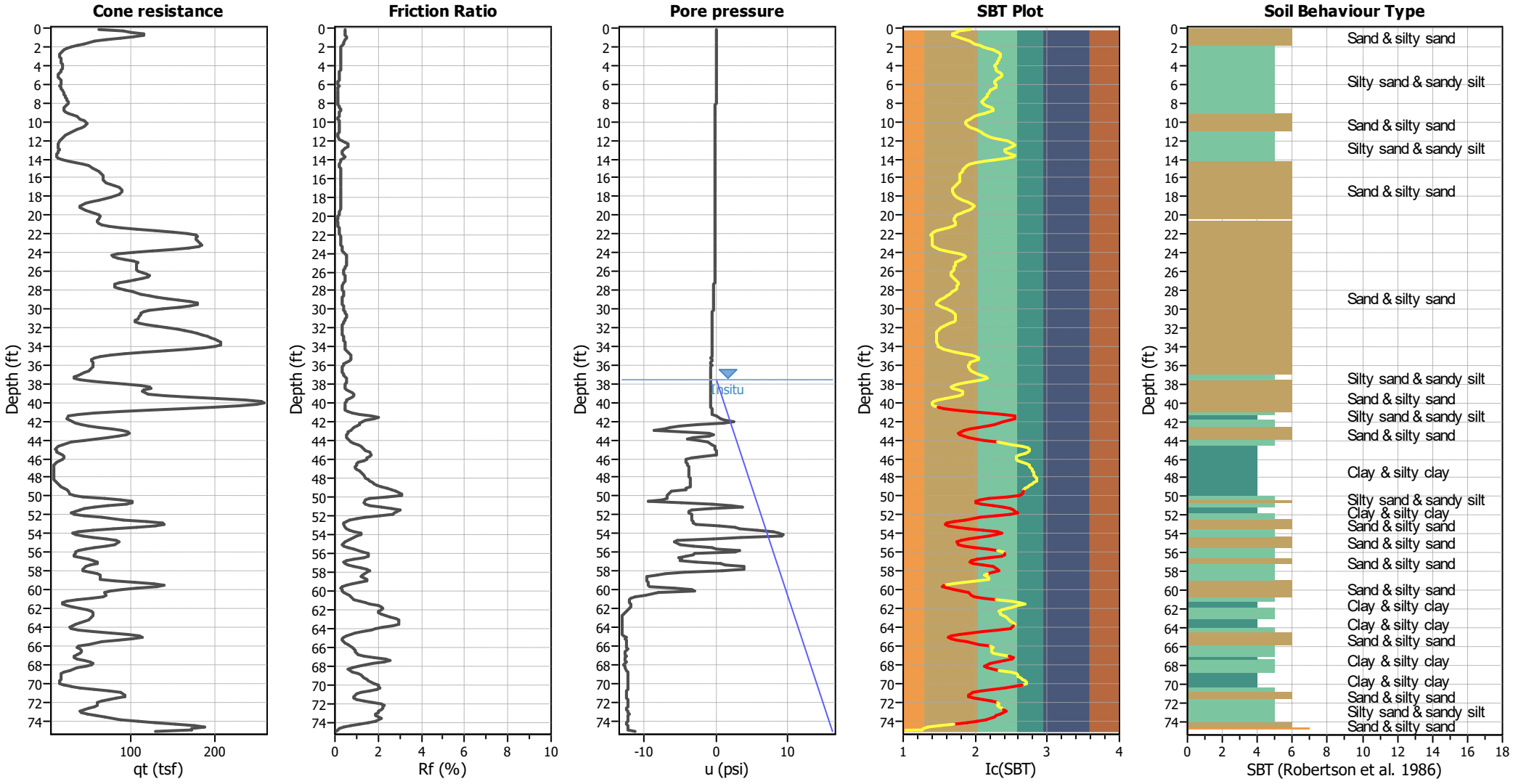



Zone $A_1$: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone $A_2$: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

# CPT basic interpretation plots



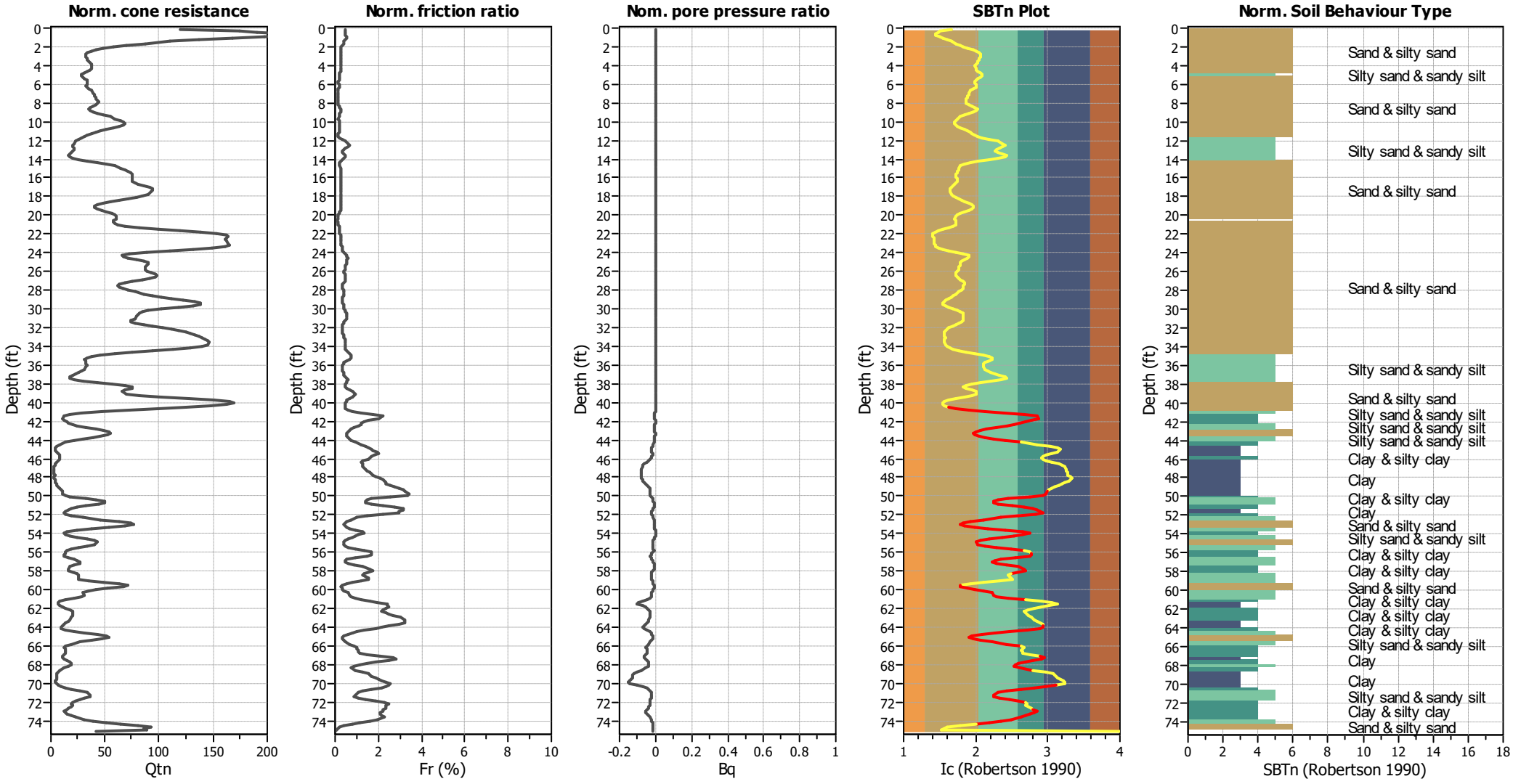

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBT legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# CPT basic interpretation plots (normalized)



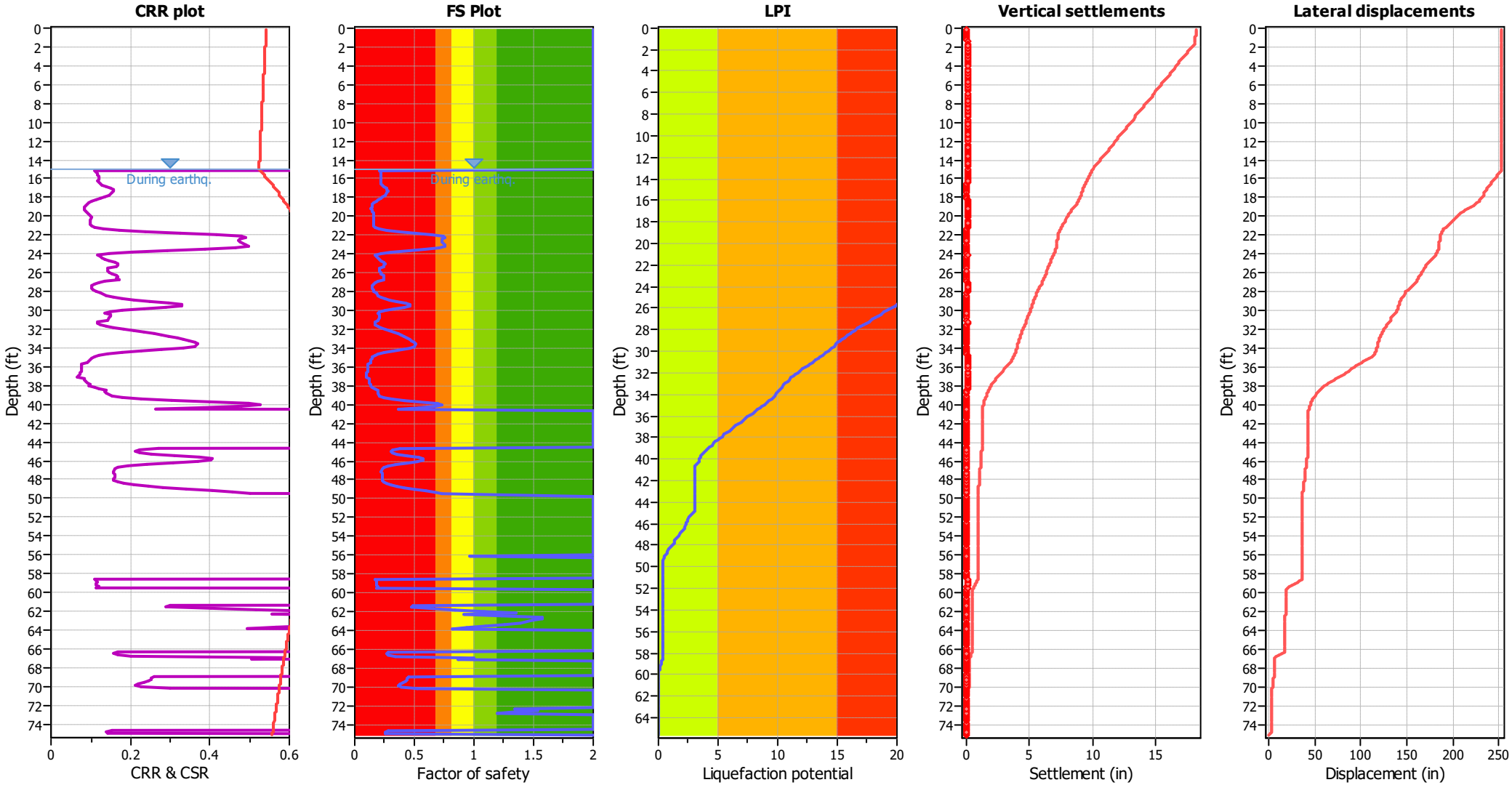

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBTn legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# Liquefaction analysis overall plots




## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**F.S. color scheme**

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**LPI color scheme**

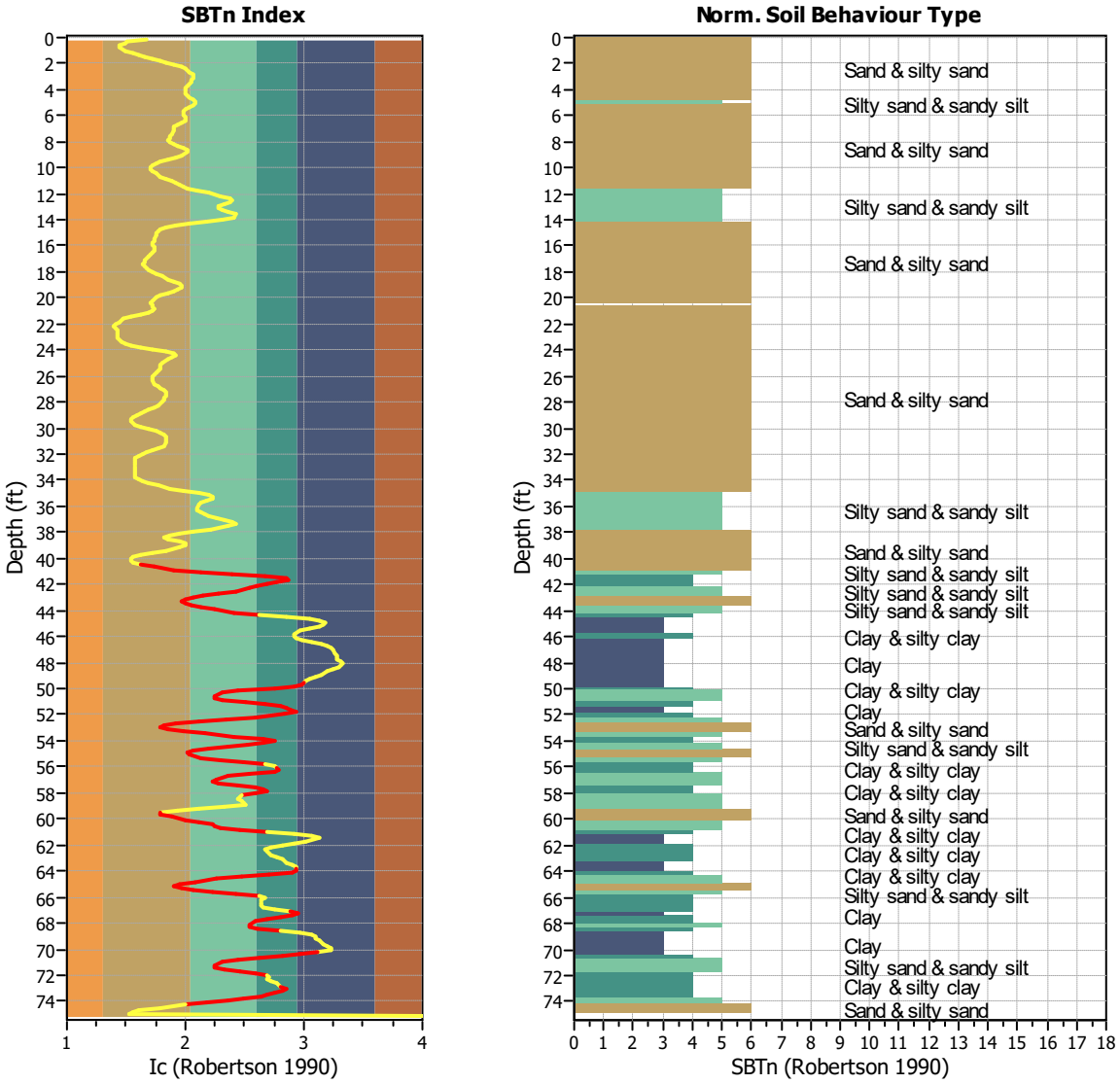
- Very high risk
- High risk
- Low risk

# TRANSITION LAYER DETECTION ALGORITHM REPORT
## Summary Details & Plots

**Short description**

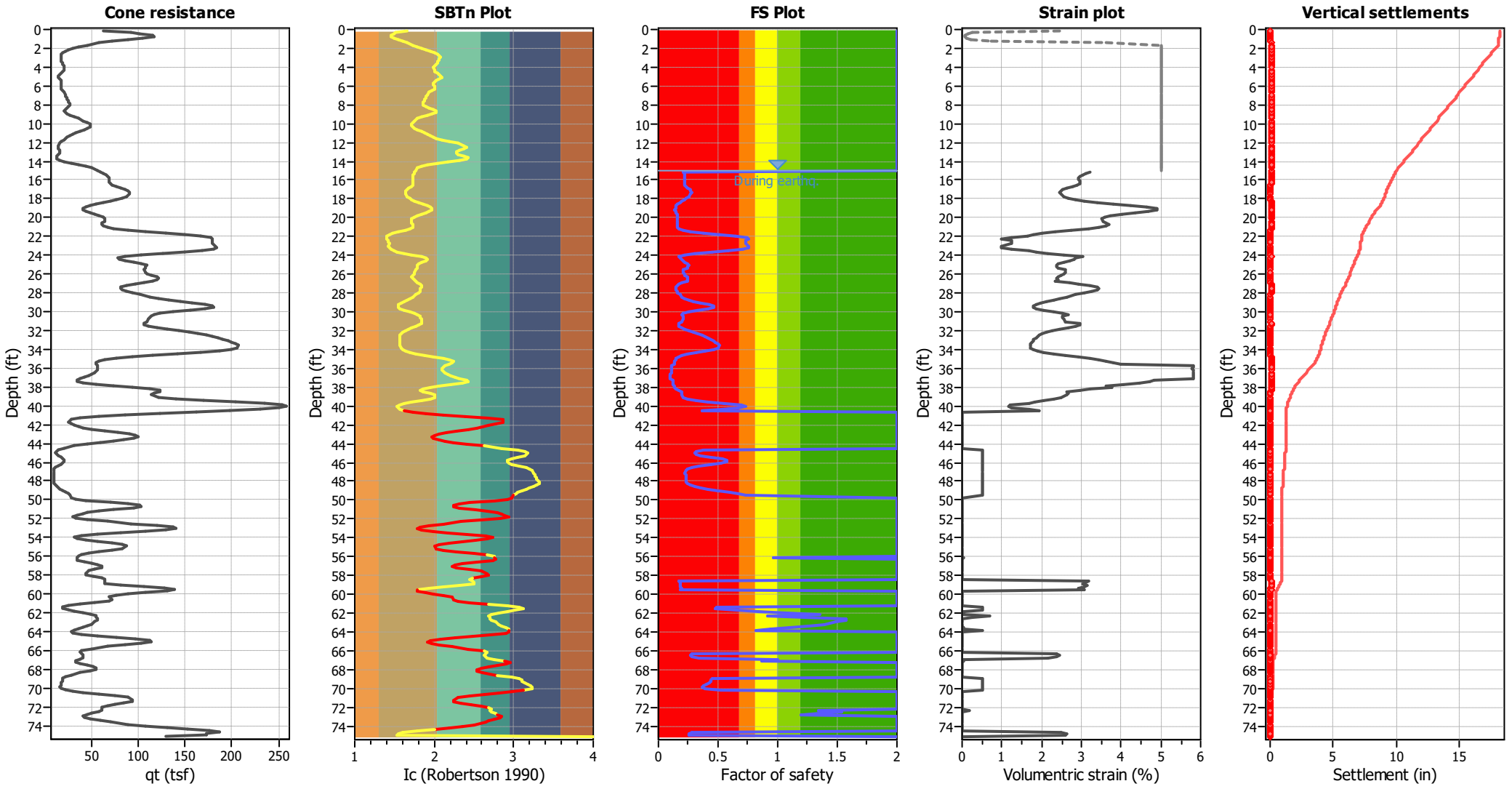
The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of $I_c$ values over which the transition will be defined (typically somewhere between $1.80 < I_c < 3.0$) and a rate of change of $I_c$. Transitions typically occur when the rate of change of $I_c$ is fast (i.e. delta $I_c$ is small).

The $SBT_n$ plot below, displays in red the detected transition layers based on the parameters listed below the graphs.




| Transition layer algorithm properties | | General statistics | |
|---|---|---|---|
| $I_c$ minimum check value: | 1.70 | Total points in CPT file: | 458 |
| $I_c$ maximum check value: | 3.00 | Total points excluded: | 139 |
| $I_c$ change ratio value: | 0.0100 | Exclusion percentage: | 30.35% |
| Minimum number of points in layer: | 4 | Number of layers detected: | 20 |

## Estimation of post-earthquake settlements

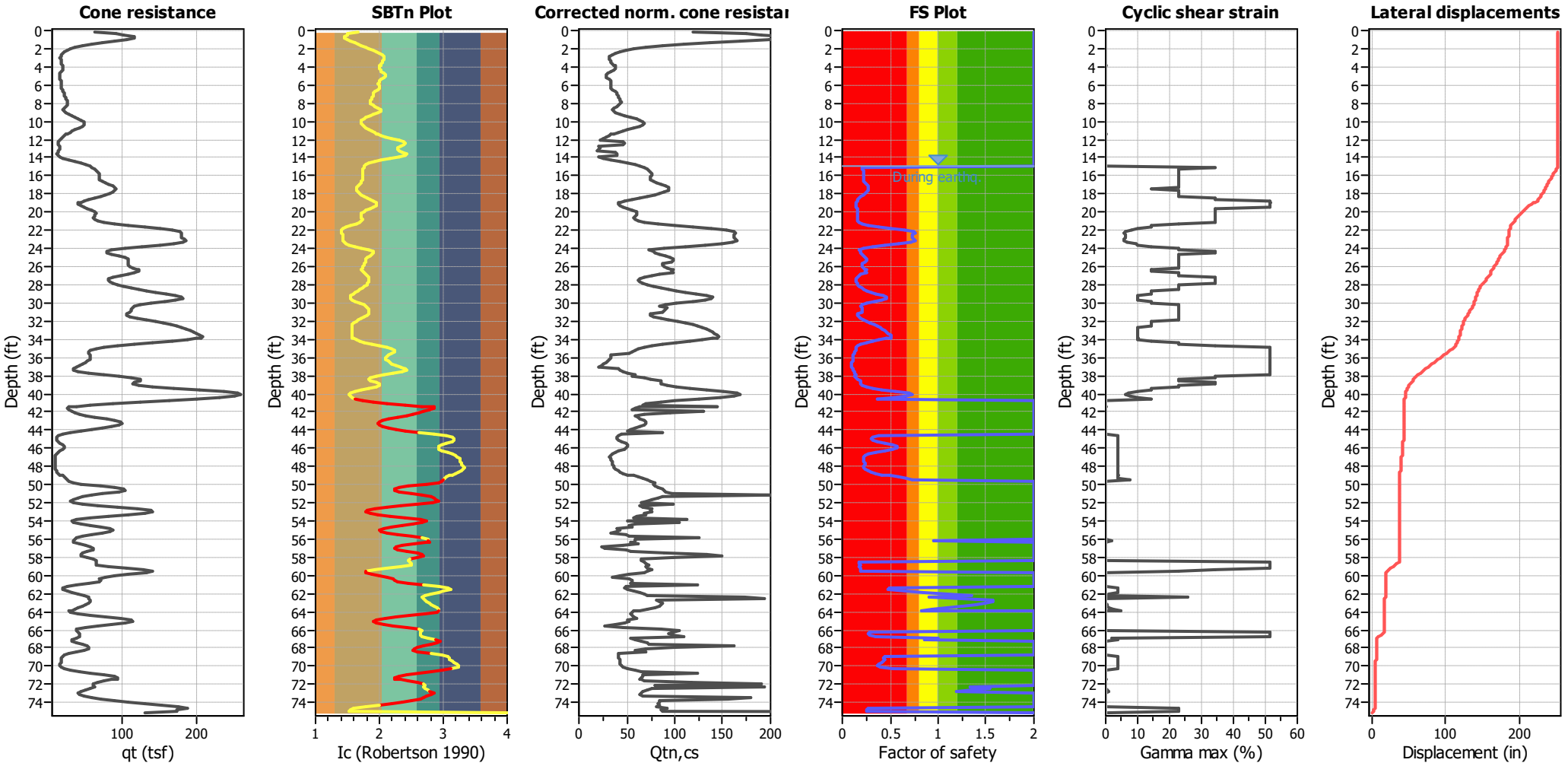



**Abbreviations**

| | |
|---|---|
| $q_t$: | Total cone resistance (cone resistance $q_c$ corrected for pore water effects) |
| $I_c$: | Soil Behaviour Type Index |
| FS: | Calculated Factor of Safety against liquefaction |
| Volumentric strain: | Post-liquefaction volumentric strain |

# Estimation of post-earthquake lateral Displacements

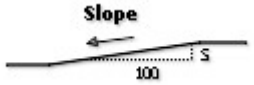
**Geometric parameters: Gently sloping ground without free face (Slope 2.50 %)**




**Abbreviations**

$q_t$: Total cone resistance (cone resistance $q_c$ corrected for pore water effects)
$I_c$: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
$\gamma_{max}$: Maximum cyclic shear strain
LDI: Lateral displacement index

**Surface condition**



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# LIQUEFACTION ANALYSIS REPORT

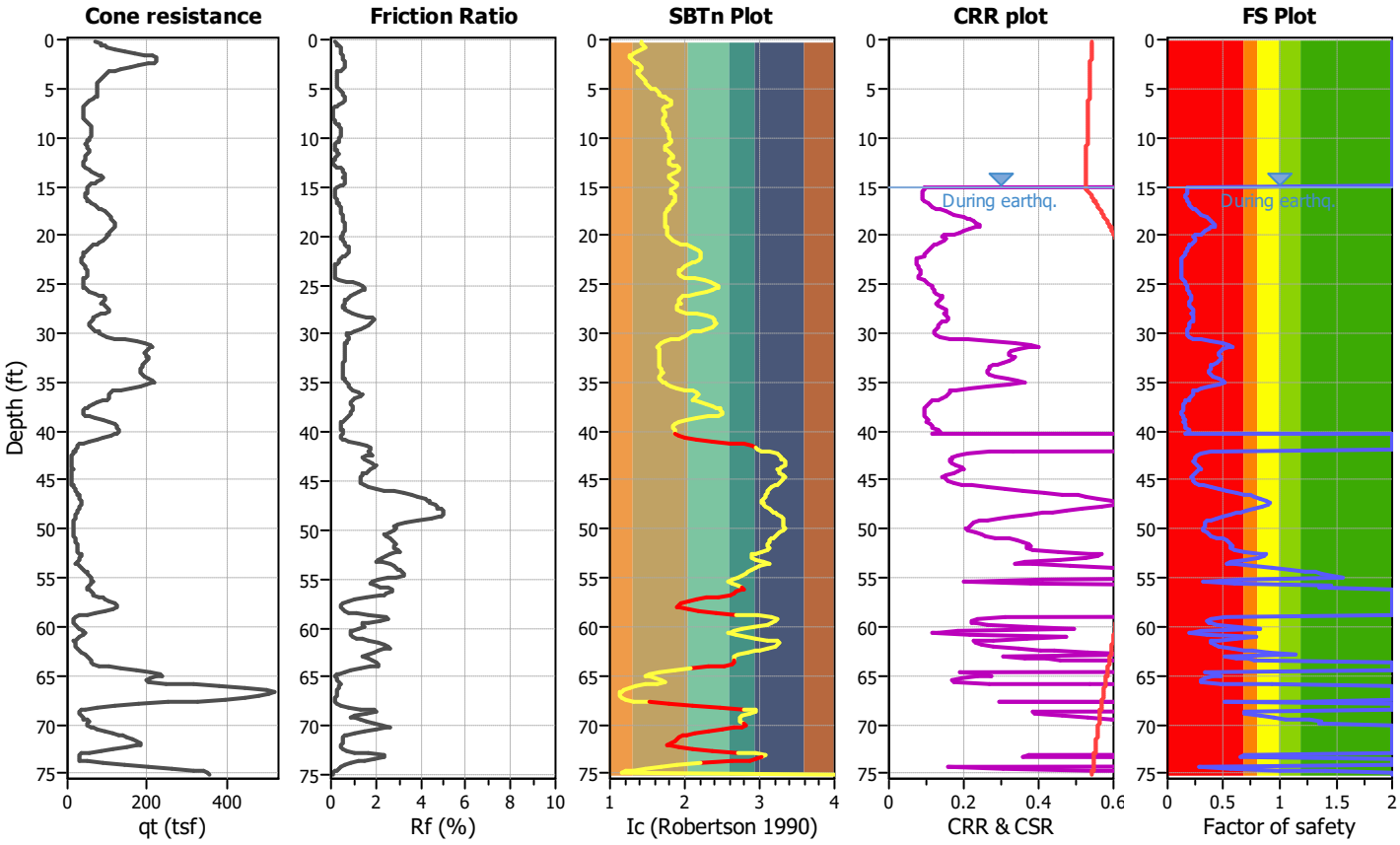
**Project title : Moorpark Library**

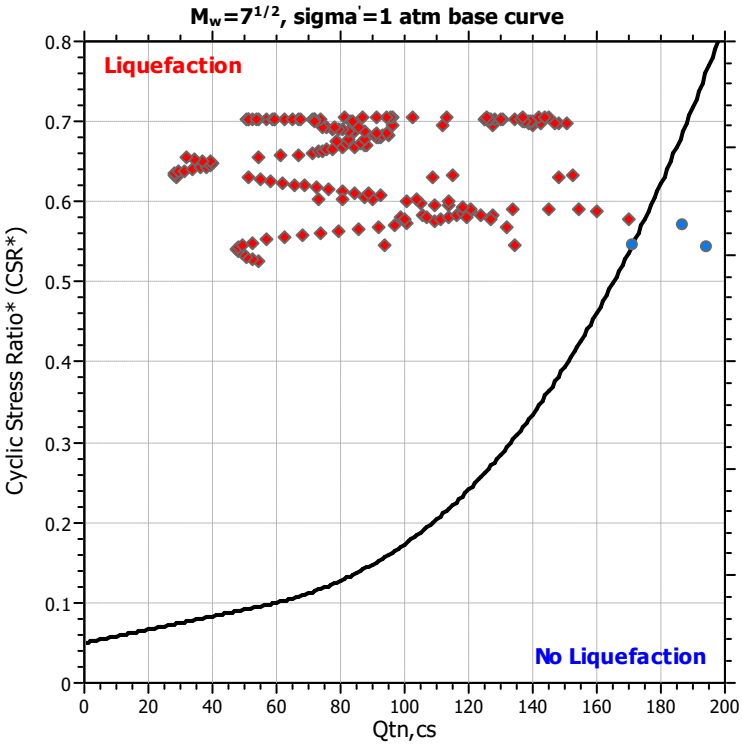
**Location : High Street and Moorpark Avenue, Moorpark, Caliornia**

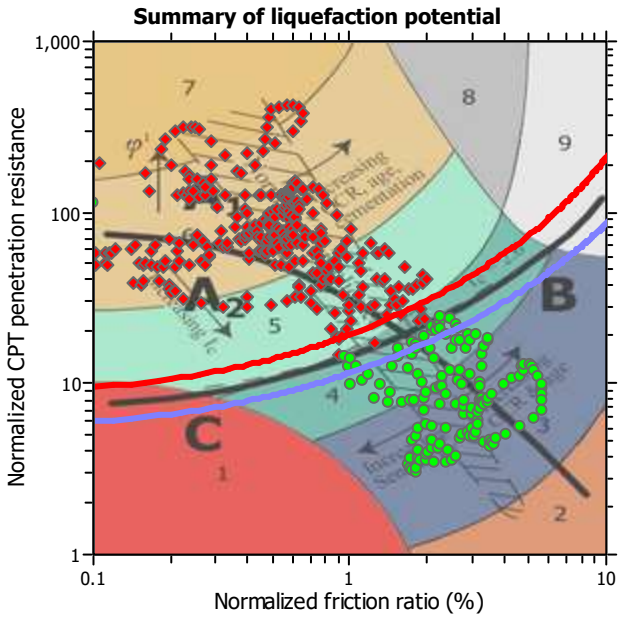
**CPT file : CPT-4**

**Input parameters and analysis data**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | G.W.T. (in-situ): | 37.50 ft | Use fill: | No | Clay like behavior applied: | All soils |
| Fines correction method: | Robertson (2009) | G.W.T. (earthq.): | 15.00 ft | Fill height: | N/A | Limit depth applied: | No |
| Points to test: | Based on Ic value | Average results interval: | 5 | Fill weight: | N/A | Limit depth: | N/A |
| Earthquake magnitude $M_w$: | 6.90 | Ic cut-off value: | 2.60 | Trans. detect. applied: | Yes | MSF method: | Method based |
| Peak ground acceleration: | 1.03 | Unit weight calculation: | Based on SBT | $K_\sigma$ applied: | No | | |

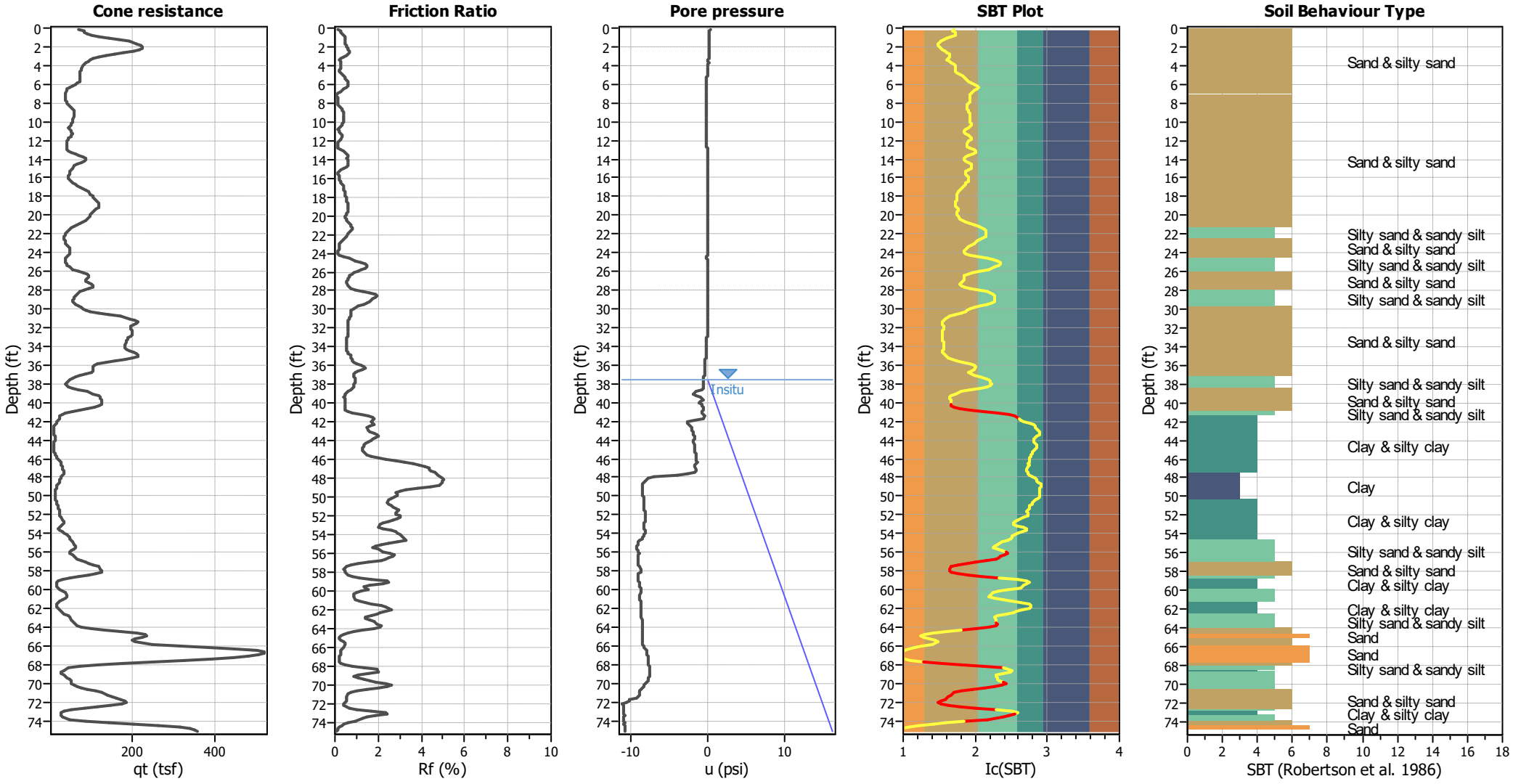



Zone $A_1$: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone $A_2$: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

# CPT basic interpretation plots



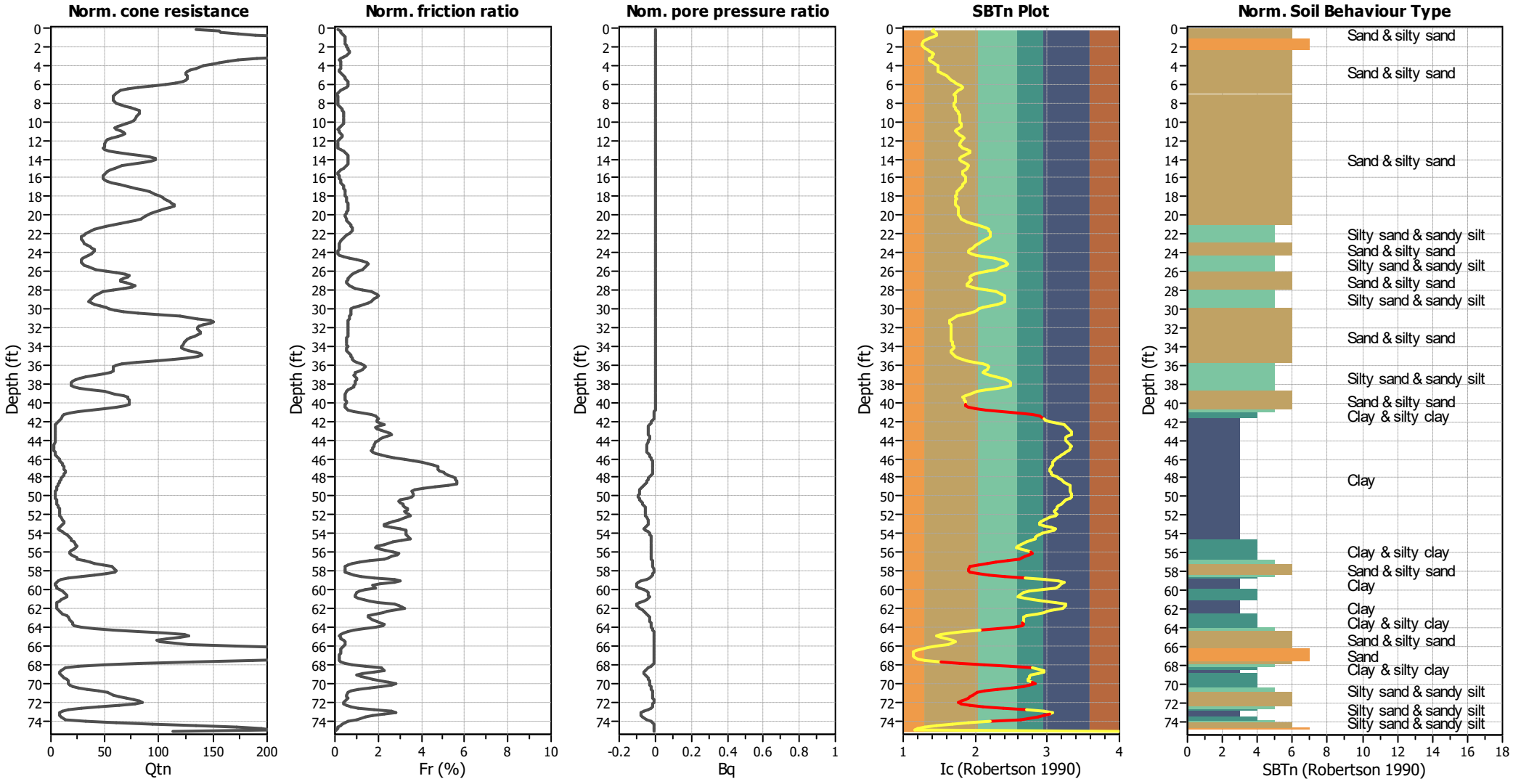

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBT legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# CPT basic interpretation plots (normalized)



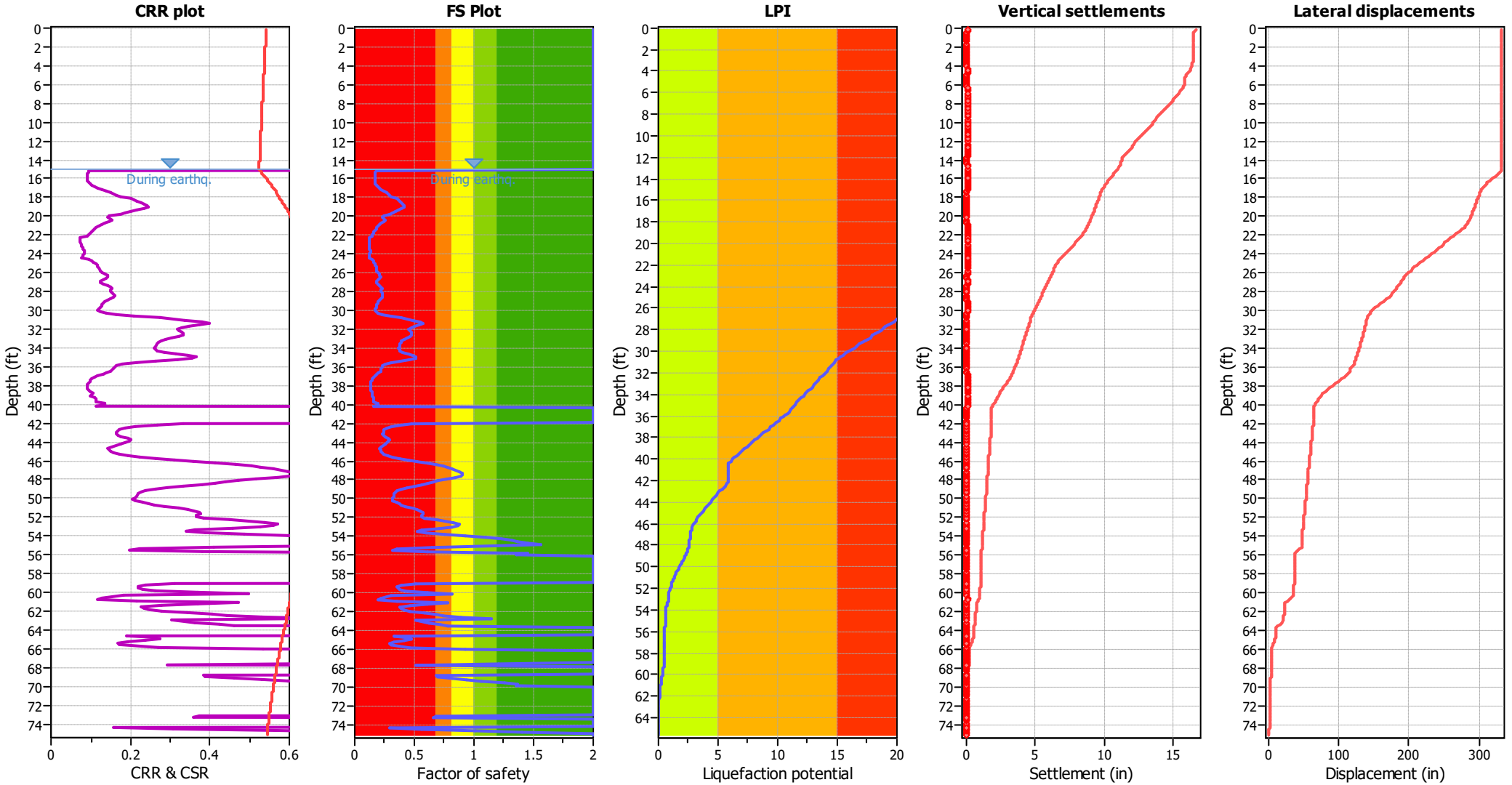

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBTn legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# Liquefaction analysis overall plots




## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**F.S. color scheme**

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**LPI color scheme**

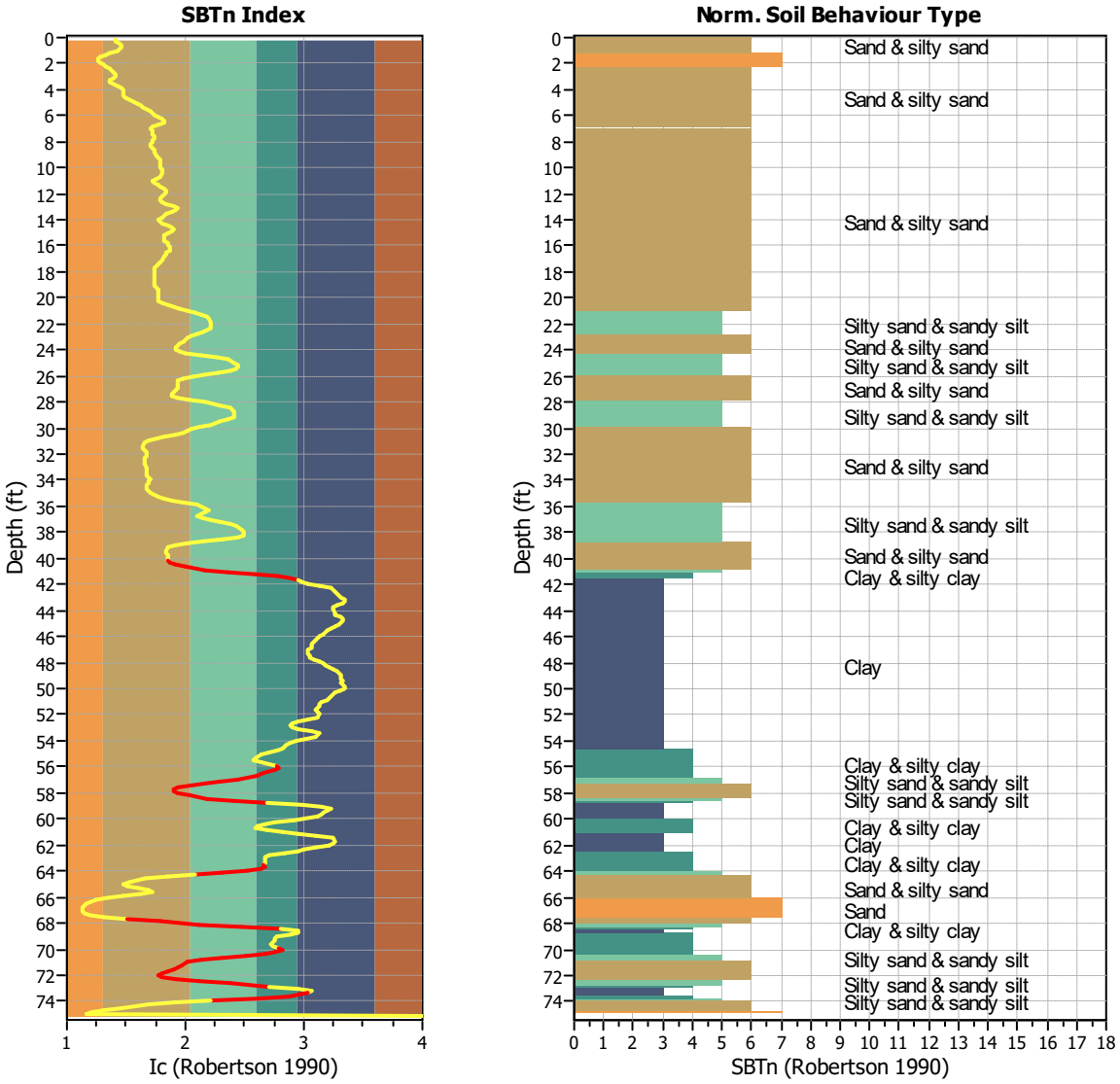
- Very high risk
- High risk
- Low risk

# TRANSITION LAYER DETECTION ALGORITHM REPORT
## Summary Details & Plots

**Short description**

The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of $I_c$ values over which the transition will be defined (typically somewhere between $1.80 < I_c < 3.0$) and a rate of change of $I_c$. Transitions typically occur when the rate of change of $I_c$ is fast (i.e. delta $I_c$ is small).

The $SBT_n$ plot below, displays in red the detected transition layers based on the parameters listed below the graphs.



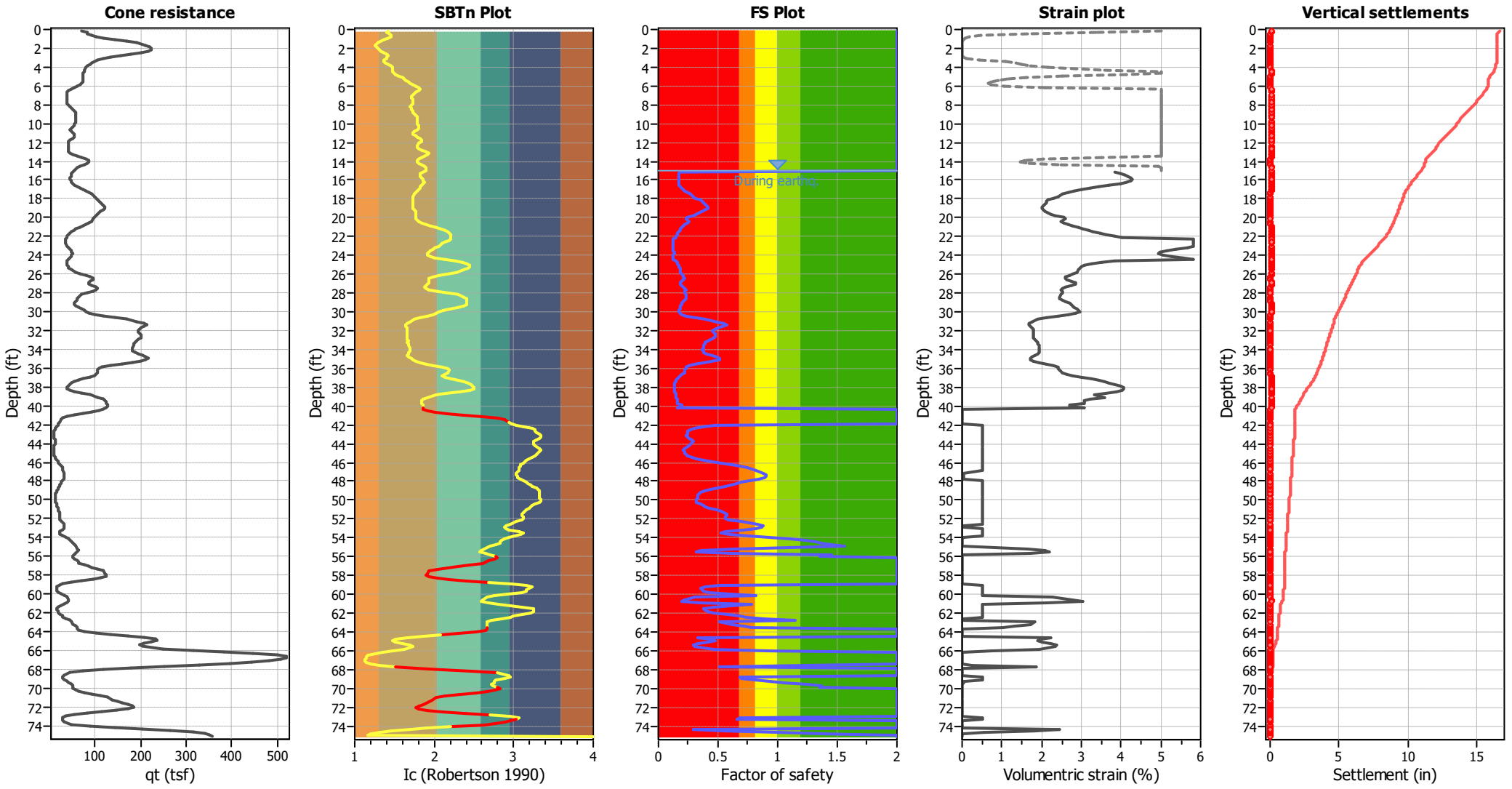

**Transition layer algorithm properties**

| | |
|---|---|
| $I_c$ minimum check value: | 1.70 |
| $I_c$ maximum check value: | 3.00 |
| $I_c$ change ratio value: | 0.0100 |
| Minimum number of points in layer: | 4 |

**General statistics**

| | |
|---|---|
| Total points in CPT file: | 458 |
| Total points excluded: | 64 |
| Exclusion percentage: | 13.97% |
| Number of layers detected: | 8 |

## Estimation of post-earthquake settlements

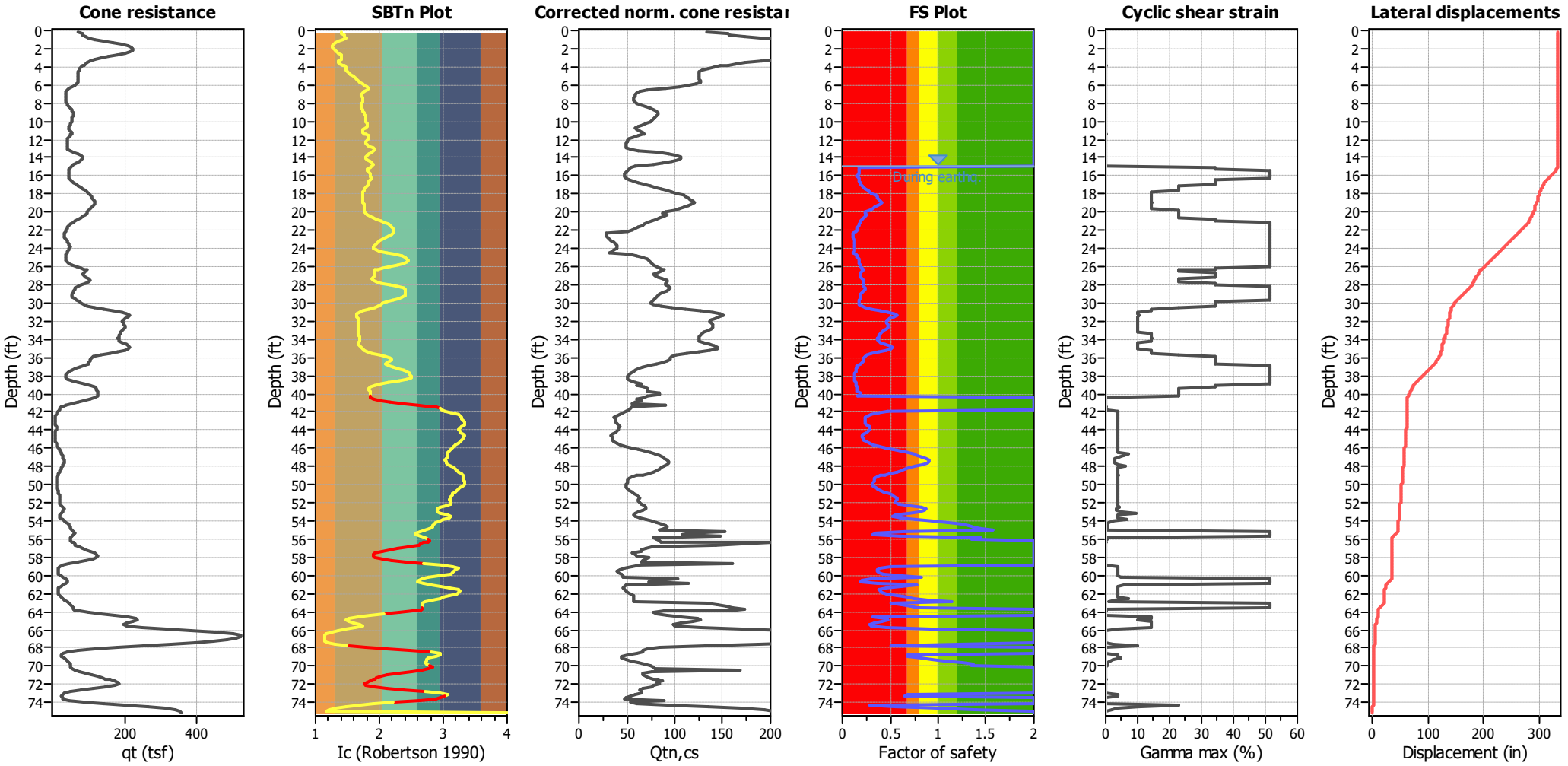



**Abbreviations**

| | |
|---|---|
| $q_t$: | Total cone resistance (cone resistance $q_c$ corrected for pore water effects) |
| $I_c$: | Soil Behaviour Type Index |
| FS: | Calculated Factor of Safety against liquefaction |
| Volumentric strain: | Post-liquefaction volumentric strain |

# Estimation of post-earthquake lateral Displacements

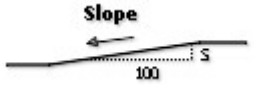
**Geometric parameters: Gently sloping ground without free face (Slope 2.50 %)**




**Abbreviations**

$q_t$: Total cone resistance (cone resistance $q_c$ corrected for pore water effects)
$I_c$: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
$\gamma_{max}$: Maximum cyclic shear strain
LDI: Lateral displacement index

**Surface condition**



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# LIQUEFACTION ANALYSIS REPORT

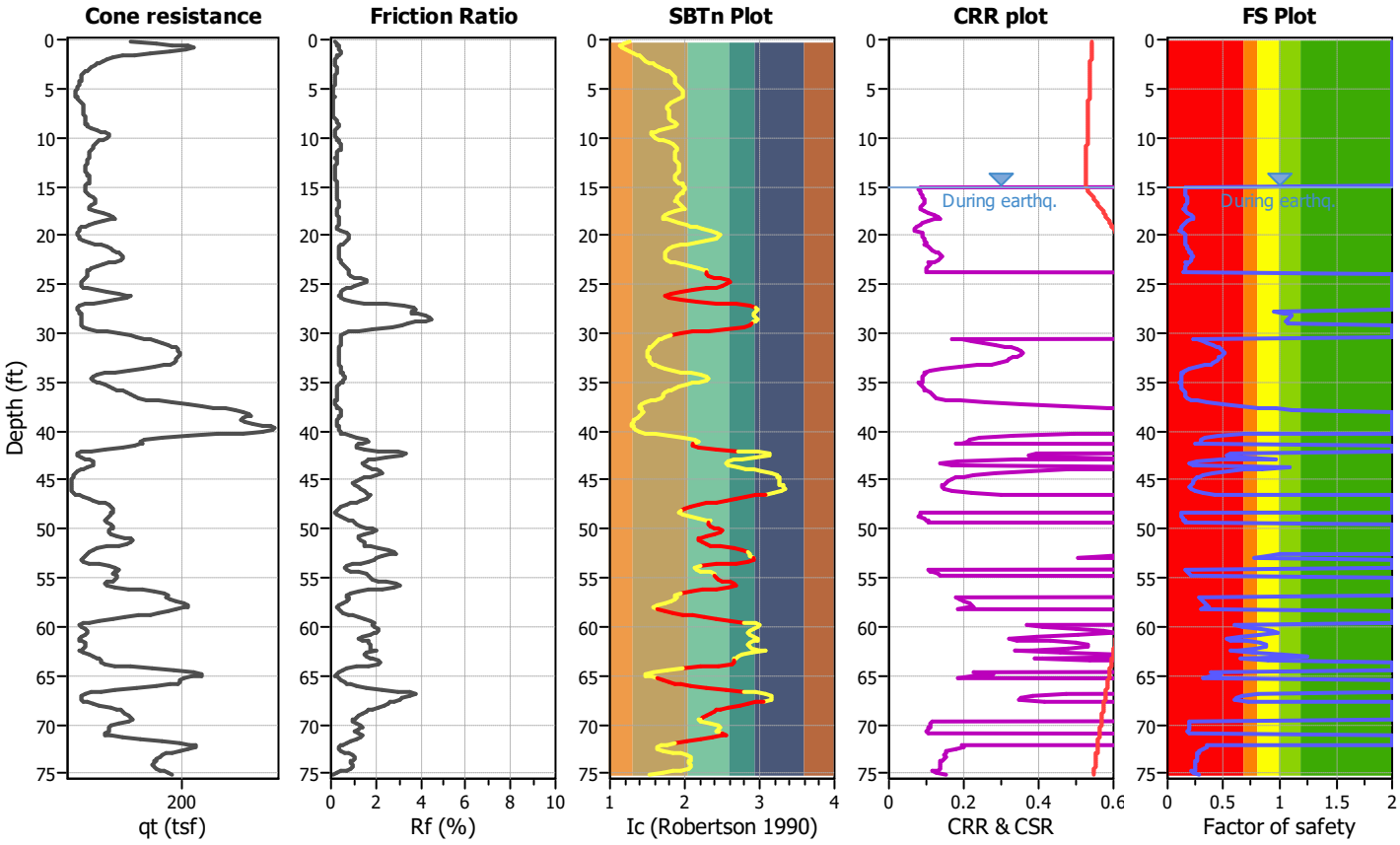
**Project title : Moorpark Library**

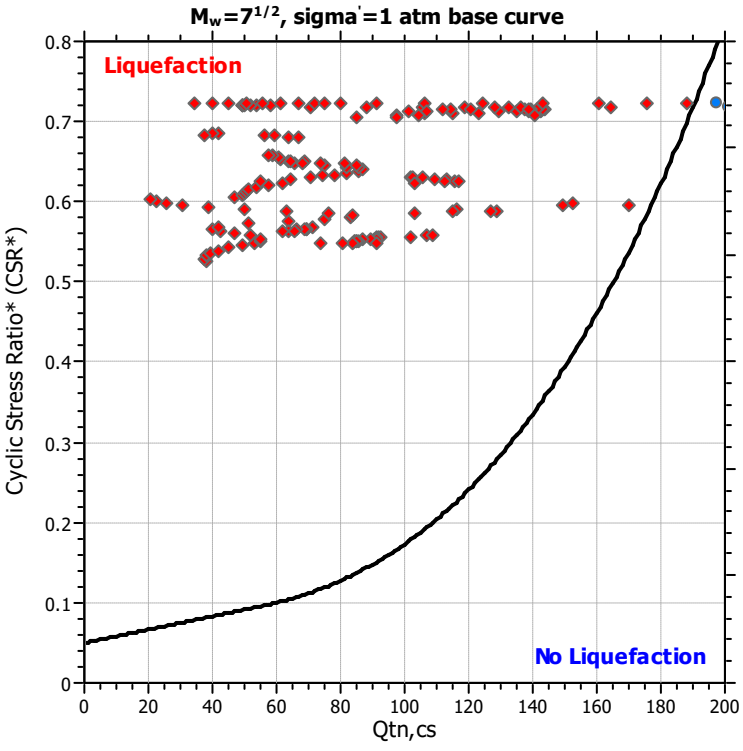
**Location : High Street and Moorpark Avenue, Moorpark, Caliornia**

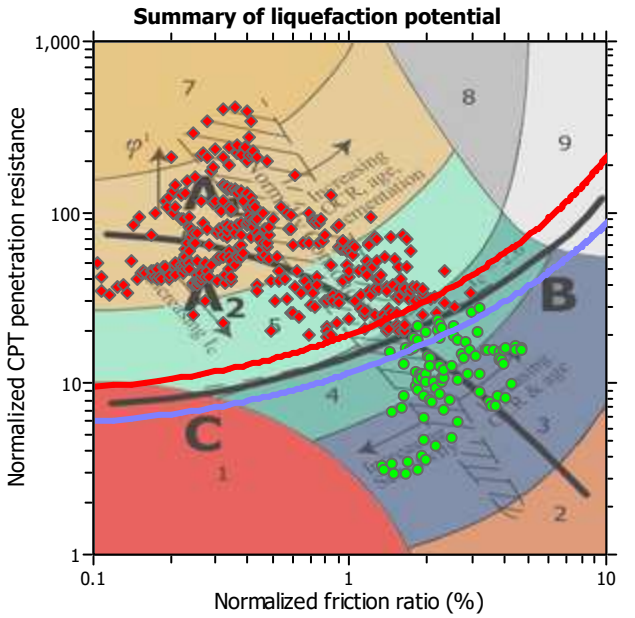
**CPT file : CPT-5**

**Input parameters and analysis data**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | G.W.T. (in-situ): | 37.50 ft | Use fill: | No | Clay like behavior applied: | All soils |
| Fines correction method: | Robertson (2009) | G.W.T. (earthq.): | 15.00 ft | Fill height: | N/A | Limit depth applied: | No |
| Points to test: | Based on Ic value | Average results interval: | 5 | Fill weight: | N/A | Limit depth: | N/A |
| Earthquake magnitude $M_w$: | 6.90 | Ic cut-off value: | 2.60 | Trans. detect. applied: | Yes | MSF method: | Method based |
| Peak ground acceleration: | 1.03 | Unit weight calculation: | Based on SBT | $K_\sigma$ applied: | No | | |

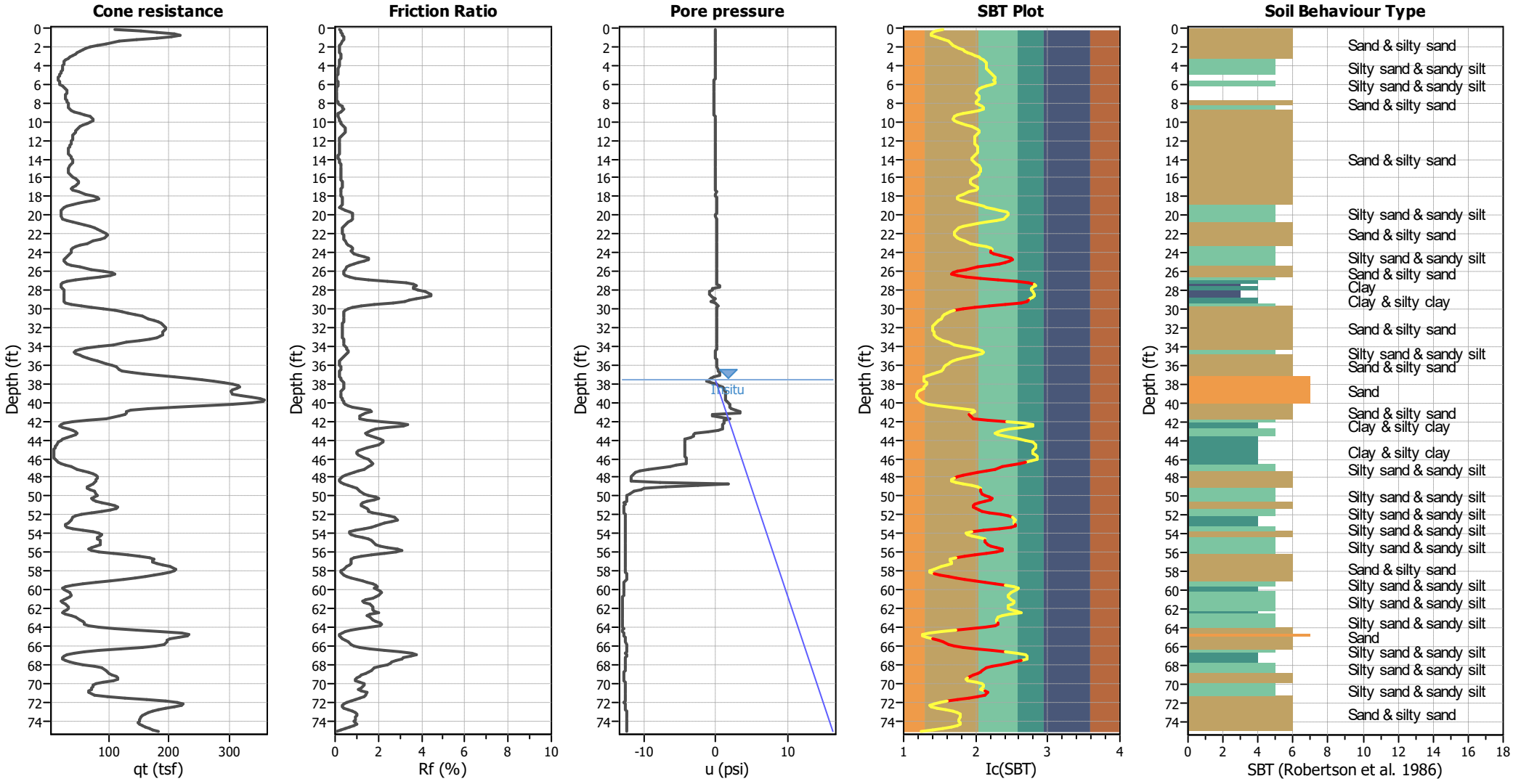



Zone $A_1$: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone $A_2$: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

# CPT basic interpretation plots



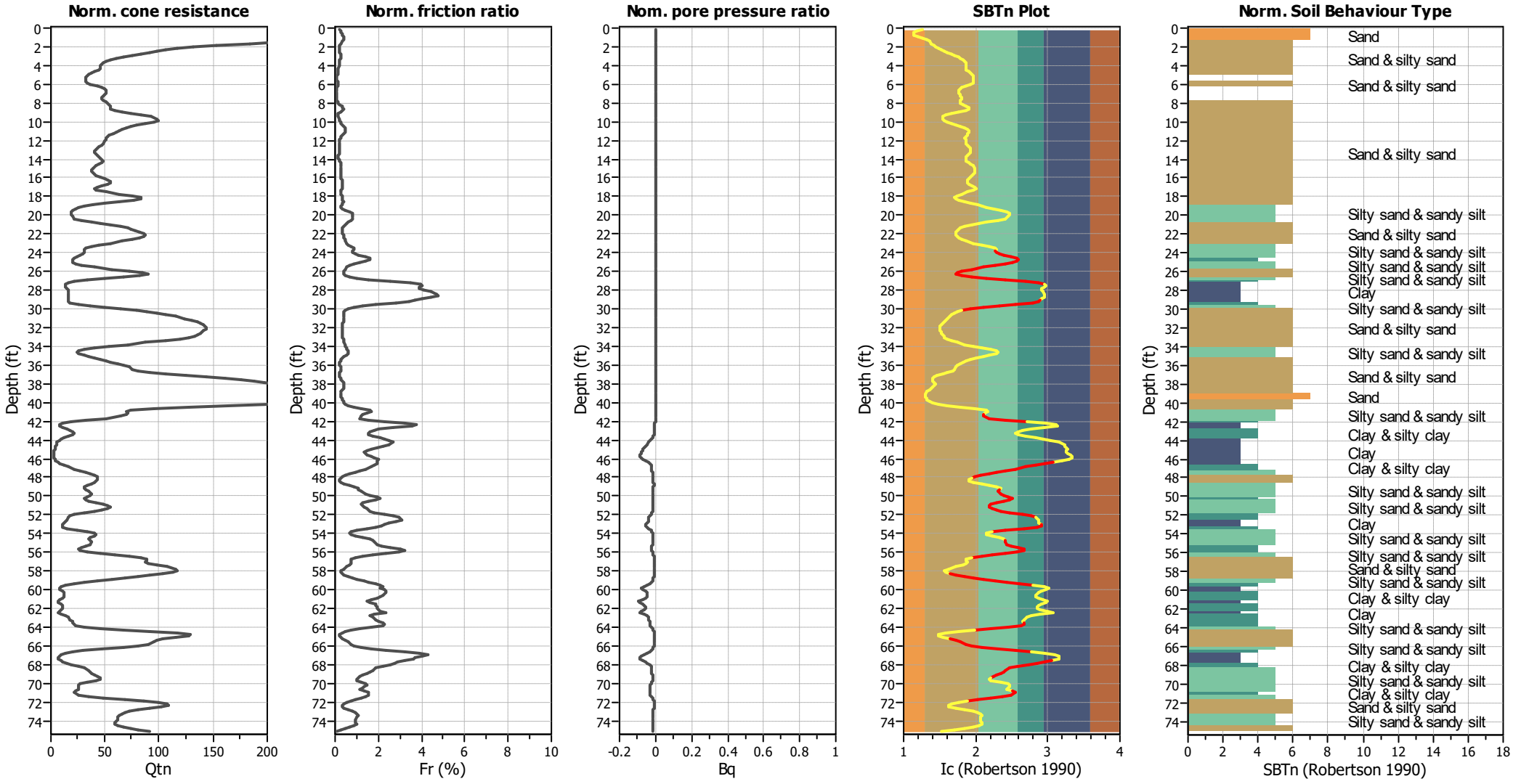

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBT legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# CPT basic interpretation plots (normalized)



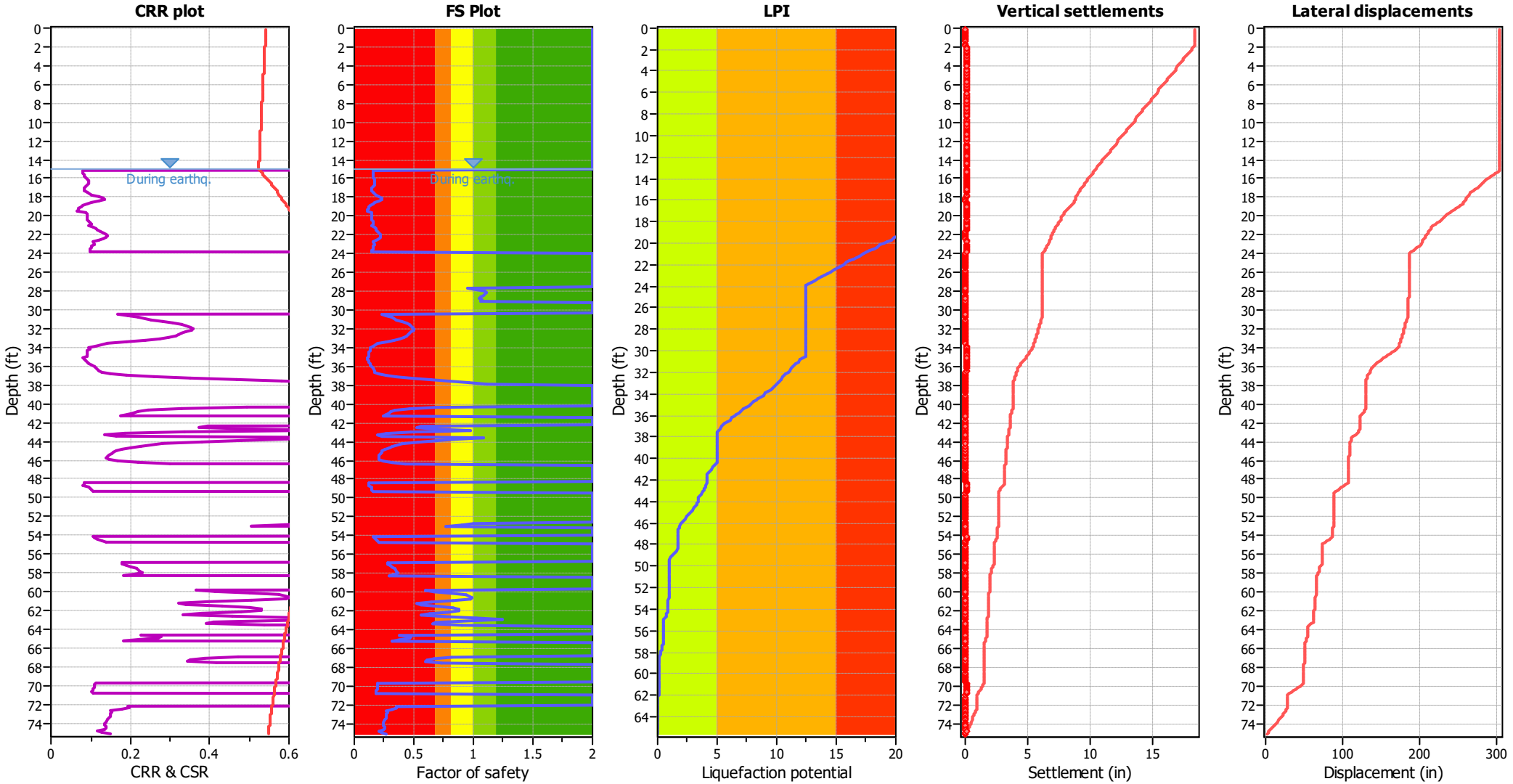

## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**SBTn legend**

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

# Liquefaction analysis overall plots




## Input parameters and analysis data

| | | | | | |
|---|---|---|---|---|---|
| Analysis method: | Robertson (2009) | Depth to water table (erthq.): | 15.00 ft | Fill weight: | N/A |
| Fines correction method: | Robertson (2009) | Average results interval: | 5 | Transition detect. applied: | Yes |
| Points to test: | Based on Ic value | Ic cut-off value: | 2.60 | $K_\sigma$ applied: | No |
| Earthquake magnitude $M_w$: | 6.90 | Unit weight calculation: | Based on SBT | Clay like behavior applied: | All soils |
| Peak ground acceleration: | 1.03 | Use fill: | No | Limit depth applied: | No |
| Depth to water table (insitu): | 37.50 ft | Fill height: | N/A | Limit depth: | N/A |

**F.S. color scheme**

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**LPI color scheme**

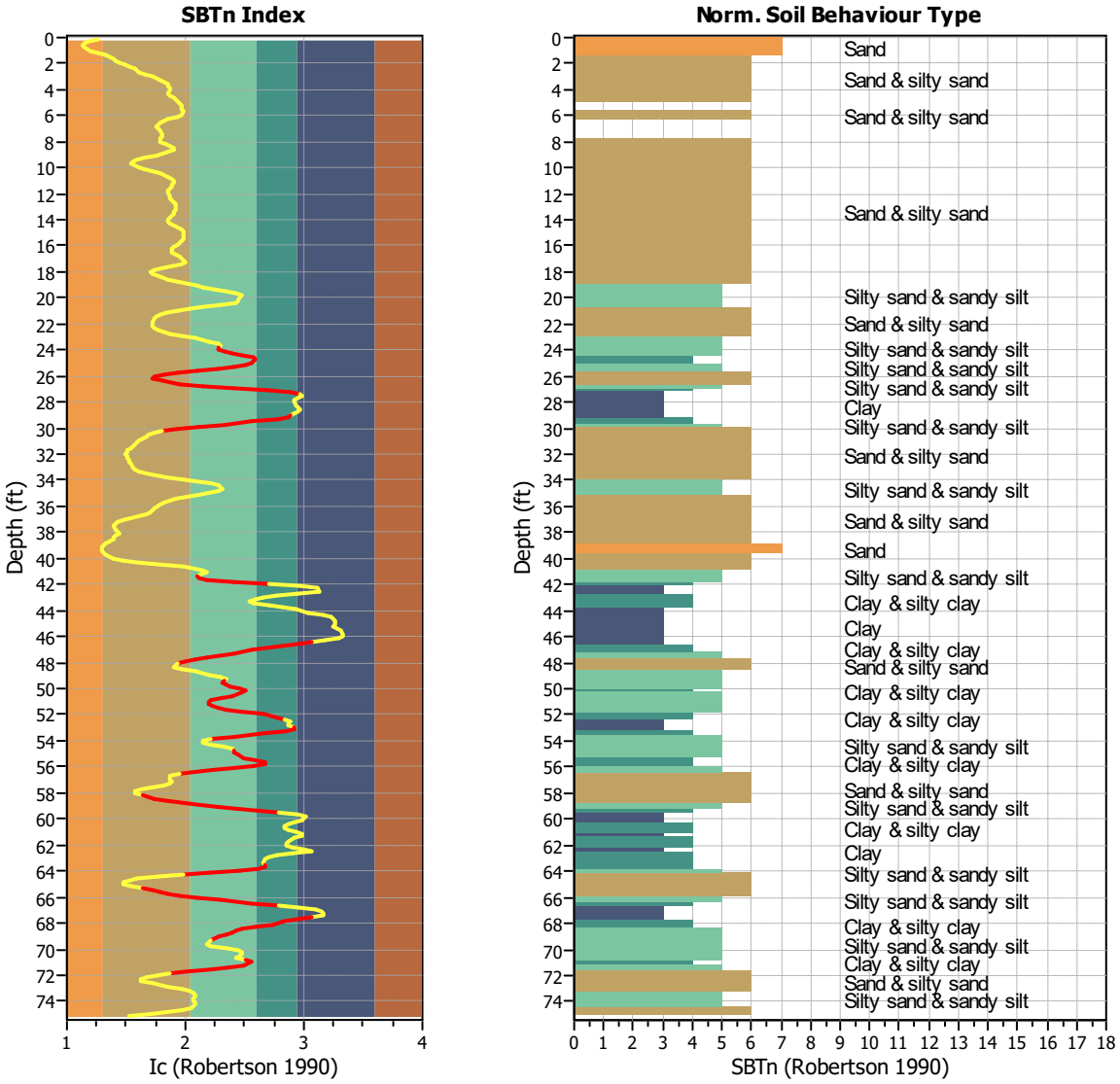
- Very high risk
- High risk
- Low risk

# TRANSITION LAYER DETECTION ALGORITHM REPORT
## Summary Details & Plots

**Short description**

The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of $I_c$ values over which the transition will be defined (typically somewhere between $1.80 < I_c < 3.0$) and a rate of change of $I_c$. Transitions typically occur when the rate of change of $I_c$ is fast (i.e. delta $I_c$ is small).

The $SBT_n$ plot below, displays in red the detected transition layers based on the parameters listed below the graphs.



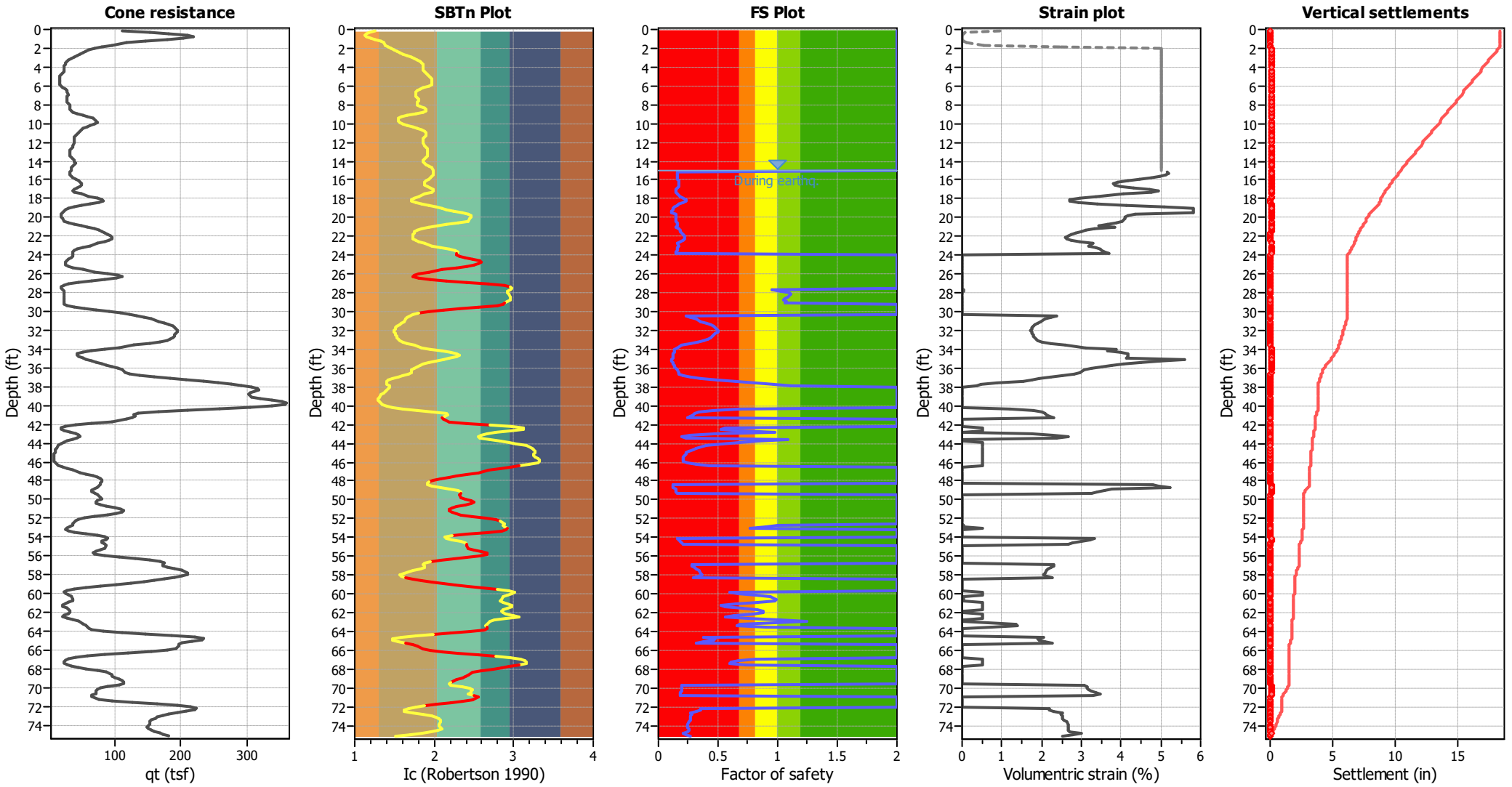

**Transition layer algorithm properties**

| | |
|---|---|
| $I_c$ minimum check value: | 1.70 |
| $I_c$ maximum check value: | 3.00 |
| $I_c$ change ratio value: | 0.0100 |
| Minimum number of points in layer: | 4 |

**General statistics**

| | |
|---|---|
| Total points in CPT file: | 458 |
| Total points excluded: | 129 |
| Exclusion percentage: | 28.17% |
| Number of layers detected: | 17 |

## Estimation of post-earthquake settlements

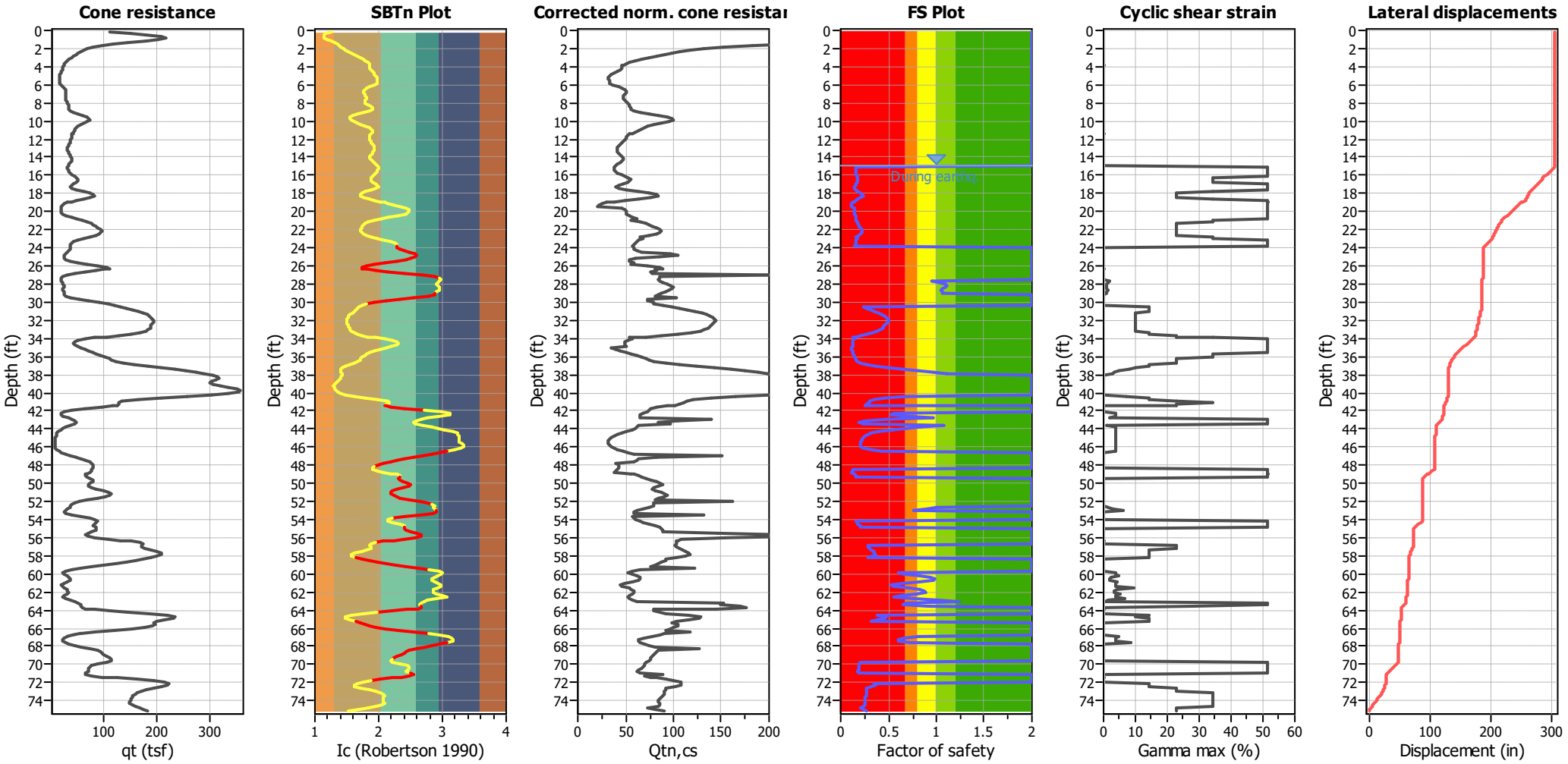



**Abbreviations**

| | |
|---|---|
| $q_t$: | Total cone resistance (cone resistance $q_c$ corrected for pore water effects) |
| $I_c$: | Soil Behaviour Type Index |
| FS: | Calculated Factor of Safety against liquefaction |
| Volumentric strain: | Post-liquefaction volumentric strain |

# Estimation of post-earthquake lateral Displacements

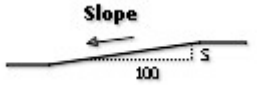
**Geometric parameters: Gently sloping ground without free face (Slope 2.50 %)**




**Abbreviations**

$q_t$: Total cone resistance (cone resistance $q_c$ corrected for pore water effects)
$I_c$: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
$\gamma_{max}$: Maximum cyclic shear strain
LDI: Lateral displacement index

**Surface condition**



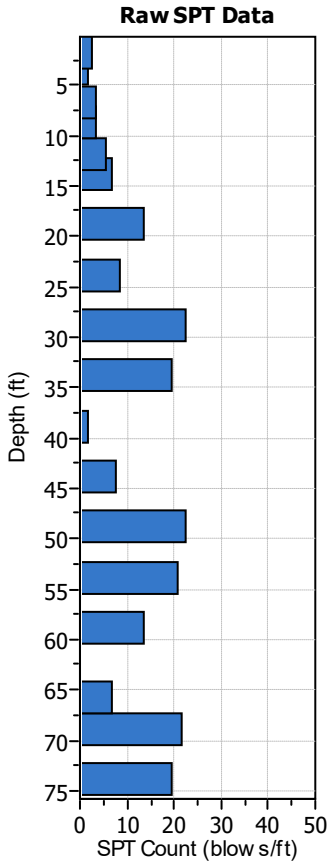
# SPT BASED LIQUEFACTION ANALYSIS REPORT

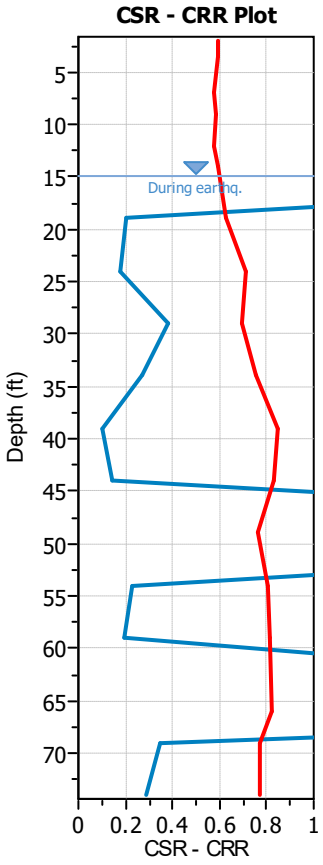
**Project title : Moorpark Library** **SPT Name: DH #1**

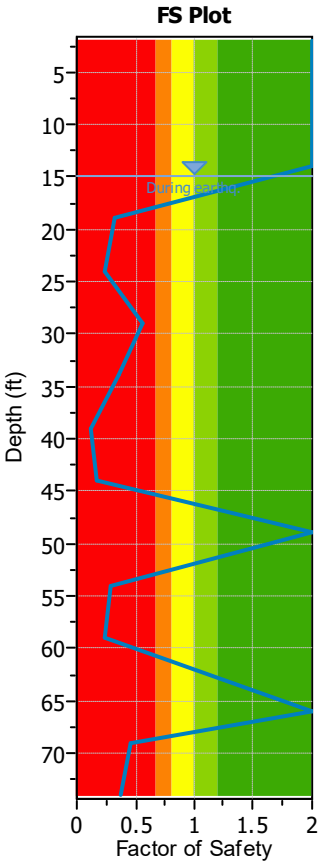
**Location : High Street and Moorpark Avenue**

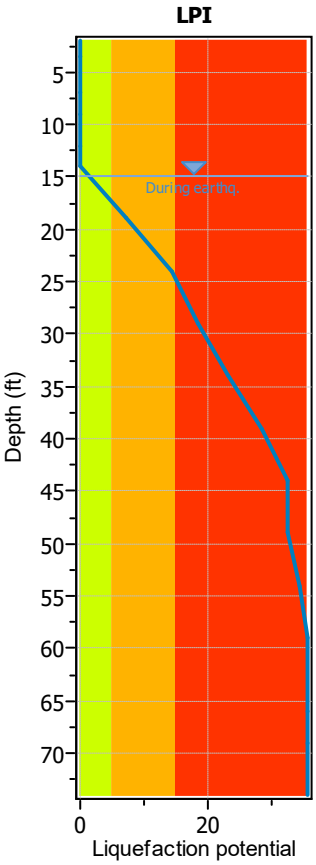
**:: Input parameters and analysis properties ::**

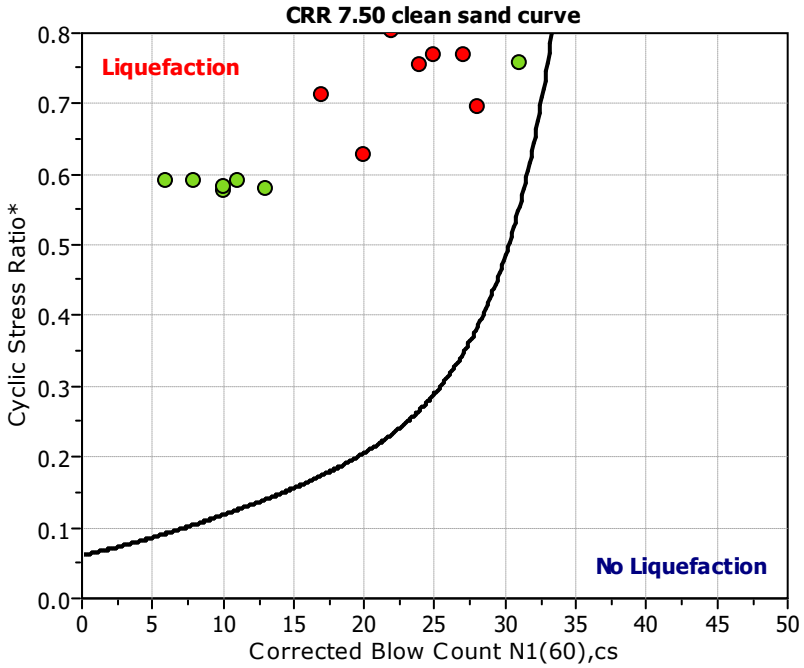
| | | | |
|---|---|---|---|
| Analysis method: | Boulanger & Idriss, 2014 | G.W.T. (in-situ): | 37.50 ft |
| Fines correction method: | Boulanger & Idriss, 2014 | G.W.T. (earthq.): | 15.00 ft |
| Sampling method: | Standard Sampler | Earthquake magnitude $M_w$: | 6.90 ft |
| Borehole diameter: | 200mm | Peak ground acceleration: | 1.03 g |
| Rod length: | 3.30 ft | Eq. external load: | 0.00 tsf |
| Hammer energy ratio: | 1.30 | | |



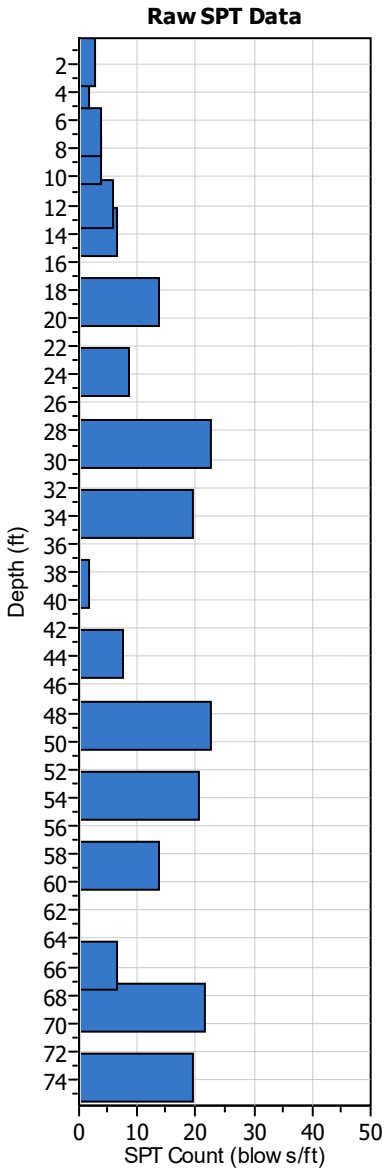

**F.S. color scheme**

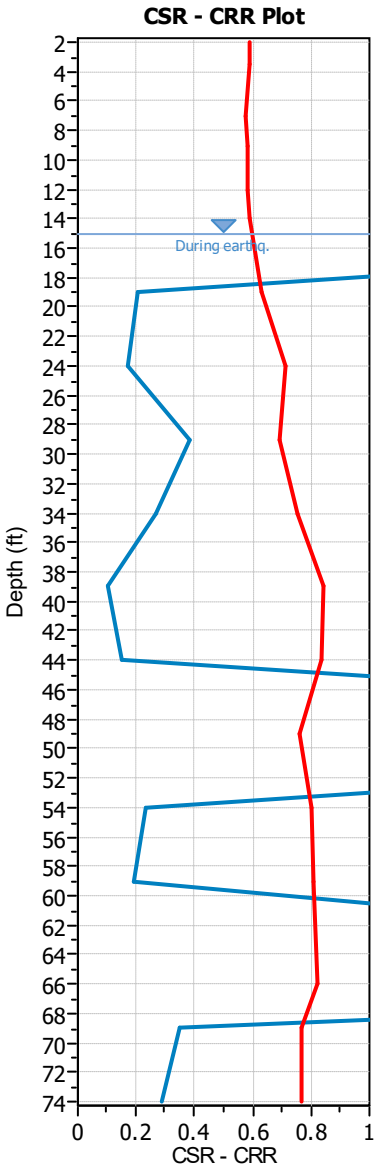
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

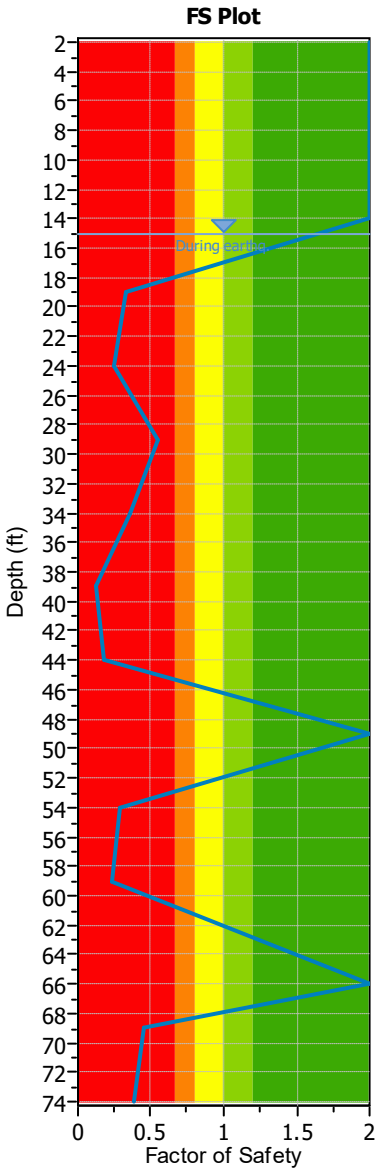
**LPI color scheme**

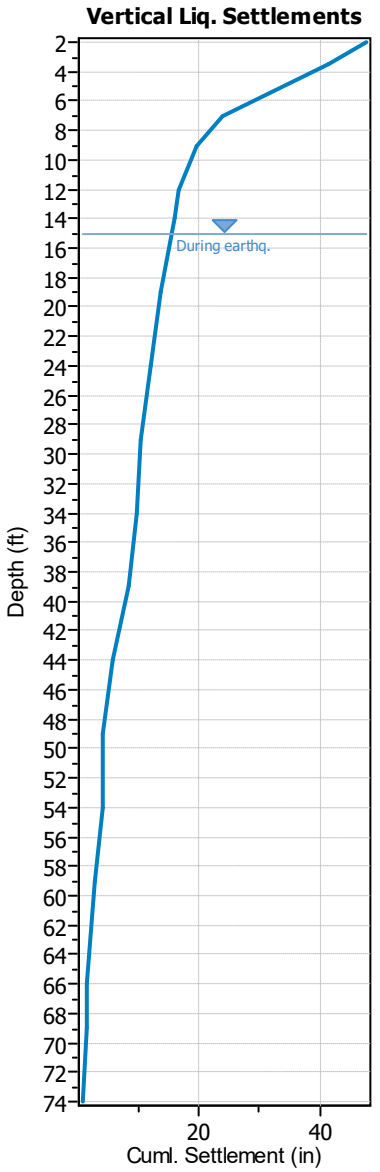
- Very high risk
- High risk
- Low risk

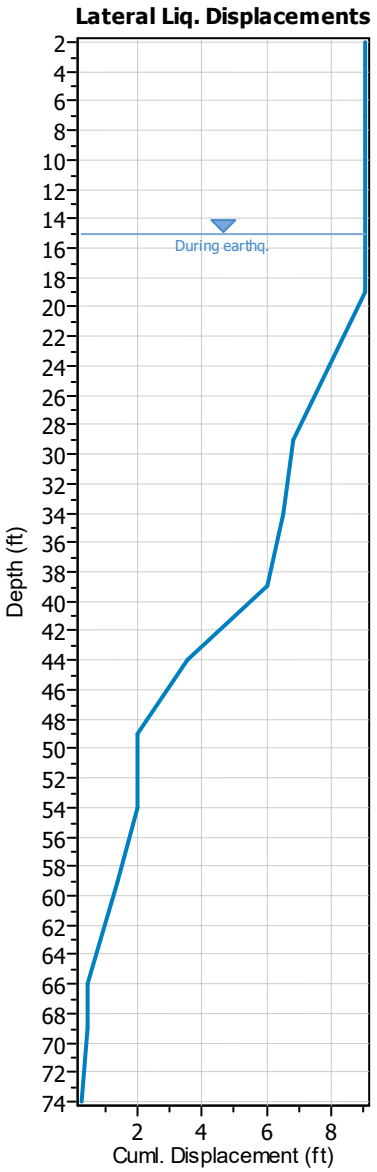
## :: Overall Liquefaction Assessment Analysis Plots ::



**:: Field input data ::**

| Test Depth (ft) | SPT Field Value (blows) | Fines Content (%) | Unit Weight (pcf) | Infl. Thickness (ft) | Can Liquefy |
|---|---|---|---|---|---|
| 2.00 | 3 | 12.00 | 98.00 | 2.00 | No |
| 3.50 | 2 | 12.00 | 98.00 | 2.00 | No |
| 7.00 | 4 | 12.00 | 105.00 | 4.00 | No |
| 9.00 | 4 | 15.00 | 105.00 | 3.00 | No |
| 12.00 | 6 | 15.00 | 111.00 | 2.00 | No |
| 14.00 | 7 | 7.00 | 111.00 | 3.00 | Yes |
| 19.00 | 14 | 7.00 | 111.00 | 7.00 | Yes |
| 24.00 | 9 | 23.00 | 108.00 | 5.00 | Yes |
| 29.00 | 23 | 7.00 | 107.00 | 5.00 | Yes |
| 34.00 | 20 | 7.00 | 107.00 | 5.00 | Yes |
| 39.00 | 2 | 50.00 | 112.00 | 5.00 | Yes |
| 44.00 | 8 | 50.00 | 112.00 | 5.00 | Yes |
| 49.00 | 23 | 25.00 | 112.00 | 5.00 | Yes |
| 54.00 | 21 | 3.00 | 112.00 | 5.00 | Yes |
| 59.00 | 14 | 25.00 | 112.00 | 5.00 | Yes |
| 66.00 | 7 | 63.00 | 112.00 | 3.00 | No |
| 69.00 | 22 | 24.00 | 112.00 | 3.00 | Yes |
| 74.00 | 20 | 24.00 | 112.00 | 3.00 | Yes |

**Abbreviations**

Depth: Depth at which test was performed (ft)
SPT Field Value: Number of blows per foot
Fines Content: Fines content at test depth (%)
Unit Weight: Unit weight at test depth (pcf)
Infl. Thickness: Thickness of the soil layer to be considered in settlements analysis (ft)
Can Liquefy: User defined switch for excluding/including test depth from the analysis procedure

**:: Cyclic Resistance Ratio (CRR) calculation data ::**

| Depth (ft) | SPT Field Value | Unit Weight (pcf) | $\sigma_v$ (tsf) | $u_o$ (tsf) | $\sigma'_{vo}$ (tsf) | m | $C_N$ | $C_E$ | $C_B$ | $C_R$ | $C_S$ | $(N_1)_{60}$ | FC (%) | $\Delta(N_1)_{60}$ | $(N_1)_{60cs}$ | $CRR_{7.5}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 3 | 98.00 | 0.10 | 0.00 | 0.10 | 0.55 | 1.70 | 1.30 | 1.15 | 0.75 | 1.00 | 6 | 12.00 | 2.07 | 8 | 4.000 |
| 3.50 | 2 | 98.00 | 0.17 | 0.00 | 0.17 | 0.58 | 1.70 | 1.30 | 1.15 | 0.75 | 1.00 | 4 | 12.00 | 2.07 | 6 | 4.000 |
| 7.00 | 4 | 105.00 | 0.36 | 0.00 | 0.36 | 0.52 | 1.70 | 1.30 | 1.15 | 0.80 | 1.00 | 8 | 12.00 | 2.07 | 10 | 4.000 |
| 9.00 | 4 | 105.00 | 0.46 | 0.00 | 0.46 | 0.51 | 1.53 | 1.30 | 1.15 | 0.80 | 1.00 | 7 | 15.00 | 3.26 | 10 | 4.000 |
| 12.00 | 6 | 111.00 | 0.63 | 0.00 | 0.63 | 0.50 | 1.30 | 1.30 | 1.15 | 0.85 | 1.00 | 10 | 15.00 | 3.26 | 13 | 4.000 |
| 14.00 | 7 | 111.00 | 0.74 | 0.00 | 0.74 | 0.53 | 1.21 | 1.30 | 1.15 | 0.85 | 1.00 | 11 | 7.00 | 0.14 | 11 | 4.000 |
| 19.00 | 14 | 111.00 | 1.02 | 0.00 | 1.02 | 0.44 | 1.02 | 1.30 | 1.15 | 0.95 | 1.00 | 20 | 7.00 | 0.14 | 20 | 0.206 |
| 24.00 | 9 | 108.00 | 1.29 | 0.00 | 1.29 | 0.48 | 0.91 | 1.30 | 1.15 | 0.95 | 1.00 | 12 | 23.00 | 4.88 | 17 | 0.174 |
| 29.00 | 23 | 107.00 | 1.55 | 0.00 | 1.55 | 0.37 | 0.87 | 1.30 | 1.15 | 0.95 | 1.00 | 28 | 7.00 | 0.14 | 28 | 0.384 |
| 34.00 | 20 | 107.00 | 1.82 | 0.00 | 1.82 | 0.41 | 0.80 | 1.30 | 1.15 | 1.00 | 1.00 | 24 | 7.00 | 0.14 | 24 | 0.268 |
| 39.00 | 2 | 112.00 | 2.10 | 0.05 | 2.05 | 0.60 | 0.67 | 1.30 | 1.15 | 1.00 | 1.00 | 2 | 50.00 | 5.61 | 8 | 0.105 |
| 44.00 | 8 | 112.00 | 2.38 | 0.20 | 2.18 | 0.52 | 0.69 | 1.30 | 1.15 | 1.00 | 1.00 | 8 | 50.00 | 5.61 | 14 | 0.148 |
| 49.00 | 23 | 112.00 | 2.66 | 0.36 | 2.30 | 0.37 | 0.75 | 1.30 | 1.15 | 1.00 | 1.00 | 26 | 25.00 | 5.07 | 31 | 4.000 |
| 54.00 | 21 | 112.00 | 2.94 | 0.51 | 2.43 | 0.42 | 0.70 | 1.30 | 1.15 | 1.00 | 1.00 | 22 | 3.00 | 0.00 | 22 | 0.233 |
| 59.00 | 14 | 112.00 | 3.22 | 0.67 | 2.55 | 0.46 | 0.66 | 1.30 | 1.15 | 1.00 | 1.00 | 14 | 25.00 | 5.07 | 19 | 0.194 |
| 66.00 | 7 | 112.00 | 3.61 | 0.89 | 2.72 | 0.55 | 0.60 | 1.30 | 1.15 | 1.00 | 1.00 | 6 | 63.00 | 5.59 | 12 | 4.000 |
| 69.00 | 22 | 112.00 | 3.78 | 0.98 | 2.80 | 0.39 | 0.68 | 1.30 | 1.15 | 1.00 | 1.00 | 22 | 24.00 | 4.98 | 27 | 0.347 |
| 74.00 | 20 | 112.00 | 4.06 | 1.14 | 2.92 | 0.42 | 0.65 | 1.30 | 1.15 | 1.00 | 1.00 | 20 | 24.00 | 4.98 | 25 | 0.290 |

**:: Cyclic Resistance Ratio (CRR) calculation data ::**

| Depth (ft) | SPT Field Value | Unit Weight (pcf) | $\sigma_v$ (tsf) | $u_o$ (tsf) | $\sigma'_{vo}$ (tsf) | m | $C_N$ | $C_E$ | $C_B$ | $C_R$ | $C_S$ | $(N_1)_{60}$ | FC (%) | $\Delta(N_1)_{60}$ | $(N_1)_{60cs}$ | $CRR_{7.5}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Abbreviations**

$\sigma_v$: Total stress during SPT test (tsf)
$u_o$: Water pore pressure during SPT test (tsf)
$\sigma'_{vo}$: Effective overburden pressure during SPT test (tsf)
m: Stress exponent normalization factor
$C_N$: Overburden corretion factor
$C_E$: Energy correction factor
$C_B$: Borehole diameter correction factor
$C_R$: Rod length correction factor
$C_S$: Liner correction factor
$N_{1(60)}$: Corrected $N_{SPT}$ to a 60% energy ratio
$\Delta(N_1)_{60}$ Equivalent clean sand adjustment
$N_{1(60)cs}$: Corected $N_{1(60)}$ value for fines content
$CRR_{7.5}$: Cyclic resistance ratio for M=7.5

**:: Cyclic Stress Ratio calculation (CSR fully adjusted and normalized) ::**

| Depth (ft) | Unit Weight (pcf) | $\sigma_{v,eq}$ (tsf) | $u_{o,eq}$ (tsf) | $\sigma'_{vo,eq}$ (tsf) | $r_d$ | $\alpha$ | CSR | $MSF_{max}$ | $(N_1)_{60cs}$ | MSF | $CSR_{eq,M=7.5}$ | $K_{sigma}$ | $CSR^*$ | FS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 98.00 | 0.10 | 0.00 | 0.10 | 1.00 | 1.00 | 0.670 | 1.15 | 8 | 1.03 | 0.649 | 1.10 | 0.590 | 2.000 | ● |
| 3.50 | 98.00 | 0.17 | 0.00 | 0.17 | 1.00 | 1.00 | 0.667 | 1.13 | 6 | 1.03 | 0.649 | 1.10 | 0.590 | 2.000 | ● |
| 7.00 | 105.00 | 0.36 | 0.00 | 0.36 | 0.98 | 1.00 | 0.659 | 1.19 | 10 | 1.04 | 0.633 | 1.10 | 0.575 | 2.000 | ● |
| 9.00 | 105.00 | 0.46 | 0.00 | 0.46 | 0.98 | 1.00 | 0.654 | 1.19 | 10 | 1.04 | 0.628 | 1.08 | 0.583 | 2.000 | ● |
| 12.00 | 111.00 | 0.63 | 0.00 | 0.63 | 0.96 | 1.00 | 0.645 | 1.26 | 13 | 1.06 | 0.611 | 1.05 | 0.580 | 2.000 | ● |
| 14.00 | 111.00 | 0.74 | 0.00 | 0.74 | 0.95 | 1.00 | 0.639 | 1.21 | 11 | 1.05 | 0.611 | 1.03 | 0.591 | 2.000 | ● |
| 19.00 | 111.00 | 1.02 | 0.12 | 0.89 | 0.93 | 1.00 | 0.711 | 1.49 | 20 | 1.11 | 0.643 | 1.02 | 0.628 | 0.328 | ● |
| 24.00 | 108.00 | 1.29 | 0.28 | 1.00 | 0.90 | 1.00 | 0.775 | 1.38 | 17 | 1.08 | 0.717 | 1.01 | 0.712 | 0.244 | ● |
| 29.00 | 107.00 | 1.55 | 0.44 | 1.12 | 0.88 | 1.00 | 0.818 | 1.88 | 28 | 1.19 | 0.688 | 0.99 | 0.695 | 0.552 | ● |
| 34.00 | 107.00 | 1.82 | 0.59 | 1.23 | 0.85 | 1.00 | 0.843 | 1.67 | 24 | 1.14 | 0.737 | 0.98 | 0.755 | 0.355 | ● |
| 39.00 | 112.00 | 2.10 | 0.75 | 1.35 | 0.82 | 1.00 | 0.853 | 1.15 | 8 | 1.03 | 0.826 | 0.98 | 0.844 | 0.124 | ● |
| 44.00 | 112.00 | 2.38 | 0.90 | 1.48 | 0.79 | 1.00 | 0.855 | 1.29 | 14 | 1.06 | 0.805 | 0.96 | 0.835 | 0.177 | ● |
| 49.00 | 112.00 | 2.66 | 1.06 | 1.60 | 0.76 | 1.00 | 0.849 | 2.06 | 31 | 1.23 | 0.692 | 0.91 | 0.759 | 2.000 | ● |
| 54.00 | 112.00 | 2.94 | 1.22 | 1.72 | 0.73 | 1.00 | 0.840 | 1.58 | 22 | 1.12 | 0.747 | 0.93 | 0.803 | 0.290 | ● |
| 59.00 | 112.00 | 3.22 | 1.37 | 1.85 | 0.71 | 1.00 | 0.827 | 1.45 | 19 | 1.10 | 0.753 | 0.93 | 0.811 | 0.239 | ● |
| 66.00 | 112.00 | 3.61 | 1.59 | 2.02 | 0.67 | 1.00 | 0.806 | 1.24 | 12 | 1.05 | 0.767 | 0.94 | 0.820 | 2.000 | ● |
| 69.00 | 112.00 | 3.78 | 1.68 | 2.10 | 0.66 | 1.00 | 0.796 | 1.82 | 27 | 1.18 | 0.677 | 0.88 | 0.770 | 0.450 | ● |
| 74.00 | 112.00 | 4.06 | 1.84 | 2.22 | 0.64 | 1.00 | 0.781 | 1.72 | 25 | 1.15 | 0.676 | 0.88 | 0.769 | 0.377 | ● |

**Abbreviations**

$\sigma_{v,eq}$: Total overburden pressure at test point, during earthquake (tsf)
$u_{o,eq}$: Water pressure at test point, during earthquake (tsf)
$\sigma'_{vo,eq}$: Effective overburden pressure, during earthquake (tsf)
$r_d$: Nonlinear shear mass factor
$\alpha$: Improvement factor due to stone columns
CSR : Cyclic Stress Ratio
MSF : Magnitude Scaling Factor
$CSR_{eq,M=7.5}$: CSR adjusted for M=7.5
$K_{sigma}$: Effective overburden stress factor
$CSR^*$: CSR fully adjusted
FS: Calculated factor of safety against soil liquefaction

**:: Liquefaction potential according to Iwasaki ::**

| Depth (ft) | FS | F | wz | Thickness (ft) | $I_L$ |
|---|---|---|---|---|---|

**:: Liquefaction potential according to Iwasaki ::**

| Depth (ft) | FS | F | wz | Thickness (ft) | $I_L$ |
|---|---|---|---|---|---|
| 2.00 | 2.000 | 0.00 | 9.70 | 1.50 | 0.00 |
| 3.50 | 2.000 | 0.00 | 9.47 | 1.50 | 0.00 |
| 7.00 | 2.000 | 0.00 | 8.93 | 3.50 | 0.00 |
| 9.00 | 2.000 | 0.00 | 8.63 | 2.00 | 0.00 |
| 12.00 | 2.000 | 0.00 | 8.17 | 3.00 | 0.00 |
| 14.00 | 2.000 | 0.00 | 7.87 | 2.00 | 0.00 |
| 19.00 | 0.328 | 0.67 | 7.10 | 5.00 | 7.28 |
| 24.00 | 0.244 | 0.76 | 6.34 | 5.00 | 7.31 |
| 29.00 | 0.552 | 0.45 | 5.58 | 5.00 | 3.81 |
| 34.00 | 0.355 | 0.64 | 4.82 | 5.00 | 4.73 |
| 39.00 | 0.124 | 0.88 | 4.06 | 5.00 | 5.42 |
| 44.00 | 0.177 | 0.82 | 3.29 | 5.00 | 4.13 |
| 49.00 | 2.000 | 0.00 | 2.53 | 5.00 | 0.00 |
| 54.00 | 0.290 | 0.71 | 1.77 | 5.00 | 1.92 |
| 59.00 | 0.239 | 0.76 | 1.01 | 5.00 | 1.17 |
| 66.00 | 2.000 | 0.00 | 0.00 | 0.00 | 0.00 |
| 69.00 | 0.450 | 0.00 | 0.00 | 0.00 | 0.00 |
| 74.00 | 0.377 | 0.00 | 0.00 | 0.00 | 0.00 |

**Overall potential $I_L$ : 35.76**

$I_L$ = 0.00 - No liquefaction
$I_L$ between 0.00 and 5 - Liquefaction not probable
$I_L$ between 5 and 15 - Liquefaction probable
$I_L$ > 15 - Liquefaction certain

**:: Vertical settlements estimation for dry sands ::**

| Depth (ft) | $(N_1)_{60}$ | $\tau_{av}$ | p | $G_{max}$ (tsf) | α | b | γ | $\varepsilon_{15}$ | $N_c$ | $\varepsilon_{Nc}$ (%) | Δh (ft) | ΔS (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 6 | 0.07 | 0.07 | 0.23 | 0.13 | 25789.58 | 0.05 | 0.16 | 10.08 | 13.35 | 2.00 | 6.406 |
| 3.50 | 4 | 0.11 | 0.11 | 0.28 | 0.13 | 18434.08 | 0.10 | 0.43 | 10.08 | 36.24 | 2.00 | 17.396 |
| 7.00 | 8 | 0.23 | 0.24 | 0.47 | 0.14 | 11908.57 | 0.02 | 0.05 | 10.08 | 4.45 | 4.00 | 4.275 |
| 9.00 | 7 | 0.30 | 0.31 | 0.53 | 0.14 | 10194.92 | 0.02 | 0.05 | 10.08 | 4.25 | 3.00 | 3.060 |
| 12.00 | 10 | 0.40 | 0.42 | 0.68 | 0.15 | 8470.78 | 0.01 | 0.02 | 10.08 | 1.72 | 2.00 | 0.824 |
| 14.00 | 11 | 0.47 | 0.49 | 0.70 | 0.15 | 7681.29 | 0.02 | 0.03 | 10.08 | 2.83 | 3.00 | 2.038 |

**Cumulative settlemetns: 33.999**

**Abbreviations**

$\tau_{av}$: Average cyclic shear stress
p: Average stress
$G_{max}$: Maximum shear modulus (tsf)
α, b: Shear strain formula variables
γ: Average shear strain
$\varepsilon_{15}$: Volumetric strain after 15 cycles
$N_c$: Number of cycles
$\varepsilon_{Nc}$: Volumetric strain for number of cycles $N_c$ (%)
Δh: Thickness of soil layer (in)
ΔS: Settlement of soil layer (in)

**:: Vertical & Lateral displ.acements estimation for saturated sands ::**

| Depth (ft) | $(N_1)_{60cs}$ | $\gamma_{lim}$ (%) | $F_\alpha$ | $FS_{liq}$ | $\gamma_{max}$ (%) | $e_v$ (%) | dz (ft) | $S_{v\text{-}1D}$ (in) | LDI (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 19.00 | 20 | 15.90 | 0.52 | 0.328 | 15.90 | 2.30 | 7.00 | 1.935 | 1.11 |
| 24.00 | 17 | 22.15 | 0.67 | 0.244 | 22.15 | 2.62 | 5.00 | 1.572 | 1.11 |
| 29.00 | 28 | 6.08 | 0.04 | 0.552 | 6.08 | 1.29 | 5.00 | 0.777 | 0.30 |
| 34.00 | 24 | 10.02 | 0.29 | 0.355 | 10.02 | 1.97 | 5.00 | 1.181 | 0.50 |
| 39.00 | 8 | 50.00 | 0.94 | 0.124 | 50.00 | 4.23 | 5.00 | 2.536 | 2.50 |
| 44.00 | 14 | 30.65 | 0.79 | 0.177 | 30.65 | 3.02 | 5.00 | 1.810 | 1.53 |
| 49.00 | 31 | 4.04 | -0.16 | 2.000 | 0.00 | 0.00 | 5.00 | 0.000 | 0.00 |
| 54.00 | 22 | 12.67 | 0.41 | 0.290 | 12.67 | 2.13 | 5.00 | 1.275 | 0.63 |
| 59.00 | 19 | 17.78 | 0.57 | 0.239 | 17.78 | 2.40 | 5.00 | 1.441 | 0.89 |
| 66.00 | 12 | 0.00 | 0.00 | 2.000 | 0.00 | 0.00 | 3.00 | 0.000 | 0.00 |
| 69.00 | 27 | 6.92 | 0.11 | 0.450 | 6.92 | 1.53 | 3.00 | 0.549 | 0.21 |
| 74.00 | 25 | 8.88 | 0.23 | 0.377 | 8.88 | 1.90 | 3.00 | 0.683 | 0.27 |
| | | | | | | | **Cumulative settlements:** | **13.760** | **9.05** |

**Abbreviations**

$\gamma_{lim}$: Limiting shear strain (%)
$F_\alpha$/N: Maximun shear strain factor
$\gamma_{max}$: Maximum shear strain (%)
$e_v$:: Post liquefaction volumetric strain (%)
$S_{v\text{-}1D}$: Estimated vertical settlement (in)
LDI: Estimated lateral displacement (ft)

GEOLOGISMIKI Geotechnical Software

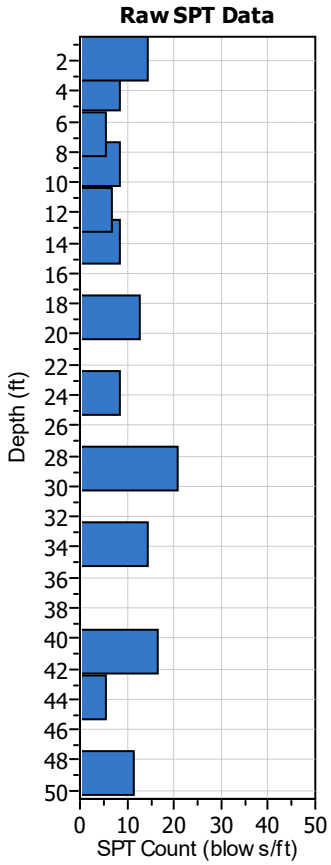
# SPT BASED LIQUEFACTION ANALYSIS REPORT

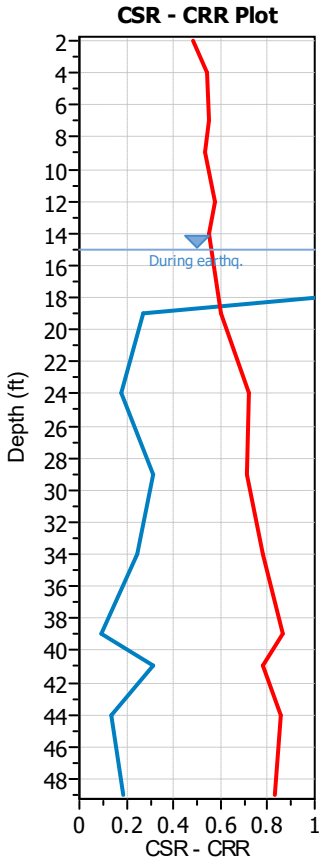
**Project title : Moorpark Library** **SPT Name: DH #2**

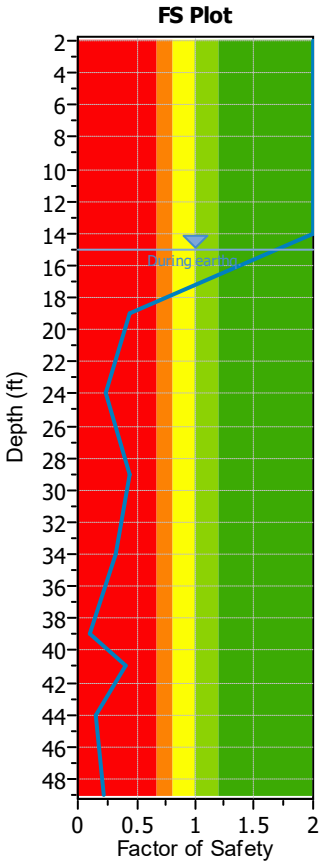
**Location : High Street and Moorpark Avenue**

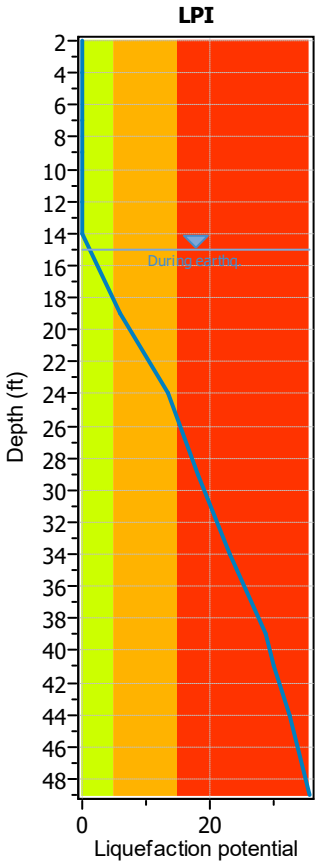
**:: Input parameters and analysis properties ::**

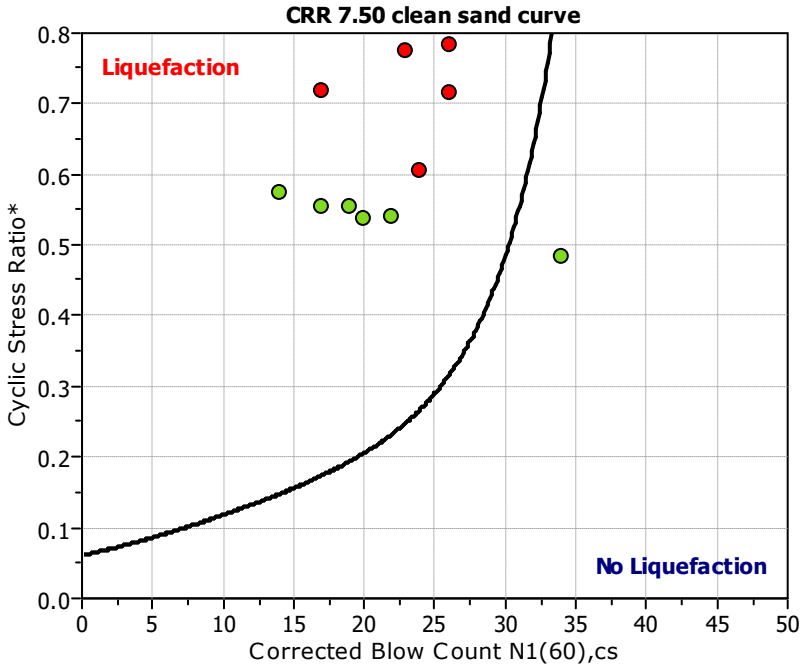
| | | | |
|---|---|---|---|
| Analysis method: | Boulanger & Idriss, 2014 | G.W.T. (in-situ): | 37.50 ft |
| Fines correction method: | Boulanger & Idriss, 2014 | G.W.T. (earthq.): | 15.00 ft |
| Sampling method: | Standard Sampler | Earthquake magnitude $M_w$: | 6.90 ft |
| Borehole diameter: | 200mm | Peak ground acceleration: | 1.03 g |
| Rod length: | 3.30 ft | Eq. external load: | 0.00 tsf |
| Hammer energy ratio: | 1.30 | | |



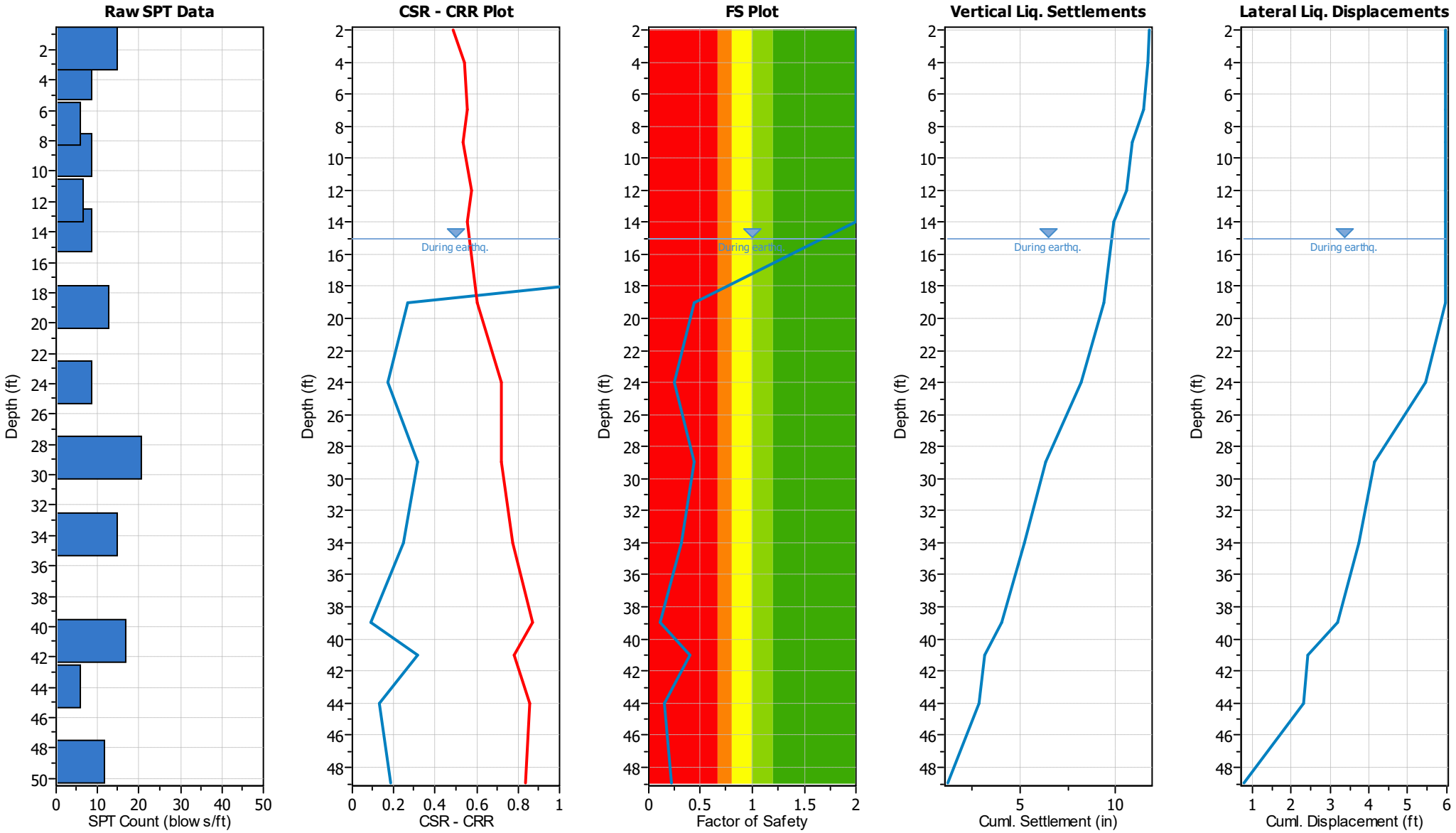

**F.S. color scheme**

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**LPI color scheme**

- Very high risk
- High risk
- Low risk

## :: Overall Liquefaction Assessment Analysis Plots ::



**:: Field input data ::**

| Test Depth (ft) | SPT Field Value (blows) | Fines Content (%) | Unit Weight (pcf) | Infl. Thickness (ft) | Can Liquefy |
|---|---|---|---|---|---|
| 2.00 | 15 | 22.00 | 102.00 | 3.00 | No |
| 4.00 | 9 | 22.00 | 102.00 | 3.00 | No |
| 7.00 | 6 | 22.00 | 101.00 | 3.00 | No |
| 9.00 | 9 | 22.00 | 101.00 | 3.00 | No |
| 12.00 | 7 | 12.00 | 101.00 | 2.00 | No |
| 14.00 | 9 | 27.00 | 106.00 | 4.00 | Yes |
| 19.00 | 13 | 27.00 | 106.00 | 5.00 | Yes |
| 24.00 | 9 | 29.00 | 95.00 | 6.00 | Yes |
| 29.00 | 21 | 6.00 | 95.00 | 5.00 | Yes |
| 34.00 | 15 | 27.00 | 97.00 | 5.00 | Yes |
| 39.00 | 0 | 52.00 | 118.00 | 1.50 | Yes |
| 41.00 | 17 | 52.00 | 118.00 | 1.50 | Yes |
| 44.00 | 6 | 47.00 | 118.00 | 4.00 | Yes |
| 49.00 | 12 | 27.00 | 118.00 | 4.00 | Yes |

**Abbreviations**

Depth: Depth at which test was performed (ft)
SPT Field Value: Number of blows per foot
Fines Content: Fines content at test depth (%)
Unit Weight: Unit weight at test depth (pcf)
Infl. Thickness: Thickness of the soil layer to be considered in settlements analysis (ft)
Can Liquefy: User defined switch for excluding/including test depth from the analysis procedure

**:: Cyclic Resistance Ratio (CRR) calculation data ::**

| Depth (ft) | SPT Field Value | Unit Weight (pcf) | $\sigma_v$ (tsf) | $u_o$ (tsf) | $\sigma'_{vo}$ (tsf) | m | $C_N$ | $C_E$ | $C_B$ | $C_R$ | $C_S$ | $(N_1)_{60}$ | FC (%) | $\Delta(N_1)_{60}$ | $(N_1)_{60cs}$ | $CRR_{7.5}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 15 | 102.00 | 0.10 | 0.00 | 0.10 | 0.32 | 1.70 | 1.30 | 1.15 | 0.75 | 1.00 | 29 | 22.00 | 4.77 | 34 | 4.000 |
| 4.00 | 9 | 102.00 | 0.20 | 0.00 | 0.20 | 0.40 | 1.70 | 1.30 | 1.15 | 0.75 | 1.00 | 17 | 22.00 | 4.77 | 22 | 4.000 |
| 7.00 | 6 | 101.00 | 0.36 | 0.00 | 0.36 | 0.45 | 1.63 | 1.30 | 1.15 | 0.80 | 1.00 | 12 | 22.00 | 4.77 | 17 | 4.000 |
| 9.00 | 9 | 101.00 | 0.46 | 0.00 | 0.46 | 0.42 | 1.43 | 1.30 | 1.15 | 0.80 | 1.00 | 15 | 22.00 | 4.77 | 20 | 4.000 |
| 12.00 | 7 | 101.00 | 0.61 | 0.00 | 0.61 | 0.49 | 1.31 | 1.30 | 1.15 | 0.85 | 1.00 | 12 | 12.00 | 2.07 | 14 | 4.000 |
| 14.00 | 9 | 106.00 | 0.71 | 0.00 | 0.71 | 0.44 | 1.19 | 1.30 | 1.15 | 0.85 | 1.00 | 14 | 27.00 | 5.21 | 19 | 4.000 |
| 19.00 | 13 | 106.00 | 0.98 | 0.00 | 0.98 | 0.40 | 1.03 | 1.30 | 1.15 | 0.95 | 1.00 | 19 | 27.00 | 5.21 | 24 | 0.268 |
| 24.00 | 9 | 95.00 | 1.22 | 0.00 | 1.22 | 0.47 | 0.94 | 1.30 | 1.15 | 0.95 | 1.00 | 12 | 29.00 | 5.32 | 17 | 0.174 |
| 29.00 | 21 | 95.00 | 1.45 | 0.00 | 1.45 | 0.39 | 0.88 | 1.30 | 1.15 | 0.95 | 1.00 | 26 | 6.00 | 0.03 | 26 | 0.316 |
| 34.00 | 15 | 97.00 | 1.70 | 0.00 | 1.70 | 0.42 | 0.82 | 1.30 | 1.15 | 1.00 | 1.00 | 18 | 27.00 | 5.21 | 23 | 0.249 |
| 39.00 | 0 | 118.00 | 1.99 | 0.05 | 1.94 | 0.63 | 0.68 | 1.30 | 1.15 | 1.00 | 1.00 | 0 | 52.00 | 5.61 | 6 | 0.092 |
| 41.00 | 17 | 118.00 | 2.11 | 0.11 | 2.00 | 0.41 | 0.77 | 1.30 | 1.15 | 1.00 | 1.00 | 20 | 52.00 | 5.61 | 26 | 0.316 |
| 44.00 | 6 | 118.00 | 2.29 | 0.20 | 2.08 | 0.54 | 0.69 | 1.30 | 1.15 | 1.00 | 1.00 | 6 | 47.00 | 5.61 | 12 | 0.132 |
| 49.00 | 12 | 118.00 | 2.58 | 0.36 | 2.22 | 0.47 | 0.70 | 1.30 | 1.15 | 1.00 | 1.00 | 13 | 27.00 | 5.21 | 18 | 0.184 |

**:: Cyclic Resistance Ratio (CRR) calculation data ::**

| Depth (ft) | SPT Field Value | Unit Weight (pcf) | $\sigma_v$ (tsf) | $u_o$ (tsf) | $\sigma'_{vo}$ (tsf) | m | $C_N$ | $C_E$ | $C_B$ | $C_R$ | $C_S$ | $(N_1)_{60}$ | FC (%) | $\Delta(N_1)_{60}$ | $(N_1)_{60cs}$ | $CRR_{7.5}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Abbreviations**

$\sigma_v$: Total stress during SPT test (tsf)
$u_o$: Water pore pressure during SPT test (tsf)
$\sigma'_{vo}$: Effective overburden pressure during SPT test (tsf)
m: Stress exponent normalization factor
$C_N$: Overburden corretion factor
$C_E$: Energy correction factor
$C_B$: Borehole diameter correction factor
$C_R$: Rod length correction factor
$C_S$: Liner correction factor
$N_{1(60)}$: Corrected $N_{SPT}$ to a 60% energy ratio
$\Delta(N_1)_{60}$ Equivalent clean sand adjustment
$N_{1(60)cs}$: Corected $N_{1(60)}$ value for fines content
$CRR_{7.5}$: Cyclic resistance ratio for M=7.5

**:: Cyclic Stress Ratio calculation (CSR fully adjusted and normalized) ::**

| Depth (ft) | Unit Weight (pcf) | $\sigma_{v,eq}$ (tsf) | $u_{o,eq}$ (tsf) | $\sigma'_{vo,eq}$ (tsf) | $r_d$ | $\alpha$ | CSR | $MSF_{max}$ | $(N_1)_{60cs}$ | MSF | $CSR_{eq,M=7.5}$ | $K_{sigma}$ | $CSR^*$ | FS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 102.00 | 0.10 | 0.00 | 0.10 | 1.00 | 1.00 | 0.670 | 2.20 | 34 | 1.26 | 0.533 | 1.10 | 0.485 | 2.000 | ● |
| 4.00 | 102.00 | 0.20 | 0.00 | 0.20 | 0.99 | 1.00 | 0.666 | 1.58 | 22 | 1.12 | 0.593 | 1.10 | 0.539 | 2.000 | ● |
| 7.00 | 101.00 | 0.36 | 0.00 | 0.36 | 0.98 | 1.00 | 0.659 | 1.38 | 17 | 1.08 | 0.609 | 1.10 | 0.554 | 2.000 | ● |
| 9.00 | 101.00 | 0.46 | 0.00 | 0.46 | 0.98 | 1.00 | 0.654 | 1.49 | 20 | 1.11 | 0.591 | 1.10 | 0.537 | 2.000 | ● |
| 12.00 | 101.00 | 0.61 | 0.00 | 0.61 | 0.96 | 1.00 | 0.645 | 1.29 | 14 | 1.06 | 0.608 | 1.06 | 0.574 | 2.000 | ● |
| 14.00 | 106.00 | 0.71 | 0.00 | 0.71 | 0.95 | 1.00 | 0.639 | 1.45 | 19 | 1.10 | 0.583 | 1.05 | 0.555 | 2.000 | ● |
| 19.00 | 106.00 | 0.98 | 0.12 | 0.85 | 0.93 | 1.00 | 0.714 | 1.67 | 24 | 1.14 | 0.625 | 1.03 | 0.604 | 0.444 | ● |
| 24.00 | 95.00 | 1.22 | 0.28 | 0.94 | 0.90 | 1.00 | 0.788 | 1.38 | 17 | 1.08 | 0.728 | 1.01 | 0.718 | 0.242 | ● |
| 29.00 | 95.00 | 1.45 | 0.44 | 1.02 | 0.88 | 1.00 | 0.840 | 1.77 | 26 | 1.17 | 0.721 | 1.01 | 0.716 | 0.441 | ● |
| 34.00 | 97.00 | 1.70 | 0.59 | 1.10 | 0.85 | 1.00 | 0.874 | 1.62 | 23 | 1.13 | 0.771 | 0.99 | 0.776 | 0.321 | ● |
| 39.00 | 118.00 | 1.99 | 0.75 | 1.24 | 0.82 | 1.00 | 0.880 | 1.13 | 6 | 1.03 | 0.857 | 0.99 | 0.868 | 0.106 | ● |
| 41.00 | 118.00 | 2.11 | 0.81 | 1.30 | 0.81 | 1.00 | 0.880 | 1.77 | 26 | 1.17 | 0.755 | 0.97 | 0.782 | 0.404 | ● |
| 44.00 | 118.00 | 2.29 | 0.90 | 1.38 | 0.79 | 1.00 | 0.877 | 1.24 | 12 | 1.05 | 0.835 | 0.97 | 0.857 | 0.154 | ● |
| 49.00 | 118.00 | 2.58 | 1.06 | 1.52 | 0.76 | 1.00 | 0.867 | 1.42 | 18 | 1.09 | 0.796 | 0.96 | 0.833 | 0.220 | ● |

**Abbreviations**

$\sigma_{v,eq}$: Total overburden pressure at test point, during earthquake (tsf)
$u_{o,eq}$: Water pressure at test point, during earthquake (tsf)
$\sigma'_{vo,eq}$: Effective overburden pressure, during earthquake (tsf)
$r_d$: Nonlinear shear mass factor
$\alpha$: Improvement factor due to stone columns
CSR : Cyclic Stress Ratio
MSF : Magnitude Scaling Factor
$CSR_{eq,M=7.5}$: CSR adjusted for M=7.5
$K_{sigma}$: Effective overburden stress factor
$CSR^*$: CSR fully adjusted
FS: Calculated factor of safety against soil liquefaction

**:: Liquefaction potential according to Iwasaki ::**

| Depth (ft) | FS | F | wz | Thickness (ft) | $I_L$ |
|---|---|---|---|---|---|
| 2.00 | 2.000 | 0.00 | 9.70 | 2.00 | 0.00 |
| 4.00 | 2.000 | 0.00 | 9.39 | 2.00 | 0.00 |
| 7.00 | 2.000 | 0.00 | 8.93 | 3.00 | 0.00 |
| 9.00 | 2.000 | 0.00 | 8.63 | 2.00 | 0.00 |

**:: Liquefaction potential according to Iwasaki ::**

| Depth (ft) | FS | F | wz | Thickness (ft) | $I_L$ |
|---|---|---|---|---|---|
| 12.00 | 2.000 | 0.00 | 8.17 | 3.00 | 0.00 |
| 14.00 | 2.000 | 0.00 | 7.87 | 2.00 | 0.00 |
| 19.00 | 0.444 | 0.56 | 7.10 | 5.00 | 6.02 |
| 24.00 | 0.242 | 0.76 | 6.34 | 5.00 | 7.32 |
| 29.00 | 0.441 | 0.56 | 5.58 | 5.00 | 4.75 |
| 34.00 | 0.321 | 0.68 | 4.82 | 5.00 | 4.98 |
| 39.00 | 0.106 | 0.89 | 4.06 | 5.00 | 5.53 |
| 41.00 | 0.404 | 0.60 | 3.75 | 2.00 | 1.36 |
| 44.00 | 0.154 | 0.85 | 3.29 | 3.00 | 2.55 |
| 49.00 | 0.220 | 0.78 | 2.53 | 5.00 | 3.01 |

**Overall potential $I_L$ : 35.53**

$I_L$ = 0.00 - No liquefaction
$I_L$ between 0.00 and 5 - Liquefaction not probable
$I_L$ between 5 and 15 - Liquefaction probable
$I_L$ > 15 - Liquefaction certain

**:: Vertical settlements estimation for dry sands ::**

| Depth (ft) | $(N_1)_{60}$ | $\tau_{av}$ | p | $G_{max}$ (tsf) | α | b | γ | $\varepsilon_{15}$ | $N_c$ | $\varepsilon_{Nc}$ (%) | Δh (ft) | ΔS (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 29 | 0.07 | 0.07 | 0.38 | 0.13 | 25177.92 | 0.00 | 0.00 | 10.08 | 0.09 | 3.00 | 0.067 |
| 4.00 | 17 | 0.14 | 0.14 | 0.46 | 0.13 | 16611.23 | 0.00 | 0.00 | 10.08 | 0.35 | 3.00 | 0.254 |
| 7.00 | 12 | 0.23 | 0.24 | 0.56 | 0.14 | 11903.54 | 0.01 | 0.01 | 10.08 | 0.78 | 3.00 | 0.560 |
| 9.00 | 15 | 0.30 | 0.31 | 0.67 | 0.14 | 10245.08 | 0.01 | 0.01 | 10.08 | 0.47 | 3.00 | 0.340 |
| 12.00 | 12 | 0.39 | 0.41 | 0.69 | 0.15 | 8626.56 | 0.01 | 0.02 | 10.08 | 1.36 | 2.00 | 0.651 |
| 14.00 | 14 | 0.46 | 0.48 | 0.82 | 0.15 | 7833.59 | 0.01 | 0.01 | 10.08 | 0.54 | 4.00 | 0.516 |

**Cumulative settlemetns: 2.387**

**Abbreviations**

$\tau_{av}$: Average cyclic shear stress
p: Average stress
$G_{max}$: Maximum shear modulus (tsf)
α, b: Shear strain formula variables
γ: Average shear strain
$\varepsilon_{15}$: Volumetric strain after 15 cycles
$N_c$: Number of cycles
$\varepsilon_{Nc}$: Volumetric strain for number of cycles $N_c$ (%)
Δh: Thickness of soil layer (in)
ΔS: Settlement of soil layer (in)

**:: Vertical & Lateral displ.acements estimation for saturated sands ::**

| Depth (ft) | $(N_1)_{60cs}$ | $\gamma_{lim}$ (%) | $F_\alpha$ | $FS_{liq}$ | $\gamma_{max}$ (%) | $e_v$ (%) | dz (ft) | $S_{v\text{-}1D}$ (in) | LDI (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 19.00 | 24 | 10.02 | 0.29 | 0.444 | 10.02 | 1.97 | 5.00 | 1.181 | 0.50 |
| 24.00 | 17 | 22.15 | 0.67 | 0.242 | 22.15 | 2.62 | 6.00 | 1.887 | 1.33 |
| 29.00 | 26 | 7.85 | 0.17 | 0.441 | 7.85 | 1.79 | 5.00 | 1.076 | 0.39 |
| 34.00 | 23 | 11.27 | 0.35 | 0.321 | 11.27 | 2.04 | 5.00 | 1.227 | 0.56 |
| 39.00 | 6 | 50.00 | 0.95 | 0.106 | 50.00 | 4.86 | 1.50 | 0.875 | 0.75 |
| 41.00 | 26 | 7.85 | 0.17 | 0.404 | 7.85 | 1.79 | 1.50 | 0.323 | 0.12 |
| 44.00 | 12 | 38.03 | 0.86 | 0.154 | 38.03 | 3.34 | 4.00 | 1.604 | 1.52 |

**:: Vertical & Lateral displ.acements estimation for saturated sands ::**

| Depth (ft) | $(N_1)_{60cs}$ | $\gamma_{lim}$ (%) | $F_a$ | $FS_{liq}$ | $\gamma_{max}$ (%) | $e_v$ (%) | dz (ft) | $S_{v-1D}$ (in) | LDI (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 49.00 | 18 | 19.85 | 0.62 | 0.220 | 19.85 | 2.51 | 4.00 | 1.204 | 0.79 |
| | | | | | **Cumulative settlements:** | | | **9.376** | **5.97** |

**Abbreviations**

$\gamma_{lim}$: Limiting shear strain (%)
$F_a$/N: Maximun shear strain factor
$\gamma_{max}$: Maximum shear strain (%)
$e_v$:: Post liquefaction volumetric strain (%)
$S_{v-1D}$: Estimated vertical settlement (in)
LDI: Estimated lateral displacement (ft)

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# APPENDIX H

# CONCEPTUAL GROUND IMPROVEMENT PLAN

**PROJECT MEMORANDUM**

Oakridge Geoscience, Inc.

*PO Box 2540, Camarillo, California 93011*
*www.Oakridgegeo.com*
*805-368-7765*

July 10, 2017
Project No. 030.003

From: Lori/Craig Prentice
To: Christopher Ball, Jeremy Laurentowski
Company: City of Moorpark

Subject: Moorpark Library Project Site, Conceptual Ground Improvement Plan Cost Estimate

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This memorandum outlines a conceptual ground improvement plan cost estimate for the proposed Moorpark Library project site adjacent to High Street in Moorpark, California. The subsurface site conditions at the proposed library site are described in OGIs report dated June 17, 2017, and consist of an upper zone of very loose to loose granular soil from the ground surface to a depth of about 40 feet underlain by interbedded medium dense granular soils and medium stiff fine-grained soils from a depth of about 40 to 75 feet below the ground surface. Groundwater was encountered at a depth of about 37 feet during the site explorations in late April 2017. The results of the analyses indicate the granular soils in the upper 60 feet are susceptible to liquefaction-related settlement, dry seismic settlement, and lateral spreading. Based on the findings and analyses, ground improvement is required by the current building codes to densify or strengthen the onsite prior to construction of the proposed library building.

The preliminary geotechnical report identified two possible ground improvement methods; vibro-replacement (VR - stone columns) or deep soil mixing (DSM). Other ground improvement options could potentially be utilized pending evaluation by a qualified ground improvement contractor. The current building codes generally require seismic-related settlement be limited to two inches of total settlement and one inch of differential settlement. The estimated seismic settlements at proposed library site range from about 12 to 38 inches with an average of about 19 inches.

The suggested potential ground improvement techniques may be able to limit the seismic settlement to two inches or less; however, a more likely scenario would be that the selected ground improvement method could reduce the seismic settlement to about four inches and the proposed building foundation would need to be strengthened using a grade beam/waffle system or possibly a mat-type foundation.

Estimated fees are provided below for the two potential ground improvement options and for a grade beam-type foundation support system that appears to be generally suitable for a one-story wood frame building. We note both ground improvement methods have been used successfully at several sites in the Tri-county area: VR at Las Virgenes Municipal Water District's Tapia Wastewater Treatment Plant and the City of Santa Barbara's El Estero Wastewater Treatment Plant and DSM at the Ventura County Medical Center Replacement Clinic Building in Ventura, California.

**Conceptual Ground Improvement Elements:**

1) **Vibro Replacement (VR - stone columns).** As described in OGI's preliminary geotechnical report, the VR procedure consists of advancing a 30-inch diameter steel mandrel to the selected depth (approximately 40 feet at the library site) using a combination of the weight of mandrel and vibration. Once the mandrel reaches the selected depth, ¾-inch crushed rock is used to backfill the hole. The gravel is vibrated and "rammed" into the soft, loose granular soils. The stone columns are placed on a grid pattern with a spacing typically in the range of six to nine feet on-center. The soil displaced by the mandrel is "pushed" laterally into the adjacent soil, densifying the soil mass at the site to the point where it will resist liquefying and settlement in response to earthquake ground shaking. CPTs are advanced between columns after the VR is performed to evaluate the increase in soil strength/resistance to liquefaction. VR is an effective method of densifying granular soils to a depth of about 50 feet, but the process does not significantly improve the density of fine-grained silt and clay soils or highly interbedded fine-grained and granular soils (such as present below a depth of about 40 feet at the library site). In our opinion, VR will be most effective in the upper 40 feet at the proposed library site.

   VR typically extends about one column spacing outside of the proposed building foundation to provide improved/densified soil outside of the building footprint and reduce the potential for lateral spreading to impact the structure. For the proposed library site, the conceptual VR plan consists of:

   - 30-inch diameter columns at 8-foot on-center (replacement area of about 7.8%),
   - 24 rows of 15 columns/row with a total of 360 columns x 40 feet deep,
   - Estimated cost of VR columns is $30/foot,
   - Mobilization/Demobilization of $60,000,
   - Estimated column installation cost of $430,000, and
   - Estimated cost of VR is approximately $500,000.

2) **Deep Soil Mixing (DSM).** DSM uses a large-diameter auger (three- to eight-feet in diameter) mounted to a large drill rig or crane to advance the auger to the target depth (approximately 50 feet for the library project). Cement is mixed into the soil at a regulated rate of around 10 percent and mixed by the auger using several up and down passes of the auger. The amount of cement added to the soil is determined by laboratory testing to optimize the soil strength versus amount of cement utilized. Once the cement and soil are uniformly mixed, the auger is withdrawn and moved to the next location. The DSM columns can be placed in a variety of patterns (grid, tangent, overlapping) depending on the project requirements. For the proposed library project, one option is to place the DSM columns on a grid pattern with a center to center spacing of two to three diameters with a grade-beam type foundation system supported on the columns. The column configuration will depend on the column diameter selected (typically three to eight feet), cement percentage, soil type, and amount of soil improvement

required. Once the columns are completed, a grade-beam type foundation can be installed on top of the DSM columns to support the structure. Other column configurations such as tangent columns, overlapping columns, etc. can be utilized depending on project requirements. The advantages of the DSM method are that it can installed to depths of greater than 50 feet and it can improve the strength of fine-grained soils. Disadvantages are that the DSM method does not improve the soil density between the columns and about 20 percent waste material is generated during the installation process that must be disposed of. A conceptual DSM ground improvement plan for the proposed library building consists of:

- Four-foot diameter columns at 10-foot on center (replacement area of about 12%),
- 11 rows of 19 columns/row with a total of 209 columns x 50 feet deep,
- Estimated cost of DSM columns is $50/foot,
- Mobilization/Demobilization of $150,000,
- Estimated DSM column installation cost of $525,000, and
- Estimated cost of DSM is approximately $675,000.

3) **Grade Beam/Waffle Foundation System.** As described above, at this point in the project planning effort, a supplemental support system such as a grade beam-type foundation likely will be required in addition to one of the ground improvement options discussed above. If future analyses and evaluation indicate the seismic settlement at the site can be reduced to two inches or less, a supplemental grade beam system may not be required. A grade beam foundation system consists of a grid of deepened steel-reinforced concrete beams typically on a spacing of 8 to 10 feet. The grade beam lengths and depths vary depending on the foundation support and structural engineering design. For a one-story, wood frame building as proposed for the Moorpark library, the grade beam system might consist of grade beams 12-inches deep, 18- to 24-inches wide, at a grid spacing of 10-foot on-center. The grade beam system ties into the overlying concrete building slab that would be approximately 6-inches thick. The conceptual grade beam system could consist of:

- 10-foot center to center grid spacing,
- 24-inches wide and 18-inches deep,
- Ties into 6-inch-thick concrete slab above the grade beam system (note that the grade beam system does not include the cost for the concrete slab which would be part of standard construction),
- Grade beam length equals about 4,000 feet,
- Estimated cost of $400/cubic yard for concrete ($15 cubic foot),
- Estimated volume of grade beam system 8,000 cubic feet, and
- Estimated cost of grade beam system $120,000.

## SUMMARY

The preliminary cost estimates for the ground improvements (VR or DSM) and supplemental grade beam system are summarized below. The estimates have been provided at the request of the City of Moorpark staff to assist with the project planning efforts, however, we note they do not include permitting costs.

To the best of our knowledge, the estimated costs summarized below represent reasonable planning-level estimates; however, we strongly advise the City of Moorpark have a civil/structural engineering firm familiar with project estimating and experience with ground improvement and grade beam foundation systems provide updated cost estimates for the project elements at the earliest possible time.

| Project Element | Vibro-Replacement (VR) | Deep Soil Mixing (DSM) |
|---|---|---|
| Ground Improvement Option | $ 500,000 | $ 675,000 |
| Grade Beam System | $ 120,000 | $ 120,000 |
| **Estimated Subtotal:** | **$ 620,000** | **$ 795,000** |
| Contingency (20%) | $ 125,000 | $ 160,000 |
| Design (15%) | $ 90,000 | $ 120,000 |
| Construction Management (10%) | $ 60,000 | $ 80,000 |
| **Planning-Level Cost Estimate:** | **$ 895,000** | **$ 1,155,000** |

# APPENDIX I

# EDR REPORT

**Moorpark Civic Center Master Plan Project**
799 Moorpark Avenue
Moorpark, CA  93021

Inquiry Number: 6987243.2s
May 19, 2022

# The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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**GEOCHECK ADDENDUM**

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***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.


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# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

799 MOORPARK AVENUE
MOORPARK, CA 93021

### COORDINATES

| | |
|---|---|
| Latitude (North): | 34.2863930 - 34ˆ 17' 11.01'' |
| Longitude (West): | 118.8830330 - 118ˆ 52' 58.91'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 326676.3 |
| UTM Y (Meters): | 3795320.8 |
| Elevation: | 523 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 11994278 MOORPARK, CA |
| Version Date: | 2018 |
| Northeast Map: | 11994308 SIMI VALLEY WEST, CA |
| Version Date: | 2018 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20140531 |
| Source: | USDA |

# MAPPED SITES SUMMARY

Target Property Address:
799 MOORPARK AVENUE
MOORPARK, CA 93021

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | CITY OF MOORPARK INT | 799 MOORPARK AVENUE | NPDES, CIWQS | | TP |
| A2 | JAVIER MAGDALENO | 799 MOORPARK DR | PEST LIC | | TP |
| A3 | CITY OF MOORPARK INT | 799 MOORPARK | FINDS, ECHO | | TP |
| A4 | CITY OF MOORPARK | 799 MOORPARK AVENUE | HWTS | | TP |
| A5 | CITY OF MOORPARK CIV | 799 MOORPARK AVE | FINDS | | TP |
| A6 | LEONARDO MENDEZ | 799 MOORPARK AVE | PEST LIC | | TP |
| A7 | CITY OF MOORPARK CIV | 799 MOORPARK AVE | VENTURA CO. BWT, CERS | | TP |
| A8 | CITY OF MOORPARK/RED | 661 MOORPARK AVE | HAZNET, HWTS | Lower | 1 ft. |
| A9 | JEMCO PLUMBING INC | 675 MOORPARK AVE | VENTURA CO. BWT | Lower | 1 ft. |
| A10 | MOORPARK CLEANERS | 675 MOORPARK AVE | EDR Hist Cleaner | Lower | 1 ft. |
| B11 | BUG MECHANIC PEST CO | 100 W HIGH ST #300 | PEST LIC | Lower | 1 ft. |
| B12 | DENNIS A GOTTLIEB | 100 WEST HIGH ST #30 | PEST LIC | Lower | 1 ft. |
| C13 | PATTON S UNION STATI | 589 MOORPARK AVE | EDR Hist Auto | Lower | 8, 0.002, SE |
| B14 | METROLINK MOORPARK L | 585 N MOORPARK AVE | RCRA NonGen / NLR | Lower | 8, 0.002, SE |
| B15 | TOWRY S SHIRLEY CHEV | 499 MOORPARK AVE | EDR Hist Auto | Lower | 25, 0.005, SE |
| B16 | AA MOORPARK TRANSMIS | 21 W HIGH ST | EDR Hist Auto | Lower | 60, 0.011, SSE |
| D17 | FIRE STATION #42 | 782 MOORPARK AVE. | UST | Higher | 77, 0.015, NE |
| D18 | MOORPARK FIRE STATIO | 782 MOORPARK AVENUE | HIST UST | Higher | 77, 0.015, NE |
| C19 | CITY OF MOORPARK | CHARLES ST (X WALNUT | UST | Lower | 83, 0.016, East |
| C20 | A & P ARCO | 18 E HIGH ST | EDR Hist Auto | Lower | 88, 0.017, SE |
| C21 | UNOCAL #1696 | 18 HIGH ST | LUST, UST, Cortese, CERS | Lower | 120, 0.023, SE |
| E22 | CITY OF MOORPARK | 530 1/2 N MOORPARK A | RCRA NonGen / NLR | Lower | 216, 0.041, SSE |
| E23 | PRIMO CORP | 31 POINDEXTER ST | RCRA-SQG, FINDS, ECHO | Lower | 246, 0.047, South |
| 24 | CASCADE SPRINKLER | 177 POINDEXTER AVE | UST | Lower | 320, 0.061, WSW |
| 25 | SEACON CONSTRUCTION | 175 POINDEXTER AVE | RCRA NonGen / NLR | Lower | 345, 0.065, SSW |
| F26 | CE & D MABRY FAMILY | 137 E. HIGH ST. | RCRA NonGen / NLR | Lower | 353, 0.067, ESE |
| F27 | MOORPARK GARAGE | 661 WALNUT ST | EDR Hist Auto | Lower | 371, 0.070, ESE |
| F28 | CITY OF MOORPARK | 661 WALNUT ST | UST | Lower | 371, 0.070, ESE |
| F29 | DICK S GARAGE | 690 WALNUT ST | EDR Hist Auto | Lower | 445, 0.084, East |
| 30 | GAIL COVATE | 80 1ST STREET | RCRA NonGen / NLR | Lower | 520, 0.098, SSE |
| 31 | RANCHO CLEANERS | 419 MOORPARK AVE | RCRA NonGen / NLR, FINDS, ECHO, HAZNET, HWTS | Lower | 664, 0.126, SSE |
| 32 | GIFFORD RUNKLE | 393 MCFADDEN AVENUE | RCRA NonGen / NLR | Lower | 799, 0.151, South |
| G33 | TEXACO STATION | 347 MOORPARK AVE | LUST, CERS | Lower | 1014, 0.192, South |
| G34 | MOORPARK TEXACO AND | 347 MOORPARK AVE | HIST UST | Lower | 1014, 0.192, South |
| G35 | TEXACO SS - MOORPARK | 347 MOORPARK AVE | LUST, VENTURA CO. BWT, Cortese, HIST CORTESE | Lower | 1014, 0.192, South |
| G36 | TEXACO | 347 MOORPARK AVE. | UST | Lower | 1014, 0.192, South |
| H37 | FRANCISCO AND DELIA | 507 MILLARD ST | RCRA NonGen / NLR | Lower | 1071, 0.203, ESE |
| H38 | ANN DOWD | 445 MILLARD ST | RCRA NonGen / NLR | Lower | 1189, 0.225, SE |
| 39 | RALPHS GROCERY #723 | 101 W. LOS ANGELES A | SWRCY, CERS HAZ WASTE, HAZNET, CERS, HWTS | Lower | 1730, 0.328, South |

## MAPPED SITES SUMMARY

Target Property Address:
799 MOORPARK AVENUE
MOORPARK, CA 93021

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| I40 | J. E. CLARK II CORP | 450 HIGH ST | LUST | Higher | 1792, 0.339, ESE |
| I41 | J. E. CLARK | 450 HIGH ST | LUST, Cortese, CERS | Higher | 1792, 0.339, ESE |
| I42 | J. E. CLARK II CORP | 450 HIGH | LUST, HIST CORTESE | Higher | 1792, 0.339, ESE |
| I43 | J.E. CLARK II CORP P | 412 HIGH ST | SWEEPS UST, VENTURA CO. BWT, HIST CORTESE | Higher | 1814, 0.344, ESE |
| 44 | MOORPARK UNIF. SCHOO | 30 FLORY AVE | LUST, UST, SWEEPS UST, HIST UST, CA FID UST,... | Lower | 2129, 0.403, SSE |
| 45 | ANTONIO M. PEREZ | 1363 WALNUT CANYON R | CPS-SLIC, CERS | Higher | 2191, 0.415, NNE |
| 46 | CONOCOPHILLIPS STN 2 | 13800 PRINCETON AVEN | LUST, Cortese, CERS | Higher | 2347, 0.445, East |
| 47 | MOORPARK CHEVRON | 502 LOS ANGELES AVE | CERS HAZ WASTE, CERS TANKS, VENTURA CO. BWT, HIST. | Lower | 2353, 0.446, SSW |
| 48 | SUMMIT GAS STATION - | 50 LOS ANGELES AVE. | LUST, VENTURA CO. BWT, Cortese, CERS | Lower | 2357, 0.446, South |
| 49 | PARK LANE CAR WASH | 75 PARK LN | LUST, UST, CERS HAZ WASTE, VENTURA CO. BWT,... | Lower | 2536, 0.480, SSW |
| 50 | VIKING ELECTRONICS I | 5455 ENDEAVOUR CT | ENVIROSTOR, WDS | Lower | 2855, 0.541, WSW |
| 51 | WALNUT CANYON TRACT | WALNUT CANYON RD-N O | ENVIROSTOR | Higher | 3821, 0.724, North |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

| Site | Database(s) | EPA ID |
|---|---|---|
| CITY OF MOORPARK INT<br>799 MOORPARK AVENUE<br>MOORPARK, CA 93021 | NPDES<br>Facility Status: Active<br>CIWQS | N/A |
| JAVIER MAGDALENO<br>799 MOORPARK DR<br>MOORPARK, CA 93021 | PEST LIC | N/A |
| CITY OF MOORPARK INT<br>799 MOORPARK<br>MOORPARK, CA 93021 | FINDS<br>Registry ID:: 110066578803<br>ECHO<br>Registry ID: 110066578803 | N/A |
| CITY OF MOORPARK<br>799 MOORPARK AVENUE<br>MOORPARK, CA 93021 | HWTS | N/A |
| CITY OF MOORPARK CIV<br>799 MOORPARK AVE<br>MOORPARK, CA 93021 | FINDS<br>Registry ID:: 110066147510 | N/A |
| LEONARDO MENDEZ<br>799 MOORPARK AVE<br>MOORPARK, CA 93021 | PEST LIC | N/A |
| CITY OF MOORPARK CIV<br>799 MOORPARK AVE<br>MOORPARK, CA 93021 | VENTURA CO. BWT<br>Facility Id: FA0027477<br>CERS | N/A |

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### *Lists of Federal NPL (Superfund) sites*

NPL ---------- National Priority List

# EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

***Lists of Federal Delisted NPL sites***

Delisted NPL ---------- National Priority List Deletions

***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS ---------- Corrective Action Report

***Lists of Federal RCRA TSD facilities***

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

***Lists of Federal RCRA generators***

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

***Federal institutional controls / engineering controls registries***

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

***Federal ERNS list***

ERNS ---------- Emergency Response Notification System

***Lists of state- and tribal (Superfund) equivalent sites***

RESPONSE ---------- State Response Sites

***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF ---------- Solid Waste Information System

***Lists of state and tribal leaking storage tanks***

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

***Lists of state and tribal registered storage tanks***

FEMA UST ---------- Underground Storage Tank Listing

AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

***Lists of state and tribal voluntary cleanup sites***

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

***Lists of state and tribal brownfield sites***

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS ---------- A Listing of Brownfields Sites

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT ---------- Waste Management Unit Database
HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---------- Historical Calsites Database
SCH ---------- School Property Evaluation Program
CDL ---------- Clandestine Drug Labs
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
CERS HAZ WASTE ---------- CERS HAZ WASTE
US CDL ---------- National Clandestine Laboratory Register
PFAS ---------- PFAS Contamination Site Location Listing
AQUEOUS FOAM ---------- Former Fire Training Facility Assessments Listing

***Local Lists of Registered Storage Tanks***

SWEEPS UST ---------- SWEEPS UST Listing
CA FID UST ---------- Facility Inventory Database
CERS TANKS ---------- California Environmental Reporting System (CERS) Tanks

***Local Land Records***

LIENS ---------- Environmental Liens Listing
LIENS 2 ---------- CERCLA Lien Information
DEED ---------- Deed Restriction Listing

***Records of Emergency Release Reports***

HMIRS ---------- Hazardous Materials Information Reporting System

| | |
|---|---|
| CHMIRS | California Hazardous Material Incident Report System |
| LDS | Land Disposal Sites Listing |
| MCS | Military Cleanup Sites Listing |
| SPILLS 90 | SPILLS 90 data from FirstSearch |

***Other Ascertainable Records***

| | |
|---|---|
| FUDS | Formerly Used Defense Sites |
| DOD | Department of Defense Sites |
| SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing |
| US FIN ASSUR | Financial Assurance Information |
| EPA WATCH LIST | EPA WATCH LIST |
| 2020 COR ACTION | 2020 Corrective Action Program List |
| TSCA | Toxic Substances Control Act |
| TRIS | Toxic Chemical Release Inventory System |
| SSTS | Section 7 Tracking Systems |
| ROD | Records Of Decision |
| RMP | Risk Management Plans |
| RAATS | RCRA Administrative Action Tracking System |
| PRP | Potentially Responsible Parties |
| PADS | PCB Activity Database System |
| ICIS | Integrated Compliance Information System |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS | Material Licensing Tracking System |
| COAL ASH DOE | Steam-Electric Plant Operation Data |
| COAL ASH EPA | Coal Combustion Residues Surface Impoundments List |
| PCB TRANSFORMER | PCB Transformer Registration Database |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| DOT OPS | Incident and Accident Data |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| INDIAN RESERV | Indian Reservations |
| FUSRAP | Formerly Utilized Sites Remedial Action Program |
| UMTRA | Uranium Mill Tailings Sites |
| LEAD SMELTERS | Lead Smelter Sites |
| US AIRS | Aerometric Information Retrieval System Facility Subsystem |
| US MINES | Mines Master Index File |
| ABANDONED MINES | Abandoned Mines |
| DOCKET HWC | Hazardous Waste Compliance Docket Listing |
| UXO | Unexploded Ordnance Sites |
| FUELS PROGRAM | EPA Fuels Program Registered Listing |
| CA BOND EXP. PLAN | Bond Expenditure Plan |
| CUPA Listings | CUPA Resources List |
| DRYCLEANERS | Cleaner Facilities |
| EMI | Emissions Inventory Data |
| ENF | Enforcement Action Listing |
| Financial Assurance | Financial Assurance Information Listing |
| ICE | ICE |
| HWP | EnviroStor Permitted Facilities Listing |
| HWT | Registered Hazardous Waste Transporter Database |
| MED WASTE VENTURA | Medical Waste Program List |
| MINES | Mines Site Location Listing |
| MWMP | Medical Waste Management Program Listing |
| PROC | Certified Processors Database |

Notify 65 ---------- Proposition 65 Records
UIC ---------- UIC Listing
UIC GEO ---------- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---------- Oil Wastewater Pits Listing
WDS ---------- Waste Discharge System
WIP ---------- Well Investigation Program Case List
MILITARY PRIV SITES ---------- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---------- PROJECT (GEOTRACKER)
WDR ---------- Waste Discharge Requirements Listing
NON-CASE INFO ---------- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---------- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---------- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---------- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---------- Well Stimulation Project (GEOTRACKER)
MINES MRDS ---------- Mineral Resources Data System

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of Federal RCRA generators***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1

RCRA-SQG site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***PRIMO CORP*** | ***31 POINDEXTER ST*** | ***S 0 - 1/8 (0.047 mi.)*** | ***E23*** | ***28*** |
| EPA ID:: CAD080071434 | | | | |

***Lists of state- and tribal hazardous waste facilities***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/24/2022 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| WALNUT CANYON TRACT | WALNUT CANYON RD-N O | N 1/2 - 1 (0.724 mi.) | 51 | 176 |
| Facility Id: 56490100 | | | | |
| Status: No Further Action | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***VIKING ELECTRONICS I*** | ***5455 ENDEAVOUR CT*** | ***WSW 1/2 - 1 (0.541 mi.)*** | ***50*** | ***174*** |
| Facility Id: 71003350 | | | | |
| Status: Refer: Other Agency | | | | |

***Lists of state and tribal leaking storage tanks***

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 10 LUST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| J. E. CLARK II CORP | 450 HIGH ST | ESE 1/4 - 1/2 (0.339 mi.) | I40 | 122 |
| Database: LUST REG 4, Date of Government Version: 09/07/2004 | | | | |
| Facility Id: C-98026 | | | | |
| Status: Preliminary site assessment workplan submitted | | | | |
| Global ID: T0611101184 | | | | |
| ***J. E. CLARK*** | ***450 HIGH ST*** | ***ESE 1/4 - 1/2 (0.339 mi.)*** | ***I41*** | ***123*** |
| Database: LUST REG 4, Date of Government Version: 09/07/2004 | | | | |
| Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008 | | | | |

Facility Id: C-93014
Status: Case Closed
Facility Id: 98026
Facility Id: 93014
Status: Case Closed
Global ID: T0611100842

***J. E. CLARK II CORP*** ***450 HIGH*** ***ESE 1/4 - 1/2 (0.339 mi.)*** ***I42*** ***126***
Database: LUST, Date of Government Version: 12/06/2021
Status: Completed - Case Closed
Global Id: T0611101184
Global Id: T0611100842

***CONOCOPHILLIPS STN 2*** ***13800 PRINCETON AVEN*** ***E 1/4 - 1/2 (0.445 mi.)*** ***46*** ***139***
Database: LUST, Date of Government Version: 12/06/2021
Status: Completed - Case Closed
Global Id: T10000003241

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|

***UNOCAL #1696*** ***18 HIGH ST*** ***SE 0 - 1/8 (0.023 mi.)*** ***C21*** ***23***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Facility Id: C-93041
Status: Case Closed
Facility Id: 93041
Status: Case Closed
Global ID: T0611100863

***TEXACO STATION*** ***347 MOORPARK AVE*** ***S 1/8 - 1/4 (0.192 mi.)*** ***G33*** ***79***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Facility Id: C-88066
Status: Case Closed
Facility Id: 88066
Status: Case Closed
Global ID: T0611100313

***TEXACO SS - MOORPARK*** ***347 MOORPARK AVE*** ***S 1/8 - 1/4 (0.192 mi.)*** ***G35*** ***82***
Database: LUST, Date of Government Version: 12/06/2021
Status: Completed - Case Closed
Global Id: T0611100313

***MOORPARK UNIF. SCHOO*** ***30 FLORY AVE*** ***SSE 1/4 - 1/2 (0.403 mi.)*** ***44*** ***132***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 12/06/2021
Status: Completed - Case Closed
Facility Id: C-97012
Status: Case Closed
Facility Id: 97012
Status: Case Closed
Global Id: T0611101132
Global ID: T0611101132

***SUMMIT GAS STATION -*** ***50 LOS ANGELES AVE.*** ***S 1/4 - 1/2 (0.446 mi.)*** ***48*** ***156***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 12/06/2021

Status: Completed - Case Closed
Facility Id: C-01011
Status: Preliminary site assessment underway
Facility Id: 01011
Status: Remedial action (cleanup) Underway
Global Id: T0611101370
Global ID: T0611101370

***PARK LANE CAR WASH*** ***75 PARK LN*** ***SSW 1/4 - 1/2 (0.480 mi.)*** ***49*** ***165***
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 12/06/2021
Status: Completed - Case Closed
Facility Id: 04035
Status: Case Closed
Global Id: T0611137666

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ANTONIO M. PEREZ*** | ***1363 WALNUT CANYON R*** | ***NNE 1/4 - 1/2 (0.415 mi.)*** | ***45*** | ***138*** |

Database: CPS-SLIC, Date of Government Version: 12/06/2021
Facility Status: Completed - Case Closed
Global Id: T10000000782

***Lists of state and tribal registered storage tanks***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 6 UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| FIRE STATION #42 | 782 MOORPARK AVE. | NE 0 - 1/8 (0.015 mi.) | D17 | 21 |

Database: VENTURA CO. UST, Date of Government Version: 11/29/2021
Facility Status: Inactive
Facility Id: D 1068

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CITY OF MOORPARK | CHARLES ST (X WALNUT | E 0 - 1/8 (0.016 mi.) | C19 | 22 |

Database: VENTURA CO. UST, Date of Government Version: 11/29/2021
Facility Status: Inactive

Facility Id: D 1004

| | | | | |
|---|---|---|---|---|
| ***UNOCAL #1696*** | ***18 HIGH ST*** | ***SE 0 - 1/8 (0.023 mi.)*** | ***C21*** | ***23*** |
| Database: VENTURA CO. UST, Date of Government Version: 11/29/2021<br>Facility Status: Inactive<br>Facility Id: D 1086 | | | | |
| CASCADE SPRINKLER | 177 POINDEXTER AVE | WSW 0 - 1/8 (0.061 mi.) | 24 | 31 |
| Database: VENTURA CO. UST, Date of Government Version: 11/29/2021<br>Facility Status: Inactive<br>Facility Id: D 1250 | | | | |
| CITY OF MOORPARK | 661 WALNUT ST | ESE 0 - 1/8 (0.070 mi.) | F28 | 36 |
| Database: VENTURA CO. UST, Date of Government Version: 11/29/2021<br>Facility Status: Inactive<br>Facility Id: D 1203 | | | | |
| TEXACO | 347 MOORPARK AVE. | S 1/8 - 1/4 (0.192 mi.) | G36 | 84 |
| Database: VENTURA CO. UST, Date of Government Version: 11/29/2021<br>Facility Status: Inactive<br>Facility Id: D 380 | | | | |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Landfill / Solid Waste Disposal Sites***

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 12/06/2021 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***RALPHS GROCERY #723***<br>Cert Id: RC295748.001 | ***101 W. LOS ANGELES A*** | ***S 1/4 - 1/2 (0.328 mi.)*** | ***39*** | ***89*** |

***Local Lists of Registered Storage Tanks***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MOORPARK FIRE STATIO<br>Facility Id: 00000021257 | 782 MOORPARK AVENUE | NE 0 - 1/8 (0.015 mi.) | D18 | 22 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MOORPARK TEXACO AND<br>Facility Id: 00000018623 | 347 MOORPARK AVE | S 1/8 - 1/4 (0.192 mi.) | G34 | 80 |

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/28/2022 has revealed that there are 9 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| METROLINK MOORPARK L<br>EPA ID:: CAL000401630 | 585 N MOORPARK AVE | SE 0 - 1/8 (0.002 mi.) | B14 | 18 |
| CITY OF MOORPARK<br>EPA ID:: CAH111000672 | 530 1/2 N MOORPARK A | SSE 0 - 1/8 (0.041 mi.) | E22 | 25 |
| SEACON CONSTRUCTION<br>EPA ID:: CAL000447569 | 175 POINDEXTER AVE | SSW 0 - 1/8 (0.065 mi.) | 25 | 31 |
| CE & D MABRY FAMILY<br>EPA ID:: CAC002968458 | 137 E. HIGH ST. | ESE 0 - 1/8 (0.067 mi.) | F26 | 33 |
| GAIL COVATE | 80 1ST STREET | SSE 0 - 1/8 (0.098 mi.) | 30 | 37 |
| ***RANCHO CLEANERS***<br>EPA ID:: CAD981968241 | ***419 MOORPARK AVE*** | ***SSE 1/8 - 1/4 (0.126 mi.)*** | ***31*** | ***39*** |
| GIFFORD RUNKLE | 393 MCFADDEN AVENUE | S 1/8 - 1/4 (0.151 mi.) | 32 | 76 |
| FRANCISCO AND DELIA | 507 MILLARD ST | ESE 1/8 - 1/4 (0.203 mi.) | H37 | 84 |
| ANN DOWD<br>EPA ID:: CAC003015546 | 445 MILLARD ST | SE 1/8 - 1/4 (0.225 mi.) | H38 | 87 |

VENTURA CO. BWT: The Business Plan, Hazardous Waste Producers, & Operating Underground Tanks Site Address List indicates by site address whether EHD has Business Plan (BP), Waste Producer (W), and/or Underground Tank (T) Information.

A review of the VENTURA CO. BWT list, as provided by EDR, and dated 12/27/2021 has revealed that there is 1 VENTURA CO. BWT site within approximately 0.001 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| JEMCO PLUMBING INC<br>Facility Id: BP 919 | 675 MOORPARK AVE | 0 - 1/8 (0.000 mi.) | A9 | 17 |

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/16/2021 has revealed that there are 7 Cortese sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***J. E. CLARK***<br>Cleanup Status: COMPLETED - CASE CLOSED | ***450 HIGH ST*** | ***ESE 1/4 - 1/2 (0.339 mi.)*** | ***I41*** | ***123*** |
| ***CONOCOPHILLIPS STN 2*** | ***13800 PRINCETON AVEN*** | ***E 1/4 - 1/2 (0.445 mi.)*** | ***46*** | ***139*** |

Cleanup Status: COMPLETED - CASE CLOSED

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***UNOCAL #1696*** | ***18 HIGH ST*** | ***SE 0 - 1/8 (0.023 mi.)*** | ***C21*** | ***23*** |
| Cleanup Status: COMPLETED - CASE CLOSED | | | | |
| ***TEXACO SS - MOORPARK*** | ***347 MOORPARK AVE*** | ***S 1/8 - 1/4 (0.192 mi.)*** | ***G35*** | ***82*** |
| Cleanup Status: COMPLETED - CASE CLOSED | | | | |
| ***MOORPARK UNIF. SCHOO*** | ***30 FLORY AVE*** | ***SSE 1/4 - 1/2 (0.403 mi.)*** | ***44*** | ***132*** |
| Cleanup Status: COMPLETED - CASE CLOSED | | | | |
| ***SUMMIT GAS STATION -*** | ***50 LOS ANGELES AVE.*** | ***S 1/4 - 1/2 (0.446 mi.)*** | ***48*** | ***156*** |
| Cleanup Status: COMPLETED - CASE CLOSED | | | | |
| ***PARK LANE CAR WASH*** | ***75 PARK LN*** | ***SSW 1/4 - 1/2 (0.480 mi.)*** | ***49*** | ***165*** |
| Cleanup Status: COMPLETED - CASE CLOSED | | | | |

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency. This database begins with calendar year 1993.

A review of the HAZNET list, as provided by EDR, and dated 12/31/2019 has revealed that there is 1 HAZNET site within approximately 0.001 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***CITY OF MOORPARK/RED*** | ***661 MOORPARK AVE*** | ***0 - 1/8 (0.000 mi.)*** | ***A8*** | ***15*** |
| GEPAID: CAC002646044 | | | | |

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5 HIST CORTESE sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***J. E. CLARK II CORP*** | ***450 HIGH*** | ***ESE 1/4 - 1/2 (0.339 mi.)*** | ***I42*** | ***126*** |
| Reg Id: C-98026 | | | | |
| ***J.E. CLARK II CORP P*** | ***412 HIGH ST*** | ***ESE 1/4 - 1/2 (0.344 mi.)*** | ***I43*** | ***130*** |
| Reg Id: C-93014 | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***TEXACO SS - MOORPARK*** | ***347 MOORPARK AVE*** | ***S 1/8 - 1/4 (0.192 mi.)*** | ***G35*** | ***82*** |
| Reg Id: C-88066 | | | | |
| ***MOORPARK UNIF. SCHOO*** | ***30 FLORY AVE*** | ***SSE 1/4 - 1/2 (0.403 mi.)*** | ***44*** | ***132*** |
| Reg Id: C-97012 | | | | |
| ***MOORPARK CHEVRON*** | ***502 LOS ANGELES AVE*** | ***SSW 1/4 - 1/2 (0.446 mi.)*** | ***47*** | ***140*** |

Reg Id: C-88067

PEST LIC: A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

A review of the PEST LIC list, as provided by EDR, and dated 11/30/2021 has revealed that there are 2 PEST LIC sites within approximately 0.001 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| BUG MECHANIC PEST CO | 100 W HIGH ST #300 | 0 - 1/8 (0.000 mi.) | B11 | 17 |
| DENNIS A GOTTLIEB | 100 WEST HIGH ST #30 | 0 - 1/8 (0.000 mi.) | B12 | 18 |

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 6 EDR Hist Auto sites within approximately 0.125 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| PATTON S UNION STATI | 589 MOORPARK AVE | SE 0 - 1/8 (0.002 mi.) | C13 | 18 |
| TOWRY S SHIRLEY CHEV | 499 MOORPARK AVE | SE 0 - 1/8 (0.005 mi.) | B15 | 21 |
| AA MOORPARK TRANSMIS | 21 W HIGH ST | SSE 0 - 1/8 (0.011 mi.) | B16 | 21 |
| A & P ARCO | 18 E HIGH ST | SE 0 - 1/8 (0.017 mi.) | C20 | 23 |
| MOORPARK GARAGE | 661 WALNUT ST | ESE 0 - 1/8 (0.070 mi.) | F27 | 36 |
| DICK S GARAGE | 690 WALNUT ST | E 0 - 1/8 (0.084 mi.) | F29 | 36 |

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist

# EXECUTIVE SUMMARY

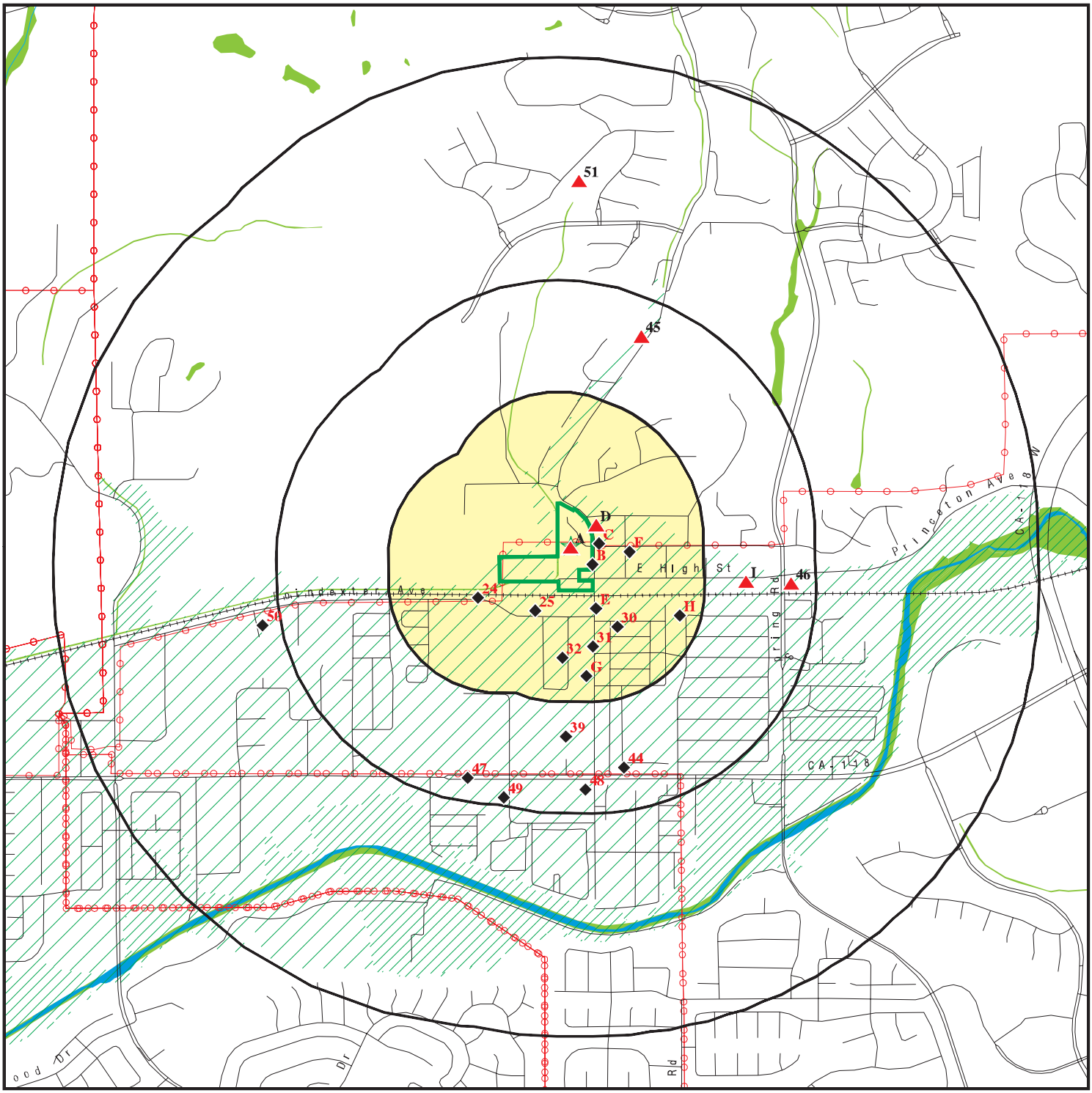
Cleaner site within approximately 0.125 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MOORPARK CLEANERS | 675 MOORPARK AVE | 0 - 1/8 (0.000 mi.) | A10 | 17 |

# EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 6987243.2S




- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | Moorpark Civic Center Master Plan Project | CLIENT: | Psomas |
| ADDRESS: | 799 Moorpark Avenue<br>Moorpark CA 93021 | CONTACT: | Jsnet Powell |
| LAT/LONG: | 34.286393 / 118.883033 | INQUIRY #: | 6987243.2s |
| | | DATE: | May 19, 2022 4:09 pm |

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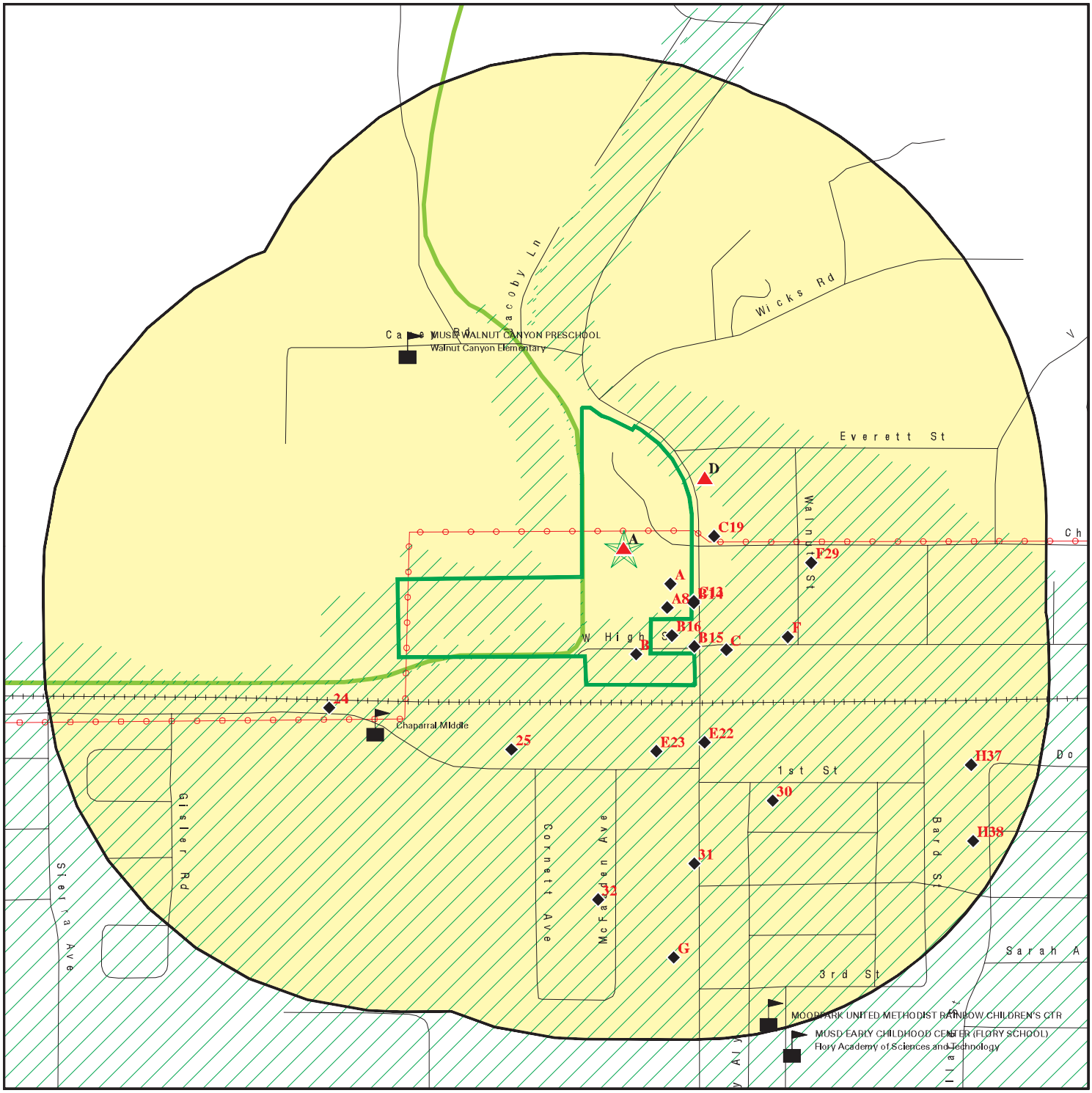
# DETAIL MAP - 6987243.2S




0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | Moorpark Civic Center Master Plan Project | CLIENT: | Psomas |
| ADDRESS: | 799 Moorpark Avenue<br>Moorpark CA 93021 | CONTACT: | Jsnet Powell |
| LAT/LONG: | 34.286393 / 118.883033 | INQUIRY #: | 6987243.2s |
| | | DATE: | May 19, 2022 4:12 pm |

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# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Lists of Federal NPL (Superfund) sites*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal Delisted NPL sites*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal sites subject to CERCLA removals and CERCLA orders*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal CERCLA sites with NFRAP*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA facilities undergoing Corrective Action*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal RCRA TSD facilities*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA generators*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| RCRA-VSQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Lists of state- and tribal (Superfund) equivalent sites*** | | | | | | | | |
| RESPONSE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of state- and tribal hazardous waste facilities*** | | | | | | | | |
| ENVIROSTOR | 1.000 | | 0 | 0 | 0 | 2 | NR | 2 |
| ***Lists of state and tribal landfills and solid waste disposal facilities*** | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| ***Lists of state and tribal leaking storage tanks*** | | | | | | | | |
| LUST | 0.500 | | 1 | 2 | 7 | NR | NR | 10 |
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| CPS-SLIC | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| ***Lists of state and tribal registered storage tanks*** | | | | | | | | |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UST | 0.250 | | 5 | 1 | NR | NR | NR | 6 |
| AST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Lists of state and tribal voluntary cleanup sites*** | | | | | | | | |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal brownfield sites*** | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| WMUDS/SWAT | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SWRCY | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| HAULERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| IHS OPEN DUMPS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST Cal-Sites | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCH | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Toxic Pits | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| CERS HAZ WASTE | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| US CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PFAS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| AQUEOUS FOAM | TP | | NR | NR | NR | NR | NR | 0 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| SWEEPS UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| HIST UST | 0.250 | | 1 | 1 | NR | NR | NR | 2 |
| CA FID UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| CERS TANKS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Local Land Records*** | | | | | | | | |
| LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LIENS 2 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DEED | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CHMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MCS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SPILLS 90 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 5 | 4 | NR | NR | NR | 9 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| TRIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SSTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RAATS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PRP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PADS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ICIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MLTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH DOE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RADINFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOT OPS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN RESERV | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US AIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FINDS | 0.001 | 2 | 0 | NR | NR | NR | NR | 2 |
| DOCKET HWC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ECHO | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CA BOND EXP. PLAN | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| VENTURA CO. BWT | 0.001 | 1 | 1 | NR | NR | NR | NR | 2 |
| Cortese | 0.500 | | 1 | 1 | 5 | NR | NR | 7 |
| CUPA Listings | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EMI | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ENF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Financial Assurance | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HAZNET | 0.001 | | 1 | NR | NR | NR | NR | 1 |
| ICE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST CORTESE | 0.500 | | 0 | 1 | 4 | NR | NR | 5 |
| HWP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| HWT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MED WASTE VENTURA | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MWMP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NPDES | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| PEST LIC | 0.001 | 2 | 2 | NR | NR | NR | NR | 4 |
| PROC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Notify 65 | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UIC GEO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WASTEWATER PITS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| WDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WIP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MILITARY PRIV SITES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROJECT | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WDR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CIWQS | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| CERS | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| NON-CASE INFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| OTHER OIL GAS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROD WATER PONDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SAMPLING POINT | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WELL STIM PROJ | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HWTS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| MINES MRDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| EDR Hist Auto | 0.125 | | 6 | NR | NR | NR | NR | 6 |
| EDR Hist Cleaner | 0.125 | | 1 | NR | NR | NR | NR | 1 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| RGA LF | 0.001 | | 0 | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| RGA LUST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| - Totals -- | | 10 | 25 | 10 | 18 | 2 | 0 | 65 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1** **CITY OF MOORPARK INTEGRATED VECTOR MANAGEMENT PROG** **NPDES** **S120027286**
**Target Property** **799 MOORPARK AVENUE** **CIWQS** **N/A**
**MOORPARK, CA 93021**

**Site 1 of 10 in cluster A**

**Actual: 523 ft.**

NPDES:

| | |
|---|---|
| Name: | CITY OF MOORPARK INTEGRATED VECTOR MANAGEMENT PROGRAM |
| Address: | 799 MOORPARK AVENUE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Facility Status: | Active |
| NPDES Number: | CAG990004 |
| Region: | 4 |
| Agency Number: | 30865 |
| Regulatory Measure ID: | 379931 |
| Place ID: | 769123 |
| Order Number: | 2016-0039-DWQ |
| WDID: | 4 56AP00001 |
| Regulatory Measure Type: | Enrollee - NPDES |
| Program Type: | NPDNONMUNIPRCS |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 06/18/2011 |
| Termination Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | 06/30/2021 |
| Discharge Address: | 799 Moorpark Avenue |
| Discharge Name: | Moorpark City |
| Discharge City: | Moorpark |
| Discharge State: | CA |
| Discharge Zip: | 93021 |
| Status: | Not reported |
| Status Date: | Not reported |
| Operator Name: | Not reported |
| Operator Address: | Not reported |
| Operator City: | Not reported |
| Operator State: | Not reported |
| Operator Zip: | Not reported |

CIWQS:

| | |
|---|---|
| Name: | CITY OF MOORPARK INTEGRATED VECTOR MANAGEMENT PROGRAM |
| Address: | 799 MOORPARK AVENUE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Agency: | Moorpark City |
| Agency Address: | 799 Moorpark Avenue, Moorpark, CA 93021 |
| Place/Project Type: | Service/Commercial Site, NEC |
| SIC/NAICS: | 7342 |
| Region: | 4 |
| Program: | NPDNONMUNIPRCS |
| Regulatory Measure Status: | Active |
| Regulatory Measure Type: | Enrollee - NPDES |
| Order Number: | 2016-0039-DWQ |
| WDID: | 4 56AP00001 |
| NPDES Number: | CAG990004 |
| Adoption Date: | Not reported |
| Effective Date: | 06/18/2011 |
| Termination Date: | Not reported |
| Expiration/Review Date: | 06/30/2021 |
| Design Flow: | Not reported |
| Major/Minor: | Minor |
| Complexity: | C |

**CITY OF MOORPARK INTEGRATED VECTOR MANAGEMENT PROGRAM (Continued)** **S120027286**

TTWQ: 3
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: Not reported
Longitude: Not reported

---

**A2** **JAVIER MAGDALENO** **PEST LIC** **S117631237**
**Target** **799 MOORPARK DR** **N/A**
**Property** **MOORPARK, CA 93021**

**Site 2 of 10 in cluster A**

**Actual:** **523 ft.**

PEST LIC:
Name: JAVIER MAGDALENO
Address: 799 MOORPARK DR
City,State,Zip: MOORPARK, CA 93021
Facility Type: QAC
Categories: C
License No: 121765
Issued or Renewed Date: 01/01/2020
Expiration Date: 12/31/2021

---

**A3** **CITY OF MOORPARK INTEGRATED VECTOR MANAGEMENT PROG** **FINDS** **1023360727**
**Target** **799 MOORPARK** **ECHO** **N/A**
**Property** **MOORPARK, CA 93021**

**Site 3 of 10 in cluster A**

**Actual:** **523 ft.**

FINDS:
Registry ID: 110066578803

Click Here:

Environmental Interest/Information System:
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1023360727
Registry ID: 110066578803
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110066578803
Name: CITY OF MOORPARK INTEGRATED VECTOR MANAGEMENT PROGRAM
Address: 799 MOORPARK
City,State,Zip: MOORPARK, CA 93021

**A4** **CITY OF MOORPARK** **HWTS** **S124649780**
**Target** **799 MOORPARK AVENUE** **N/A**
**Property** **MOORPARK, CA 93021**

**Site 4 of 10 in cluster A**

**Actual:** **523 ft.**

HWTS:

| | |
|---|---|
| Name: | CITY OF MOORPARK |
| Address: | 799 MOORPARK AVENUE |
| Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 93021 |
| EPA ID: | CAC002896301 |
| Inactive Date: | 05/10/2017 |
| Create Date: | 02/07/2017 |
| Last Act Date: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | 799 MOORPARK AVENUE |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | MOORPARK, CA 93021 |
| Owner Name: | CITY OF MOORPARK |
| Owner Address: | 799 MOORPARK AVENUE |
| Owner Address 2: | Not reported |
| Owner City,State,Zip: | MOORPARK, CA 93021 |
| Contact Name: | BRIAN CHONG |
| Contact Address: | 799 MOORPARK AVENUE |
| Contact Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 93021 |
| Facility Status: | Inactive |
| Facility Type: | TEMPORARY |
| Category: | STATE |
| Latitude: | 34.287223 |
| Longitude: | -118.882372 |

NAICS:

| | |
|---|---|
| EPA ID: | CAC002896301 |
| Create Date: | 2017-02-07 09:13:57.913 |
| NAICS Code: | 92119 |
| NAICS Description: | Other General Government Support |
| Issued EPA ID Date: | 2017-02-07 09:13:57.91300 |
| Inactive Date: | 2017-05-10 03:00:28.76300 |
| Facility Name: | CITY OF MOORPARK |
| Facility Address: | 799 MOORPARK AVENUE |
| Facility Address 2: | Not reported |
| Facility City: | MOORPARK |
| Facility County: | Not reported |
| Facility State: | CA |
| Facility Zip: | 93021 |

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**A5** **CITY OF MOORPARK CIVIC CENTER** **FINDS** **1023321038**
**Target** **799 MOORPARK AVE** **N/A**
**Property** **MOORPARK, CA 93021**

**Site 5 of 10 in cluster A**

**Actual:** **523 ft.**

FINDS:

| | |
|---|---|
| Registry ID: | 110066147510 |

Click Here:

**CITY OF MOORPARK CIVIC CENTER (Continued)** **1023321038**

Environmental Interest/Information System:
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

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**A6** **LEONARDO MENDEZ** **PEST LIC** **S117631238**
**Target** **799 MOORPARK AVE** **N/A**
**Property** **MOORPARK, CA 93021**

**Site 6 of 10 in cluster A**

**Actual:** **523 ft.**

PEST LIC:

| | |
|---|---|
| Name: | LEONARDO MENDEZ |
| Address: | 799 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Facility Type: | QAC |
| Categories: | C |
| License No: | 121766 |
| Issued or Renewed Date: | 01/01/2020 |
| Expiration Date: | 12/31/2021 |

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**A7** **CITY OF MOORPARK CIVIC CENTER** **VENTURA CO. BWT** **S111293233**
**Target** **799 MOORPARK AVE** **CERS** **N/A**
**Property** **MOORPARK, CA 93021**

**Site 7 of 10 in cluster A**

**Actual:** **523 ft.**

VENTURA CO. BWT:

| | |
|---|---|
| Name: | CITY OF MOORPARK CIVIC CENTER |
| Address: | 799 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA |
| Facility ID: | FA0027477 |
| Program: | BUSINESS PLAN |

CERS:

| | |
|---|---|
| Name: | CITY OF MOORPARK CIVIC CENTER |
| Address: | 799 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 106215 |
| CERS ID: | 10338535 |
| CERS Description: | Chemical Storage Facilities |

Violations:

| | |
|---|---|
| Site ID: | 106215 |
| Site Name: | CITY OF MOORPARK CIVIC CENTER |
| Violation Date: | 01-24-2019 |
| Citation: | HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4) |
| Violation Description: | Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years. |
| Violation Notes: | Returned to compliance on 04/15/2019. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HMRRP |
| Violation Source: | CERS, |

**CITY OF MOORPARK CIVIC CENTER (Continued)** **S111293233**

Site ID: 106215
Site Name: CITY OF MOORPARK CIVIC CENTER
Violation Date: 01-11-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 03/04/2019.
Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-11-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-18-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-30-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-08-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-13-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP

**CITY OF MOORPARK CIVIC CENTER (Continued)** **S111293233**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-24-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 106215
Facility Name: CITY OF MOORPARK CIVIC CENTER
Env Int Type Code: HMBP
Program ID: 10338535
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 34.287180
Longitude: -118.882320

Affiliation:
Affiliation Type Desc: Operator
Entity Name: CITY OF MOORPARK - FACILITIES DIV
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (805) 517-6200,

Affiliation Type Desc: CUPA District
Entity Name: Ventura County Environmental Health
Entity Title: Not reported
Affiliation Address: 800 South Victoria Avenue
Affiliation City: Ventura
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93009
Affiliation Phone: (805) 654-2813,

Affiliation Type Desc: Document Preparer
Entity Name: Robert Valery
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: CITY CLERKS OFFICE
Entity Title: Not reported
Affiliation Address: 799 MOORPARK AVE

**CITY OF MOORPARK CIVIC CENTER (Continued)** **S111293233**

| | |
|---|---|
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 93021 |
| Affiliation Phone: | , |
| Affiliation Type Desc: | Legal Owner |
| Entity Name: | CITY OF MOORPARK |
| Entity Title: | Not reported |
| Affiliation Address: | 799 MOORPARK AVE |
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 93021 |
| Affiliation Phone: | (805) 517-6200, |
| Affiliation Type Desc: | Facility Mailing Address |
| Entity Name: | Mailing Address |
| Entity Title: | Not reported |
| Affiliation Address: | 799 MOORPARK AVE |
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 93021 |
| Affiliation Phone: | , |
| Affiliation Type Desc: | Identification Signer |
| Entity Name: | Robert Valery |
| Entity Title: | Facilities Supervisor |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |
| Affiliation Type Desc: | Parent Corporation |
| Entity Name: | CITY OF MOORPARK CIVIC CENTER |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |

---

**A8** **CITY OF MOORPARK/REDEV** **HAZNET S112980248**
**661 MOORPARK AVE** **HWTS N/A**
**< 1/8** **MOORPARK, CA 93021**
**1 ft.**

**Site 8 of 10 in cluster A**

**Relative:** HAZNET:
**Lower**

| | |
|---|---|
| Name: | CITY OF MOORPARK/REDEV |
| Address: | 661 MOORPARK AVE |
| Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 93021 |

**Actual:**
**515 ft.**

**CITY OF MOORPARK/REDEV (Continued)** **S112980248**

Contact: JENNIFER MELLON
Telephone: 8055176247
Mailing Name: Not reported
Mailing Address: 799 MOORPARK AVE

Year: 2009
Gepaid: CAC002646044
TSD EPA ID: CAD097030993
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1668

Additional Info:
Year: 2009
Gen EPA ID: CAC002646044

Shipment Date: 20090902
Creation Date: 10/13/2009 18:30:21
Receipt Date: 20090911
Manifest ID: 005234515JJK
Trans EPA ID: CAR000175638
Trans Name: L&H CONSULTING INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD097030993
Trans Name: SIEMENS WATER TECHNOLOGIES
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 223 - Unspecified oil-containing waste
RCRA Code: Not reported
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.1668
Waste Quantity: 40
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

HWTS:
Name: CITY OF MOORPARK/REDEV
Address: 661 MOORPARK AVE
Address 2: Not reported
City,State,Zip: MOORPARK, CA 93021
EPA ID: CAC002646044
Inactive Date: 03/02/2010
Create Date: 09/02/2009
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 799 MOORPARK AVE
Mailing Address 2: Not reported
Mailing City,State,Zip: MOORPARK, CA 93021

**CITY OF MOORPARK/REDEV (Continued)** **S112980248**

| | |
|---|---|
| Owner Name: | CITY OF MOORPARK |
| Owner Address: | 799 MOORPARK AVE |
| Owner Address 2: | Not reported |
| Owner City,State,Zip: | MOORPARK, CA 93021 |
| Contact Name: | JENNIFER MELLON |
| Contact Address: | 799 MOORPARK AVE |
| Contact Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 93021 |
| Facility Status: | Inactive |
| Facility Type: | TEMPORARY |
| Category: | STATE |
| Latitude: | 34.286245 |
| Longitude: | -118.882128 |

---

**A9** **JEMCO PLUMBING INC** **VENTURA CO. BWT** **S118098671**
**675 MOORPARK AVE** **N/A**
**< 1/8** **MOORPARK, CA**
**1 ft.**

**Site 9 of 10 in cluster A**

**Relative: Lower**
**Actual: 518 ft.**

VENTURA CO. BWT:

| | |
|---|---|
| Name: | JEMCO PLUMBING INC |
| Address: | 675 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA |
| Facility ID: | BP 919 |
| Program: | Not reported |

---

**A10** **MOORPARK CLEANERS** **EDR Hist Cleaner** **1009145343**
**675 MOORPARK AVE** **N/A**
**< 1/8** **MOORPARK, CA**
**1 ft.**

**Site 10 of 10 in cluster A**

**Relative: Lower**
**Actual: 518 ft.**

EDR Hist Cleaner

| Year: | Name: | Type: |
|---|---|---|
| 1957 | MOORPARK CLEANERS | CLEANERS AND DYERS |
| 1961 | MOORPARK CLEANERS | CLEANERS AND DYERS |
| 1969 | TRICKEY JAMES A | Drycleaning Plants, Except Rugs |
| 1970 | TRICKEY JAMES A | Drycleaning Plants, Except Rugs |
| 1971 | TRICKEY JAMES A | Drycleaning Plants, Except Rugs |
| 1972 | TRICKEY JAMES A | Drycleaning Plants, Except Rugs |

---

**B11** **BUG MECHANIC PEST CONTROL & LANDSCAPE SPRAYING** **PEST LIC** **S127513349**
**100 W HIGH ST #300** **N/A**
**< 1/8** **MOORPARK, CA 93021**
**1 ft.**

**Site 1 of 5 in cluster B**

**Relative: Lower**
**Actual: 513 ft.**

PEST LIC:

| | |
|---|---|
| Name: | BUG MECHANIC PEST CONTROL & LANDSCAPE SPRAYING |
| Address: | 100 W HIGH ST #300 |
| City,State,Zip: | MOORPARK, CA 93021 |
| Facility Type: | PCM |
| Categories: | Not reported |

**BUG MECHANIC PEST CONTROL & LANDSCAPE SPRAYING (Continued)** **S127513349**

License No: 39584
Issued or Renewed Date: 03/26/2021
Expiration Date: 12/31/2022

---

**B12** **DENNIS A GOTTLIEB** **PEST LIC** **S127512054**
**100 WEST HIGH ST #300** **N/A**
**< 1/8** **MOORPARK, CA 93021**
**1 ft.**

**Site 2 of 5 in cluster B**

**Relative:** PEST LIC:
**Lower**
Name: DENNIS A GOTTLIEB
**Actual:** Address: 100 WEST HIGH ST #300
**513 ft.** City,State,Zip: MOORPARK, CA 93021
Facility Type: QAL
Categories: ABC
License No: 131674
Issued or Renewed Date: 03/25/2021
Expiration Date: 12/31/2022

---

**C13** **PATTON S UNION STATION** **EDR Hist Auto** **1009027864**
**SE** **589 MOORPARK AVE** **N/A**
**< 1/8** **MOORPARK, CA**
**0.002 mi.**
**8 ft.** **Site 1 of 4 in cluster C**

**Relative:** EDR Hist Auto
**Lower**
Year: Name: Type:
**Actual:** 1961 PATTON S UNION STATION GASOLINE STATIONS
**517 ft.**

---

**B14** **METROLINK MOORPARK LAYOVER** **RCRA NonGen / NLR** **1024847015**
**SE** **585 N MOORPARK AVE** **CAL000401630**
**< 1/8** **MOORPARK, CA 93021**
**0.002 mi.**
**8 ft.** **Site 3 of 5 in cluster B**

**Relative:** RCRA NonGen / NLR:
**Lower**
Date Form Received by Agency: 20141027
**Actual:** Handler Name: METROLINK MOORPARK LAYOVER
**517 ft.** Handler Address: 585 N MOORPARK AVE
Handler City,State,Zip: MOORPARK, CA 93021
EPA ID: CAL000401630
Contact Name: TRACY BERGE
Contact Address: 2704 SOUTH GAREY AVENUE
Contact City,State,Zip: POMONA, CA 91767
Contact Telephone: 909-451-2889
Contact Fax: 000-000-0000
Contact Email: BERGET@SCRRA.NET
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported

**METROLINK MOORPARK LAYOVER (Continued)** **1024847015**

| | |
|---|---|
| Accessibility: | Not reported |
| Active Site Indicator: | Handler Activities |
| State District Owner: | Not reported |
| State District: | Not reported |
| Mailing Address: | ONE GATEWAY PLAZA |
| Mailing City,State,Zip: | LOS ANGELES, CA 90012 |
| Owner Name: | SO CAL REG RAIL AUTH |
| Owner Type: | Other |
| Operator Name: | TRACY BERGE |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | Yes |
| Universal Waste Destination Facility: | Yes |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |

**METROLINK MOORPARK LAYOVER (Continued)** **1024847015**

| | |
|---|---|
| Handler Date of Last Change: | 20180906 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | SO CAL REG RAIL AUTH |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | ONE GATEWAY PLAZA |
| Owner/Operator City,State,Zip: | LOS ANGELES, CA 90012 |
| Owner/Operator Telephone: | 213-452-0200 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | TRACY BERGE |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 2704 SOUTH GAREY AVENUE |
| Owner/Operator City,State,Zip: | POMONA, CA 91767 |
| Owner/Operator Telephone: | 909-451-2889 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20141027 |
| Handler Name: | METROLINK MOORPARK LAYOVER |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 485999 |
| NAICS Description: | ALL OTHER TRANSIT AND GROUND PASSENGER TRANSPORTATION |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

**METROLINK MOORPARK LAYOVER (Continued)** **1024847015**

Evaluation Action Summary:
Evaluations: No Evaluations Found

---

**B15** **TOWRY S SHIRLEY CHEVRON SERVICE** **EDR Hist Auto** **1009026729**
**SE** **499 MOORPARK AVE** **N/A**
**< 1/8** **MOORPARK, CA**
**0.005 mi.**
**25 ft.** **Site 4 of 5 in cluster B**

**Relative:** EDR Hist Auto
**Lower**

**Actual:**
**515 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1957 | TOWRY S SHIRLEY CHEVRON SERVICE | GASOLINE STATIONS |
| 1961 | TOWRY S SHIRLEY CHEVRON SERVICE | GASOLINE STATIONS |
| 1970 | COLLINS BROS CHEVRON SERVICE | Gasoline Service Stations |
| 1971 | COLLINS BROS CHEVRON SERVICE | Gasoline Service Stations |

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**B16** **AA MOORPARK TRANSMISSION** **EDR Hist Auto** **1022099546**
**SSE** **21 W HIGH ST** **N/A**
**< 1/8** **MOORPARK, CA 93021**
**0.011 mi.**
**60 ft.** **Site 5 of 5 in cluster B**

**Relative:** EDR Hist Auto
**Lower**

**Actual:**
**515 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1971 | WOOD FRANK P | General Automotive Repair Shops |
| 1989 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1991 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1992 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1993 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1994 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1995 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1996 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1997 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1998 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 1999 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 2000 | CHRYSLER CONNECTION | General Automotive Repair Shops |
| 2000 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 2001 | AA MOORPARK TRANSMISSION | Automotive Transmission Repair Shops |
| 2001 | CHRYSLER CONNECTION | General Automotive Repair Shops |
| 2002 | CHRYSLER CONNECTION | General Automotive Repair Shops |

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**D17** **FIRE STATION #42** **UST** **U002244101**
**NE** **782 MOORPARK AVE.** **N/A**
**< 1/8** **MOORPARK, CA**
**0.015 mi.**
**77 ft.** **Site 1 of 2 in cluster D**

**Relative:** VENTURA CO. UST:
**Higher**

**Actual:**
**528 ft.**

| | |
|---|---|
| Name: | FIRE STATION #42 |
| Address: | 782 MOORPARK AVE. |
| City: | MOORPARK |

**FIRE STATION #42 (Continued)** **U002244101**

Facility ID: D 1068
Facility Status: Inactive

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**D18** **MOORPARK FIRE STATION** **HIST UST** **U001567276**
**NE** **782 MOORPARK AVENUE** **N/A**
**< 1/8** **MOORPARK, CA 91320**
**0.015 mi.**
**77 ft.** **Site 2 of 2 in cluster D**

**Relative:**
**Higher**

**Actual:**
**528 ft.**

HIST UST:

| | |
|---|---|
| Name: | MOORPARK FIRE STATION |
| Address: | 782 MOORPARK AVENUE |
| City,State,Zip: | MOORPARK, CA 91320 |
| File Number: | 0002D0D1 |
| URL: | http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002D0D1.pdf |
| Region: | STATE |
| Facility ID: | 00000021257 |
| Facility Type: | Other |
| Other Type: | FIRE STATION |
| Contact Name: | OFFICER IN CHARGE |
| Telephone: | 8054843601 |
| Owner Name: | VENTURA COUNTY FIRE PROTECTION |
| Owner Address: | 275 EAST PLEASANT VALLEY ROAD |
| Owner City,St,Zip: | CAMARILLO, CA 93010 |
| Total Tanks: | 0002 |
| | |
| Tank Num: | 001 |
| Container Num: | 2. |
| Year Installed: | 1982 |
| Tank Capacity: | 00001000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |
| | |
| Tank Num: | 002 |
| Container Num: | 30 |
| Year Installed: | Not reported |
| Tank Capacity: | 00001000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | UNLEADED |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |

Click here for Geo Tracker PDF:

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**C19** **CITY OF MOORPARK** **UST** **U003187589**
**East** **CHARLES ST (X WALNUT S** **N/A**
**< 1/8** **MOORPARK, CA**
**0.016 mi.**
**83 ft.** **Site 2 of 4 in cluster C**

**Relative:**
**Lower**

**Actual:**
**522 ft.**

VENTURA CO. UST:

| | |
|---|---|
| Name: | CITY OF MOORPARK |
| Address: | CHARLES ST (X WALNUT S |
| City: | MOORPARK |

**CITY OF MOORPARK (Continued)** **U003187589**

Facility ID: D 1004
Facility Status: Inactive

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**C20** **A & P ARCO** **EDR Hist Auto** **1020331398**
**SE** **18 E HIGH ST** **N/A**
**< 1/8** **MOORPARK, CA 93021**
**0.017 mi.**
**88 ft.** **Site 3 of 4 in cluster C**

**Relative:** EDR Hist Auto
**Lower**

**Actual:** Year: Name: Type:
**515 ft.** 1976 A & P ARCO Gasoline Service Stations

---

**C21** **UNOCAL #1696** **LUST** **U002169192**
**SE** **18 HIGH ST** **UST** **N/A**
**< 1/8** **MOORPARK, CA** **Cortese**
**0.023 mi.** **CERS**
**120 ft.** **Site 4 of 4 in cluster C**

**Relative:** LUST REG 4:
**Lower**

**Actual:**
**516 ft.**

| | | |
|---|---|---|
| Region: | 4 | |
| Regional Board: | 04 | |
| County: | Ventura | |
| Facility Id: | C-93041 | |
| Status: | Case Closed | |
| Substance: | Waste Oil | |
| Substance Quantity: | Not reported | |
| Local Case No: | 93041 | |
| Case Type: | Soil | |
| Abatement Method Used at the Site: | | Not reported |
| Global ID: | T0611100863 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 56000L | |
| Cross Street: | Not reported | |
| Enforcement Type: | EF | |
| Date Leak Discovered: | 11/11/1993 | |
| Date Leak First Reported: | | 11/11/1993 |
| Date Leak Record Entered: | Not reported | |
| Date Confirmation Began: | 11/11/1993 | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | Not reported |
| Date the Case was Closed: | | 5/2/1994 |
| How Leak Discovered: | Not reported | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | Not reported | |
| Leak Source: | Not reported | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 5317.88680898055597197380610 44 |
| Source of Cleanup Funding: | | F |
| Preliminary Site Assessment Workplan Submitted: | | 11/18/1993 |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |

**UNOCAL #1696 (Continued)** **U002169192**

| | |
|---|---|
| Remediation Plan Submitted: | Not reported |
| Remedial Action Underway: | Not reported |
| Post Remedial Action Monitoring Began: | Not reported |
| Enforcement Action Date: | 11/18/1993 |
| Historical Max MTBE Date: | Not reported |
| Hist Max MTBE Conc in Groundwater: | Not reported |
| Hist Max MTBE Conc in Soil: | Not reported |
| Significant Interim Remedial Action Taken: | Not reported |
| GW Qualifier: | Not reported |
| Soil Qualifier: | Not reported |
| Organization: | Not reported |
| Owner Contact: | Not reported |
| Responsible Party: | UNOCAL CERT |
| RP Address: | Not reported |
| Program: | LUST |
| Lat/Long: | 34.2854424 / -1 |
| Local Agency Staff: | EHD |
| Beneficial Use: | Not reported |
| Priority: | Not reported |
| Cleanup Fund Id: | Not reported |
| Suspended: | Not reported |
| Assigned Name: | Not reported |
| Summary: | Not reported |

VENTURA CO. LUST:

| | |
|---|---|
| Name: | UNOCAL #1696 |
| Address: | 18 HIGH ST |
| City: | MOORPARK |
| Region: | VENTURA |
| Facility ID: | 93041 |
| Status: | Case Closed |

VENTURA CO. UST:

| | |
|---|---|
| Name: | UNOCAL #1696 |
| Address: | 18 HIGH ST |
| City: | MOORPARK |
| Facility ID: | D 1086 |
| Facility Status: | Inactive |

CORTESE:

| | |
|---|---|
| Name: | UNOCAL #1696 |
| Address: | 18 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Region: | CORTESE |
| Envirostor Id: | Not reported |
| Global ID: | T0611100863 |
| Site/Facility Type: | LUST CLEANUP SITE |
| Cleanup Status: | COMPLETED - CASE CLOSED |
| Status Date: | Not reported |
| Site Code: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |

**UNOCAL #1696 (Continued)** **U002169192**

| | |
|---|---|
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

CERS:

| | |
|---|---|
| Name: | UNOCAL #1696 |
| Address: | 18 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 255507 |
| CERS ID: | T0611100863 |
| CERS Description: | Leaking Underground Storage Tank Cleanup Site |

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | Regional Board Caseworker |
| Entity Name: | DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4) |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | R4 UNKNOWN |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 2135766714, |

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**E22** **CITY OF MOORPARK** **RCRA NonGen / NLR** **1024784622**
**SSE** **530 1/2 N MOORPARK AVE** **CAH111000672**
**< 1/8** **MOORPARK, CA 93021**
**0.041 mi.**
**216 ft.** **Site 1 of 2 in cluster E**

**Relative:** **Lower**
**Actual:** **512 ft.**

RCRA NonGen / NLR:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 19980522 |
| Handler Name: | CITY OF MOORPARK | |
| Handler Address: | | 530 1/2 N MOORPARK AVE |
| Handler City,State,Zip: | | MOORPARK, CA 93021-0000 |
| EPA ID: | | CAH111000672 |
| Contact Name: | | JOHN BRAND |
| Contact Address: | | 799 MOORPARK AVE |
| Contact City,State,Zip: | | MOORPARK, CA 93021-0000 |
| Contact Telephone: | | 805-529-6864 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 09 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Handler Activities |
| State District Owner: | | Not reported |
| State District: | | Not reported |
| Mailing Address: | | 799 MOORPARK AVE |

**CITY OF MOORPARK (Continued)** **1024784622**

| | |
|---|---|
| Mailing City,State,Zip: | MOORPARK, CA 93021-0000 |
| Owner Name: | CITY OF MOORPARK |
| Owner Type: | Other |
| Operator Name: | JOHN BRAND |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | Yes |
| Universal Waste Destination Facility: | Yes |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20180905 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |

**CITY OF MOORPARK (Continued)** **1024784622**

Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: JOHN BRAND
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 799 MOORPARK AVE
Owner/Operator City,State,Zip: MOORPARK, CA 93021-0000
Owner/Operator Telephone: 805-529-6864
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF MOORPARK
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 799 MOORPARK AVE
Owner/Operator City,State,Zip: MOORPARK, CA 93021-0000
Owner/Operator Telephone: 000-000-0000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19980522
Handler Name: CITY OF MOORPARK
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

**E23** **PRIMO CORP** **RCRA-SQG** **1000300967**
**South** **31 POINDEXTER ST** **FINDS** **CAD080071434**
**< 1/8** **MOORPARK, CA 93021** **ECHO**
**0.047 mi.**
**246 ft.** **Site 2 of 2 in cluster E**

**Relative:** **Lower**
**Actual:** **511 ft.**

RCRA-SQG:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 19960901 |
| Handler Name: | PRIMO CORP | |
| Handler Address: | | 31 POINDEXTER ST |
| Handler City,State,Zip: | | MOORPARK, CA 93021 |
| EPA ID: | | CAD080071434 |
| Contact Name: | | Not reported |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | Not reported |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 09 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Small Quantity Generator |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Handler Activities |
| State District Owner: | | CA |
| State District: | | 3 |
| Mailing Address: | | POINDEXTER ST |
| Mailing City,State,Zip: | | MOORPARK, CA 93021 |
| Owner Name: | | LORENZ CURTIS |
| Owner Type: | | Private |
| Operator Name: | | NOT REQUIRED |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | | Not reported |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | NN |
| Sub-Part K Indicator: | | Not reported |
| Commercial TSD Indicator: | | No |
| Treatment Storage and Disposal Type: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| Permit Renewals Workload Universe: | | Not reported |

**PRIMO CORP (Continued)** **1000300967**

| | |
|---|---|
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20000915 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | Not reported |
| Manifest Broker: | Not reported |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | LORENZ CURTIS |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, ME 99999 |
| Owner/Operator Telephone: | 415-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | NOT REQUIRED |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, ME 99999 |
| Owner/Operator Telephone: | 415-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

**PRIMO CORP (Continued)** **1000300967**

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 19960901 |
| Handler Name: | PRIMO CORP | |
| Federal Waste Generator Description: | | Small Quantity Generator |
| State District Owner: | | CA |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |
| Recognized Trader Exporter: | | No |
| Spent Lead Acid Battery Importer: | | No |
| Spent Lead Acid Battery Exporter: | | No |
| Current Record: | | Yes |
| Non Storage Recycler Activity: | | Not reported |
| Electronic Manifest Broker: | | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

FINDS:

| | |
|---|---|
| Registry ID: | 110002660004 |

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

| | |
|---|---|
| Envid: | 1000300967 |
| Registry ID: | 110002660004 |
| DFR URL: | http://echo.epa.gov/detailed-facility-report?fid=110002660004 |
| Name: | PRIMO CORP |
| Address: | 31 POINDEXTER ST |
| City,State,Zip: | MOORPARK, CA 93021 |

**24**
**WSW**
**< 1/8**
**0.061 mi.**
**320 ft.**

**CASCADE SPRINKLER**
**177 POINDEXTER AVE**
**MOORPARK, CA**

**UST** **U003142353**
**N/A**

**Relative:**
**Lower**

**Actual:**
**502 ft.**

VENTURA CO. UST:

| | |
|---|---|
| Name: | CASCADE SPRINKLER |
| Address: | 177 POINDEXTER AVE |
| City: | MOORPARK |
| Facility ID: | D 1250 |
| Facility Status: | Inactive |

---

**25**
**SSW**
**< 1/8**
**0.065 mi.**
**345 ft.**

**SEACON CONSTRUCTION INC**
**175 POINDEXTER AVE**
**MOORPARK, CA 93021**

**RCRA NonGen / NLR** **1025874438**
**CAL000447569**

**Relative:**
**Lower**

**Actual:**
**509 ft.**

RCRA NonGen / NLR:

| | |
|---|---|
| Date Form Received by Agency: | 20190719 |
| Handler Name: | SEACON CONSTRUCTION INC |
| Handler Address: | 175 POINDEXTER AVE |
| Handler City,State,Zip: | MOORPARK, CA 93021 |
| EPA ID: | CAL000447569 |
| Contact Name: | FELICE JAMES |
| Contact Address: | 175 POINDEXTER AVE |
| Contact City,State,Zip: | MOORPARK, CA 93021 |
| Contact Telephone: | 805-529-4008 |
| Contact Fax: | 805-256-6476 |
| Contact Email: | FELICE.JAMES@SEACON1.COM |
| Contact Title: | Not reported |
| EPA Region: | 09 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Handler Activities |
| State District Owner: | Not reported |
| State District: | Not reported |
| Mailing Address: | 175 POINDEXTER AVE |
| Mailing City,State,Zip: | MOORPARK, CA 93021 |
| Owner Name: | FELICE JAMES |
| Owner Type: | Other |
| Operator Name: | FELICE JAMES |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | Yes |
| Universal Waste Destination Facility: | Yes |
| Federal Universal Waste: | No |

**SEACON CONSTRUCTION INC (Continued)** **1025874438**

| | |
|---|---|
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20190729 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | FELICE JAMES |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 175 POINDEXTER AVE |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 805-529-4008 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

**SEACON CONSTRUCTION INC (Continued)** **1025874438**

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | FELICE JAMES |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 175 POINDEXTER AVE |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021-0000 |
| Owner/Operator Telephone: | 805-529-4008 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20190719 |
| Handler Name: | SEACON CONSTRUCTION INC |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 238990 |
| NAICS Description: | ALL OTHER SPECIALTY TRADE CONTRACTORS |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

---

**F26** **CE & D MABRY FAMILY LIMITED PARTNERSHIP** **RCRA NonGen / NLR** **1024748676**
**ESE** **137 E. HIGH ST.** **CAC002968458**
**< 1/8** **MOORPARK, CA 93021**
**0.067 mi.**
**353 ft.** **Site 1 of 4 in cluster F**

**Relative:** **Lower**

**Actual:** **516 ft.**

RCRA NonGen / NLR:

| | |
|---|---|
| Date Form Received by Agency: | 20180627 |
| Handler Name: | CE & D MABRY FAMILY LIMITED PARTNERSHIP |
| Handler Address: | 137 E. HIGH ST. |
| Handler City,State,Zip: | MOORPARK, CA 93021 |
| EPA ID: | CAC002968458 |
| Contact Name: | DAVID ROSS |
| Contact Address: | P.O. BOX 72 |
| Contact City,State,Zip: | MOORPARK, CA 93020 |
| Contact Telephone: | 805-660-4080 |
| Contact Fax: | Not reported |
| Contact Email: | DAVID@MABRYFLP.COM |
| Contact Title: | Not reported |

**CE & D MABRY FAMILY LIMITED PARTNERSHIP (Continued)** **1024748676**

| | |
|---|---|
| EPA Region: | 09 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Handler Activities |
| State District Owner: | Not reported |
| State District: | Not reported |
| Mailing Address: | P.O. BOX 72 |
| Mailing City,State,Zip: | MOORPARK, CA 93020 |
| Owner Name: | CE & D MABRY FLP |
| Owner Type: | Other |
| Operator Name: | DAVID ROSS |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | Yes |
| Universal Waste Destination Facility: | Yes |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |

**CE & D MABRY FAMILY LIMITED PARTNERSHIP (Continued)** **1024748676**

| | |
|---|---|
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20180831 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | CE & D MABRY FLP |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | P.O. BOX 72 |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93020 |
| Owner/Operator Telephone: | 805-660-4080 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | DAVID ROSS |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | P.O. BOX 72 |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93020 |
| Owner/Operator Telephone: | 805-660-4080 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20180627 |
| Handler Name: | CE & D MABRY FAMILY LIMITED PARTNERSHIP |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 56299 |

**CE & D MABRY FAMILY LIMITED PARTNERSHIP (Continued)** **1024748676**

NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

---

**F27** **MOORPARK GARAGE** **EDR Hist Auto** **1009022872**
**ESE** **661 WALNUT ST** **N/A**
**< 1/8** **MOORPARK, CA**
**0.070 mi.**
**371 ft.** **Site 2 of 4 in cluster F**

**Relative:** EDR Hist Auto
**Lower**

**Actual:**
**516 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1957 | MOORPARK GARAGE | AUTOMOBILE REPAIRING |
| 1961 | ACME AUTO REPAIR | AUTOMOBILE REPAIRING |

---

**F28** **CITY OF MOORPARK** **UST** **U003042638**
**ESE** **661 WALNUT ST** **N/A**
**< 1/8** **MOORPARK, CA**
**0.070 mi.**
**371 ft.** **Site 3 of 4 in cluster F**

**Relative:** VENTURA CO. UST:
**Lower**
Name: CITY OF MOORPARK
**Actual:** Address: 661 WALNUT ST
**516 ft.** City: MOORPARK
Facility ID: D 1203
Facility Status: Inactive

---

**F29** **DICK S GARAGE** **EDR Hist Auto** **1009026879**
**East** **690 WALNUT ST** **N/A**
**< 1/8** **MOORPARK, CA**
**0.084 mi.**
**445 ft.** **Site 4 of 4 in cluster F**

**Relative:** EDR Hist Auto
**Lower**

**Actual:**
**519 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1961 | DICK S GARAGE | AUTOMOBILE REPAIRING |
| 1994 | BERARD MICHAEL GARAGE | General Automotive Repair Shops |
| 1995 | BERARD MICHAEL GARAGE | General Automotive Repair Shops |

**30**
**SSE**
**< 1/8**
**0.098 mi.**
**520 ft.**

**GAIL COVATE**
**80 1ST STREET**
**MOORPARK, CA 93021**

**RCRA NonGen / NLR** **1027088572** **CAC003161000**

**Relative:**
**Lower**

**Actual:**
**513 ft.**

RCRA NonGen / NLR:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20220209 |
| Handler Name: | GAIL COVATE | |
| Handler Address: | | 80 1ST STREET |
| Handler City,State,Zip: | | MOORPARK, CA 93021 |
| EPA ID: | | CAC003161000 |
| Contact Name: | | GAIL COVATE |
| Contact Address: | | 80 1ST STREET |
| Contact City,State,Zip: | | MOORPARK, CA 93021 |
| Contact Telephone: | | 310-927-1311 |
| Contact Fax: | | Not reported |
| Contact Email: | | THRASHLIE13@GMAIL.COM |
| Contact Title: | | Not reported |
| EPA Region: | | 09 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Not reported |
| State District: | | Not reported |
| Mailing Address: | | 80 1ST STREET |
| Mailing City,State,Zip: | | MOORPARK, CA 93021 |
| Owner Name: | | GAIL COVATE |
| Owner Type: | | Other |
| Operator Name: | | GAIL COVATE |
| Operator Type: | | Other |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | | Not reported |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| Commercial TSD Indicator: | | No |
| Treatment Storage and Disposal Type: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| Permit Renewals Workload Universe: | | Not reported |

**GAIL COVATE (Continued)** **1027088572**

| | |
|---|---|
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20220209 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | GAIL COVATE |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 80 1ST STREET |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 310-927-1311 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | GAIL COVATE |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 80 1ST STREET |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 310-927-1311 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

**GAIL COVATE (Continued)** **1027088572**

Historic Generators:
Receive Date: 20220209
Handler Name: GAIL COVATE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**31** **RANCHO CLEANERS** **RCRA NonGen / NLR** **1000171039**
**SSE** **419 MOORPARK AVE** **FINDS** **CAD981968241**
**1/8-1/4** **MOORPARK, CA 93021** **ECHO**
**0.126 mi.** **HAZNET**
**664 ft.** **HWTS**

**Relative:** **Lower**
**Actual:** **511 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 19870319
Handler Name: RANCHO CLEANERS
Handler Address: 419 MOORPARK AVE
Handler City,State,Zip: MOORPARK, CA 93021
EPA ID: CAD981968241
Contact Name: ENVIRONMENTAL MANAGER
Contact Address: 419 MOORPARK AVE
Contact City,State,Zip: MOORPARK, CA 93021
Contact Telephone: 805-529-1768
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: CA
State District: 3
Mailing Address: MOORPARK AVE
Mailing City,State,Zip: MOORPARK, CA 93021
Owner Name: WONSOON IM

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Owner Type: | Private |
| Operator Name: | NOT REQUIRED |
| Operator Type: | Private |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | NN |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20000915 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | Not reported |
| Manifest Broker: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: NOT REQUIRED
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: WONSOON IM
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19870319
Handler Name: RANCHO CLEANERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002759140

**RANCHO CLEANERS (Continued)** **1000171039**

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

| | |
|---|---|
| Envid: | 1000171039 |
| Registry ID: | 110002759140 |
| DFR URL: | http://echo.epa.gov/detailed-facility-report?fid=110002759140 |
| Name: | RANCHO CLEANERS |
| Address: | 419 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA 93021 |

HAZNET:

| | |
|---|---|
| Name: | RANCHO CLEANERS |
| Address: | 419 MOORPARK AVE |
| Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 930210000 |
| Contact: | UNDELIVERABLE SURVEY 2-1-95 HJ |
| Telephone: | -- |
| Mailing Name: | Not reported |
| Mailing Address: | 419 MOORPARK AVE |
| Year: | 2005 |
| Gepaid: | CAD981968241 |
| TSD EPA ID: | NVR000076158 |
| CA Waste Code: | 134 - Aqueous solution with total organic residues less than 10 percent |
| Disposal Method: | - |
| Tons: | Not reported |
| Year: | 2005 |
| Gepaid: | CAD981968241 |
| TSD EPA ID: | NVR000076158 |
| CA Waste Code: | 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.) |
| Disposal Method: | - |
| Tons: | Not reported |
| Year: | 2005 |
| Gepaid: | CAD981968241 |
| TSD EPA ID: | NVR000076158 |
| CA Waste Code: | 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc) |
| Disposal Method: | - |
| Tons: | 0.105 |
| Year: | 2004 |
| Gepaid: | CAD981968241 |
| TSD EPA ID: | NVR000076158 |

**RANCHO CLEANERS (Continued)** **1000171039**

CA Waste Code: 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: -
Tons: 0.115

Year: 2004
Gepaid: CAD981968241
TSD EPA ID: NVR000076158
CA Waste Code: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: -
Tons: Not reported

Year: 2004
Gepaid: CAD981968241
TSD EPA ID: NVR000076158
CA Waste Code: 134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method: -
Tons: Not reported

Year: 2003
Gepaid: CAD981968241
TSD EPA ID: CAD008302903
CA Waste Code: 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: -
Tons: Not reported

Year: 2003
Gepaid: CAD981968241
TSD EPA ID: CAD008302903
CA Waste Code: 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: H01 - Transfer Station
Tons: 0.17

Year: 2002
Gepaid: CAD981968241
TSD EPA ID: CAD008302903
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: -
Tons: Not reported

Year: 2002
Gepaid: CAD981968241
TSD EPA ID: CAD008302903
CA Waste Code: 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: -
Tons: 0.09

Click this hyperlink while viewing on your computer to access
18 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:
Year: 2004

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Gen EPA ID: | CAD981968241 |
| Shipment Date: | 20040602 |
| Creation Date: | 11/5/2004 18:30:59 |
| Receipt Date: | 20040614 |
| Manifest ID: | 23622219 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN LLC |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0.115 |
| Waste Quantity: | 230 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20040602 |
| Creation Date: | 11/5/2004 18:30:59 |
| Receipt Date: | 20040614 |
| Manifest ID: | 23622219 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN LLC |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc. |
| RCRA Code: | NA |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20040602 |
| Creation Date: | 11/5/2004 18:30:59 |
| Receipt Date: | 20040614 |
| Manifest ID: | 23622219 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN LLC |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 134 - Aqueous solution with <10% total organic residues |
| RCRA Code: | D039 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20040602 |
| Creation Date: | 11/5/2004 18:30:59 |
| Receipt Date: | 20040614 |
| Manifest ID: | 23622219 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN LLC |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2000 |
| Gen EPA ID: | CAD981968241 |

| | |
|---|---|
| Shipment Date: | 20001012 |
| Creation Date: | 12/13/2000 0:00:00 |
| Receipt Date: | 20001024 |
| Manifest ID: | 20473990 |
| Trans EPA ID: | CAD983657719 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20001012 |
| Creation Date: | 12/13/2000 0:00:00 |
| Receipt Date: | 20001024 |
| Manifest ID: | 20473990 |
| Trans EPA ID: | CAD983657719 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | H01 - Transfer Station |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2005 |
| Gen EPA ID: | CAD981968241 |
| | |
| Shipment Date: | 20050209 |
| Creation Date: | 8/24/2005 7:27:35 |
| Receipt Date: | 20050214 |
| Manifest ID: | 24186473 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| | perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0.105 |
| Waste Quantity: | 210 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20050209 |
| Creation Date: | 8/24/2005 7:27:35 |
| Receipt Date: | 20050214 |
| Manifest ID: | 24186473 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc. |
| RCRA Code: | NA |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20050209 |
| Creation Date: | 8/24/2005 7:27:35 |
| Receipt Date: | 20050214 |
| Manifest ID: | 24186473 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 134 - Aqueous solution with <10% total organic residues |
| RCRA Code: | D039 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20050209 |
| Creation Date: | 8/24/2005 7:27:35 |
| Receipt Date: | 20050214 |
| Manifest ID: | 24186473 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | CONSOLIDATED WESTERN |
| Trans 2 EPA ID: | CAD981375983 |
| Trans 2 Name: | TECHNICHEM INC |
| TSDF EPA ID: | NVR000076158 |
| Trans Name: | RESOLVENT INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2002 |
| Gen EPA ID: | CAD981968241 |
| | |
| Shipment Date: | 20020830 |
| Creation Date: | 1/27/2003 18:31:12 |
| Receipt Date: | 20020903 |
| Manifest ID: | 21925138 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | H01 - Transfer Station |
| Quantity Tons: | 0.16 |
| Waste Quantity: | 320 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Shipment Date: | 20020830 |
| Creation Date: | 1/27/2003 18:31:12 |
| Receipt Date: | 20020903 |
| Manifest ID: | 21925138 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20020830 |
| Creation Date: | 1/27/2003 18:31:12 |
| Receipt Date: | 20020903 |
| Manifest ID: | 21925138 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 343 - Unspecified organic liquid mixture |
| RCRA Code: | Not reported |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20020830 |
| Creation Date: | 1/27/2003 18:31:12 |
| Receipt Date: | 20020903 |
| Manifest ID: | 21925138 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 352 - Other organic solids |
| RCRA Code: | Not reported |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20020213 |
| Creation Date: | 5/15/2003 18:33:55 |
| Receipt Date: | Not reported |
| Manifest ID: | 22625509 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0.09 |
| Waste Quantity: | 180 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20020213 |
| Creation Date: | 5/15/2003 18:33:55 |
| Receipt Date: | Not reported |
| Manifest ID: | 22625509 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 1999 |
| Gen EPA ID: | CAD981968241 |
| Shipment Date: | 19991015 |
| Creation Date: | 5/1/2000 0:00:00 |
| Receipt Date: | 19991018 |
| Manifest ID: | 99557749 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 19991015 |
| Creation Date: | 5/1/2000 0:00:00 |
| Receipt Date: | 19991018 |
| Manifest ID: | 99557749 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.0667 |
| Waste Quantity: | 16 |
| Quantity Unit: | G |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19990407 |
| Creation Date: | 9/1/1999 0:00:00 |
| Receipt Date: | 19990408 |
| Manifest ID: | 99182736 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19990407 |
| Creation Date: | 9/1/1999 0:00:00 |
| Receipt Date: | 19990408 |
| Manifest ID: | 99182736 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.4214 |
| Waste Quantity: | 0.5 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19990112 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Creation Date: | 4/5/1999 0:00:00 |
| Receipt Date: | 19990113 |
| Manifest ID: | 98890343 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 19990112 |
| Creation Date: | 4/5/1999 0:00:00 |
| Receipt Date: | 19990113 |
| Manifest ID: | 98890343 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 1998 |
| Gen EPA ID: | CAD981968241 |

| | |
|---|---|
| Shipment Date: | 19981207 |
| Creation Date: | 4/1/1999 0:00:00 |
| Receipt Date: | 19981208 |
| Manifest ID: | 98461618 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.0208 |
| Waste Quantity: | 5 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19981207 |
| Creation Date: | 4/1/1999 0:00:00 |
| Receipt Date: | 19981208 |
| Manifest ID: | 98461618 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19980929 |
| Creation Date: | 1/21/1999 0:00:00 |
| Receipt Date: | 19981001 |
| Manifest ID: | 98536313 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19980929 |
| Creation Date: | 1/21/1999 0:00:00 |
| Receipt Date: | 19981001 |
| Manifest ID: | 98536313 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19980810 |
| Creation Date: | 12/7/1998 0:00:00 |
| Receipt Date: | 19980811 |
| Manifest ID: | 98078035 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19980810 |
| Creation Date: | 12/7/1998 0:00:00 |
| Receipt Date: | 19980811 |
| Manifest ID: | 98078035 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19980713 |
| Creation Date: | 11/5/1998 0:00:00 |
| Receipt Date: | 19980714 |
| Manifest ID: | 98125816 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19980713 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Creation Date: | 11/5/1998 0:00:00 |
| Receipt Date: | 19980714 |
| Manifest ID: | 98125816 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 19980511 |
| Creation Date: | 8/3/1998 0:00:00 |
| Receipt Date: | 19980512 |
| Manifest ID: | 98023258 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.4214 |
| Waste Quantity: | 0.5 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 19980511 |
| Creation Date: | 8/3/1998 0:00:00 |
| Receipt Date: | 19980512 |
| Manifest ID: | 98023258 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 1996 |
| Gen EPA ID: | CAD981968241 |
| Shipment Date: | 19961119 |
| Creation Date: | 5/30/1997 0:00:00 |
| Receipt Date: | 19961120 |
| Manifest ID: | 96566494 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 19961119 |
| Creation Date: | 5/30/1997 0:00:00 |
| Receipt Date: | 19961120 |
| Manifest ID: | 96566494 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960913 |
| Creation Date: | 5/20/1997 0:00:00 |
| Receipt Date: | 19960916 |
| Manifest ID: | 96357357 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960913 |
| Creation Date: | 5/20/1997 0:00:00 |
| Receipt Date: | 19960916 |
| Manifest ID: | 96357357 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960708 |
| Creation Date: | 5/20/1997 0:00:00 |
| Receipt Date: | 19960709 |
| Manifest ID: | 96109397 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960708 |
| Creation Date: | 5/20/1997 0:00:00 |
| Receipt Date: | 19960709 |
| Manifest ID: | 96109397 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960513 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Creation Date: | 5/30/1997 0:00:00 |
| Receipt Date: | 19960514 |
| Manifest ID: | 96268288 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960513 |
| Creation Date: | 5/30/1997 0:00:00 |
| Receipt Date: | 19960514 |
| Manifest ID: | 96268288 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19960319 |
| Creation Date: | 10/16/1996 0:00:00 |
| Receipt Date: | 19960320 |
| Manifest ID: | 96023557 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 19960319 |
| Creation Date: | 10/16/1996 0:00:00 |
| Receipt Date: | 19960320 |
| Manifest ID: | 96023557 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2003 |
| Gen EPA ID: | CAD981968241 |

| | |
|---|---|
| Shipment Date: | 20030807 |
| Creation Date: | 7/28/2004 10:48:03 |
| Receipt Date: | 20030814 |
| Manifest ID: | 22418418 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | H01 - Transfer Station |
| Quantity Tons: | 0.08 |
| Waste Quantity: | 160 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20030807 |
| Creation Date: | 7/28/2004 10:48:03 |
| Receipt Date: | 20030814 |
| Manifest ID: | 22418418 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20030213 |
| Creation Date: | 5/18/2003 14:32:26 |
| Receipt Date: | 20030220 |
| Manifest ID: | 22625509 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | H01 - Transfer Station |
| Quantity Tons: | 0.09 |
| Waste Quantity: | 180 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20030213 |
| Creation Date: | 5/18/2003 14:32:26 |
| Receipt Date: | 20030220 |
| Manifest ID: | 22625509 |
| Trans EPA ID: | CAR000036921 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 1997 |
| Gen EPA ID: | CAD981968241 |
| Shipment Date: | 19971110 |
| Creation Date: | 7/23/1998 0:00:00 |
| Receipt Date: | 19971111 |
| Manifest ID: | 96776087 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 21.07 |
| Waste Quantity: | 25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19971110 |
| Creation Date: | 7/23/1998 0:00:00 |
| Receipt Date: | 19971111 |
| Manifest ID: | 96776087 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.0208 |
| Waste Quantity: | 5 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970908 |
| Creation Date: | 7/23/1998 0:00:00 |
| Receipt Date: | 19970909 |
| Manifest ID: | 96781097 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970908 |
| Creation Date: | 7/23/1998 0:00:00 |
| Receipt Date: | 19970909 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Manifest ID: | 96781097 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970811 |
| Creation Date: | 7/23/1998 0:00:00 |
| Receipt Date: | 19970812 |
| Manifest ID: | 96742139 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970811 |
| Creation Date: | 7/23/1998 0:00:00 |
| Receipt Date: | 19970812 |
| Manifest ID: | 96742139 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970407 |
| Creation Date: | 7/17/1997 0:00:00 |
| Receipt Date: | 19970408 |
| Manifest ID: | 96798187 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970407 |
| Creation Date: | 7/17/1997 0:00:00 |
| Receipt Date: | 19970408 |
| Manifest ID: | 96798187 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970311 |
| Creation Date: | 6/26/1997 0:00:00 |
| Receipt Date: | 19970312 |
| Manifest ID: | 96721671 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19970311 |
| Creation Date: | 6/26/1997 0:00:00 |
| Receipt Date: | 19970312 |
| Manifest ID: | 96721671 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

Additional Info:

| | |
|---|---|
| Year: | 2001 |
| Gen EPA ID: | CAD981968241 |
| Shipment Date: | 20011121 |
| Creation Date: | 1/16/2002 0:00:00 |
| Receipt Date: | 20011128 |
| Manifest ID: | 21388584 |
| Trans EPA ID: | CAR000095927 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | H01 - Transfer Station |
| Quantity Tons: | 0.1 |
| Waste Quantity: | 200 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20011121 |
| Creation Date: | 1/16/2002 0:00:00 |
| Receipt Date: | 20011128 |
| Manifest ID: | 21388584 |
| Trans EPA ID: | CAR000095927 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20011121 |
| Creation Date: | 1/16/2002 0:00:00 |
| Receipt Date: | 20011128 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Manifest ID: | 21388584 |
| Trans EPA ID: | CAR000095927 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 343 - Unspecified organic liquid mixture |
| RCRA Code: | D001 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20010530 |
| Creation Date: | 8/29/2001 0:00:00 |
| Receipt Date: | 20010601 |
| Manifest ID: | 20822289 |
| Trans EPA ID: | CAR000094151 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | H01 - Transfer Station |
| Quantity Tons: | 0.1 |
| Waste Quantity: | 200 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20010530 |
| Creation Date: | 8/29/2001 0:00:00 |
| Receipt Date: | 20010601 |
| Manifest ID: | 20822289 |
| Trans EPA ID: | CAR000094151 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20010530 |
| Creation Date: | 8/29/2001 0:00:00 |
| Receipt Date: | 20010601 |
| Manifest ID: | 20822289 |
| Trans EPA ID: | CAR000094151 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008302903 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD008302903 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 134 - Aqueous solution with <10% total organic residues |
| RCRA Code: | F002 |
| Meth Code: | - Not reported |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 1995 |
| Gen EPA ID: | CAD981968241 |
| | |
| Shipment Date: | 19951009 |
| Creation Date: | 7/26/1996 0:00:00 |
| Receipt Date: | 19951010 |
| Manifest ID: | 95944125 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19951009 |
| Creation Date: | 7/26/1996 0:00:00 |
| Receipt Date: | 19951010 |
| Manifest ID: | 95944125 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19950814 |
| Creation Date: | 7/26/1996 0:00:00 |
| Receipt Date: | 19950815 |
| Manifest ID: | 95596805 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19950814 |
| Creation Date: | 7/26/1996 0:00:00 |
| Receipt Date: | 19950815 |
| Manifest ID: | 95596805 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19950512 |
| Creation Date: | 4/2/1996 0:00:00 |
| Receipt Date: | 19950515 |
| Manifest ID: | 95621580 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19950512 |
| Creation Date: | 4/2/1996 0:00:00 |
| Receipt Date: | 19950515 |
| Manifest ID: | 95621580 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 19950313 |
| Creation Date: | 4/2/1996 0:00:00 |
| Receipt Date: | 19950314 |
| Manifest ID: | 95186592 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 19950313 |
| Creation Date: | 4/2/1996 0:00:00 |
| Receipt Date: | 19950314 |
| Manifest ID: | 95186592 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| | perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2107 |
| Waste Quantity: | 0.25 |
| Quantity Unit: | Y |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 1994 |
| Gen EPA ID: | CAD981968241 |
| | |
| Shipment Date: | 19940624 |
| Creation Date: | 3/26/1996 0:00:00 |
| Receipt Date: | 19940627 |
| Manifest ID: | 93711421 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc. |
| RCRA Code: | F002 |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0.2293 |
| Waste Quantity: | 55 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 19940624 |
| Creation Date: | 3/26/1996 0:00:00 |
| Receipt Date: | 19940627 |
| Manifest ID: | 93711421 |
| Trans EPA ID: | CAD981414386 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD981397417 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | CAD981397417 |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | R01 - Recycler |
| Quantity Tons: | 0 |

**RANCHO CLEANERS (Continued)** **1000171039**

| | |
|---|---|
| Waste Quantity: | 0 |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

HWTS:

| | |
|---|---|
| Name: | RANCHO CLEANERS |
| Address: | 419 MOORPARK AVE |
| Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 93021 |
| EPA ID: | CAD981968241 |
| Inactive Date: | 06/30/2002 |
| Create Date: | 07/03/1987 |
| Last Act Date: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | 419 MOORPARK AVE |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | MOORPARK, CA 930210000 |
| Owner Name: | Not reported |
| Owner Address: | Not reported |
| Owner Address 2: | Not reported |
| Owner City,State,Zip: | Not reported |
| Contact Name: | UNDELIVERABLE SURVEY 2-1-95 HJ |
| Contact Address: | INACT PER NONDEL 00VQ - CR |
| Contact Address 2: | Not reported |
| City,State,Zip: | Not reported |
| Facility Status: | Inactive |
| Facility Type: | PERMANENT |
| Category: | FEDERAL |
| Latitude: | 34.283216 |
| Longitude: | -118.882114 |

---

**32** **GIFFORD RUNKLE** **RCRA NonGen / NLR** **1026798661**
**South** **393 MCFADDEN AVENUE** **CAC003110453**
**1/8-1/4** **MOORPARK, CA 93021**
**0.151 mi.**
**799 ft.**

**Relative:** **Lower**

**Actual:** **508 ft.**

RCRA NonGen / NLR:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20210317 |
| Handler Name: | GIFFORD RUNKLE | |
| Handler Address: | | 393 MCFADDEN AVENUE |
| Handler City,State,Zip: | | MOORPARK, CA 93021 |
| EPA ID: | | CAC003110453 |
| Contact Name: | | GIFFORD RUNKLE |
| Contact Address: | | 393 MCFADDEN AVENUE |
| Contact City,State,Zip: | | MOORPARK, CA 93021 |
| Contact Telephone: | | 805-529-0443 |
| Contact Fax: | | Not reported |
| Contact Email: | | CBRUNKLE1@YAHOO.COM |
| Contact Title: | | Not reported |
| EPA Region: | | 09 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |

**GIFFORD RUNKLE (Continued)** **1026798661**

| | |
|---|---|
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Not reported |
| State District: | Not reported |
| Mailing Address: | 393 MCFADDEN AVENUE |
| Mailing City,State,Zip: | MOORPARK, CA 93021 |
| Owner Name: | GIFFORD RUNKLE |
| Owner Type: | Other |
| Operator Name: | GIFFORD RUNKLE |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |

**GIFFORD RUNKLE (Continued)** **1026798661**

| | |
|---|---|
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20210322 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | GIFFORD RUNKLE |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 393 MCFADDEN AVENUE |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 805-529-0443 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | GIFFORD RUNKLE |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 393 MCFADDEN AVENUE |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 805-529-0443 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20210317 |
| Handler Name: GIFFORD RUNKLE | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | No |
| Electronic Manifest Broker: | No |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 56299 |
| NAICS Description: | ALL OTHER WASTE MANAGEMENT SERVICES |

**GIFFORD RUNKLE (Continued)** **1026798661**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**G33** **TEXACO STATION** **LUST** **S102438808**
**South** **347 MOORPARK AVE** **CERS** **N/A**
**1/8-1/4** **MOORPARK, CA 93021**
**0.192 mi.**
**1014 ft.** **Site 1 of 4 in cluster G**

**Relative:** LUST REG 4:
**Lower**

| | | |
|---|---|---|
| **Actual:** Region: | 4 | |
| **510 ft.** Regional Board: | 04 | |
| County: | Ventura | |
| Facility Id: | C-88066 | |
| Status: | Case Closed | |
| Substance: | Gasoline | |
| Substance Quantity: | Not reported | |
| Local Case No: | 88066 | |
| Case Type: | Groundwater | |
| Abatement Method Used at the Site: | | ETED |
| Global ID: | T0611100313 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 56000L | |
| Cross Street: | Not reported | |
| Enforcement Type: | EF | |
| Date Leak Discovered: | 6/2/1988 | |
| Date Leak First Reported: | | 6/2/1988 |
| Date Leak Record Entered: | Not reported | |
| Date Confirmation Began: | 7/1/1988 | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | Not reported |
| Date the Case was Closed: | | 3/8/1996 |
| How Leak Discovered: | Not reported | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | Not reported | |
| Leak Source: | Not reported | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 6451.4414296236740957154828895 |
| Source of Cleanup Funding: | | F |
| Preliminary Site Assessment Workplan Submitted: | | 6/20/1988 |
| Preliminary Site Assessment Began: | | 8/31/1990 |
| Pollution Characterization Began: | | 8/31/1990 |
| Remediation Plan Submitted: | | 10/19/1990 |
| Remedial Action Underway: | | 6/9/1992 |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | 6/2/1988 |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |

**TEXACO STATION (Continued)** **S102438808**

| | |
|---|---|
| GW Qualifier: | Not reported |
| Soil Qualifier: | Not reported |
| Organization: | Not reported |
| Owner Contact: | Not reported |
| Responsible Party: | TEXACO STATION |
| RP Address: | Not reported |
| Program: | LUST |
| Lat/Long: | 34.2823196 / -1 |
| Local Agency Staff: | EHD |
| Beneficial Use: | Not reported |
| Priority: | Not reported |
| Cleanup Fund Id: | Not reported |
| Suspended: | Not reported |
| Assigned Name: | Not reported |
| Summary: | Not reported |

VENTURA CO. LUST:

| | |
|---|---|
| Name: | TEXACO SS - MOORPARK |
| Address: | 347 MOORPARK AVE |
| City: | MOORPARK |
| Region: | VENTURA |
| Facility ID: | 88066 |
| Status: | Case Closed |

CERS:

| | |
|---|---|
| Name: | TEXACO SS - MOORPARK |
| Address: | 347 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 217320 |
| CERS ID: | T0611100313 |
| CERS Description: | Leaking Underground Storage Tank Cleanup Site |

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | Regional Board Caseworker |
| Entity Name: | DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4) |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | R4 UNKNOWN |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 2135766714, |

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**G34** **MOORPARK TEXACO AND TIRE** **HIST UST** **U001579592**
**South** **347 MOORPARK AVE** **N/A**
**1/8-1/4** **MOORPARK, CA 93021**
**0.192 mi.**
**1014 ft.** **Site 2 of 4 in cluster G**

**Relative:** **Lower**

**Actual:** **510 ft.**

HIST UST:

| | |
|---|---|
| Name: | MOORPARK TEXACO AND TIRE |
| Address: | 347 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| File Number: | 0002CB54 |
| URL: | http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CB54.pdf |
| Region: | STATE |

**MOORPARK TEXACO AND TIRE (Continued)** **U001579592**

| | |
|---|---|
| Facility ID: | 00000018623 |
| Facility Type: | Gas Station |
| Other Type: | Not reported |
| Contact Name: | BOB VANAUSDELL |
| Telephone: | 8055291276 |
| Owner Name: | MOORPARK TEXACO |
| Owner Address: | 347 MOORPARK AVE. |
| Owner City,St,Zip: | MOORPARK, CA 93021 |
| Total Tanks: | 0004 |
| | |
| Tank Num: | 001 |
| Container Num: | 1 |
| Year Installed: | Not reported |
| Tank Capacity: | 00008000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | REGULAR |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |
| | |
| Tank Num: | 002 |
| Container Num: | 2 |
| Year Installed: | Not reported |
| Tank Capacity: | 00006000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | UNLEADED |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |
| | |
| Tank Num: | 003 |
| Container Num: | 3 |
| Year Installed: | Not reported |
| Tank Capacity: | 00000500 |
| Tank Used for: | WASTE |
| Type of Fuel: | WASTE OIL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |
| | |
| Tank Num: | 004 |
| Container Num: | 4 |
| Year Installed: | Not reported |
| Tank Capacity: | 00006000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | UNLEADED |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |

Click here for Geo Tracker PDF:

**G35** **TEXACO SS - MOORPARK** **LUST** **S104994457**
**South** **347 MOORPARK AVE** **VENTURA CO. BWT** **N/A**
**1/8-1/4** **MOORPARK, CA 93021** **Cortese**
**0.192 mi.** **HIST CORTESE**
**1014 ft.** **Site 3 of 4 in cluster G**

**Relative:**
**Lower**

**Actual:**
**510 ft.**

LUST:

| | |
|---|---|
| Name: | TEXACO SS - MOORPARK |
| Address: | 347 MOORPARK AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Lead Agency: | VENTURA COUNTY |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100313 |
| Global Id: | T0611100313 |
| Latitude: | 34.282202 |
| Longitude: | -118.88242 |
| Status: | Completed - Case Closed |
| Status Date: | 03/08/1996 |
| Case Worker: | Not reported |
| RB Case Number: | C-88066 |
| Local Agency: | Not reported |
| File Location: | Not reported |
| Local Case Number: | 88066 |
| Potential Media Affect: | Other Groundwater (uses other than drinking water) |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0611100313 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | DANIEL PIROTTON |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | Not reported |
| City: | R4 UNKNOWN |
| Email: | dpirotton@waterboards.ca.gov |
| Phone Number: | 2135766714 |

LUST:

| | |
|---|---|
| Global Id: | T0611100313 |
| Action Type: | Other |
| Date: | 06/02/1988 |
| Action: | Leak Reported |

| | |
|---|---|
| Global Id: | T0611100313 |
| Action Type: | ENFORCEMENT |
| Date: | 06/02/1988 |
| Action: | * Historical Enforcement |

| | |
|---|---|
| Global Id: | T0611100313 |
| Action Type: | Other |
| Date: | 06/02/1988 |
| Action: | Leak Discovery |

LUST:

| | |
|---|---|
| Global Id: | T0611100313 |
| Status: | Open - Case Begin Date |
| Status Date: | 06/02/1988 |

| | |
|---|---|
| Global Id: | T0611100313 |

**TEXACO SS - MOORPARK (Continued)** **S104994457**

Status: Open - Site Assessment
Status Date: 06/20/1988

Global Id: T0611100313
Status: Open - Site Assessment
Status Date: 07/01/1988

Global Id: T0611100313
Status: Open - Site Assessment
Status Date: 08/31/1990

Global Id: T0611100313
Status: Open - Remediation
Status Date: 10/19/1990

Global Id: T0611100313
Status: Open - Remediation
Status Date: 06/09/1992

Global Id: T0611100313
Status: Completed - Case Closed
Status Date: 03/08/1996

VENTURA CO. BWT:
Name: SMOG PRO AUTOMOTIVE
Address: 347 MOORPARK AVE
City,State,Zip: MOORPARK, CA
Facility ID: BP 546
Program: Not reported

Name: SMOG PRO AUTOMOTIVE
Address: 347 MOORPARK AVE.
City,State,Zip: MOORPARK, CA
Facility ID: HM 914
Program: Not reported

Name: TEXACO-MOORPARK
Address: 347 MOORPARK AVE.
City,State,Zip: MOORPARK, CA
Facility ID: HM 915
Program: Not reported

CORTESE:
Name: TEXACO SS - MOORPARK
Address: 347 MOORPARK AVE
City,State,Zip: MOORPARK, CA 93021
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0611100313
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported

**TEXACO SS - MOORPARK (Continued)** **S104994457**

| | |
|---|---|
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

HIST CORTESE:

| | |
|---|---|
| edr_fname: | TEXACO STATION |
| edr_fadd1: | 347 MOORPARK |
| City,State,Zip: | MOORPARK, CA 93021 |
| Region: | CORTESE |
| Facility County Code: | 56 |
| Reg By: | LTNKA |
| Reg Id: | C-88066 |

---

**G36** **TEXACO** **UST** **U004065353**
**South** **347 MOORPARK AVE.** **N/A**
**1/8-1/4** **MOORPARK, CA**
**0.192 mi.**
**1014 ft.** **Site 4 of 4 in cluster G**

**Relative:** VENTURA CO. UST:
**Lower**

| | |
|---|---|
| Name: | TEXACO |
| Address: | 347 MOORPARK AVE. |
| City: | MOORPARK |
| Facility ID: | D 380 |
| Facility Status: | Inactive |

**Actual:**
**510 ft.**

---

**H37** **FRANCISCO AND DELIA MORALES** **RCRA NonGen / NLR** **1026805880**
**ESE** **507 MILLARD ST** **CAC003118071**
**1/8-1/4** **MOORPARK, CA 93021**
**0.203 mi.**
**1071 ft.** **Site 1 of 2 in cluster H**

**Relative:** RCRA NonGen / NLR:
**Lower**

| | |
|---|---|
| Date Form Received by Agency: | 20210504 |
| Handler Name: | FRANCISCO AND DELIA MORALES |
| Handler Address: | 507 MILLARD ST |
| Handler City,State,Zip: | MOORPARK, CA 93021-1919 |
| EPA ID: | CAC003118071 |
| Contact Name: | FRANCISCO MORALES |
| Contact Address: | 507 MILLARD ST |
| Contact City,State,Zip: | MOORPARK, CA 93021-1919 |
| Contact Telephone: | 805-947-8895 |
| Contact Fax: | Not reported |
| Contact Email: | FAVILA@BURNS-ENVIRO.COM |
| Contact Title: | Not reported |
| EPA Region: | 09 |
| Land Type: | Not reported |

**Actual:**
**521 ft.**

**FRANCISCO AND DELIA MORALES (Continued)** **1026805880**

| | |
|---|---|
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Not reported |
| State District: | Not reported |
| Mailing Address: | 507 MILLARD ST |
| Mailing City,State,Zip: | MOORPARK, CA 93021-1919 |
| Owner Name: | FRANCISCO AND DELIA MORALES |
| Owner Type: | Other |
| Operator Name: | FRANCISCO MORALES |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |

**FRANCISCO AND DELIA MORALES (Continued)** **1026805880**

| | |
|---|---|
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20210514 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | FRANCISCO MORALES |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 507 MILLARD ST |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021-1919 |
| Owner/Operator Telephone: | 805-947-8895 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | FRANCISCO AND DELIA MORALES |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 507 MILLARD ST |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021-1919 |
| Owner/Operator Telephone: | 805-947-8895 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20210504 |
| Handler Name: | FRANCISCO AND DELIA MORALES |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | No |
| Electronic Manifest Broker: | No |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 56299 |
| NAICS Description: | ALL OTHER WASTE MANAGEMENT SERVICES |

**FRANCISCO AND DELIA MORALES (Continued)** **1026805880**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**H38** **ANN DOWD** **RCRA NonGen / NLR** **1025835958**
**SE** **445 MILLARD ST** **CAC003015546**
**1/8-1/4** **MOORPARK, CA 93021**
**0.225 mi.**
**1189 ft.** **Site 2 of 2 in cluster H**

**Relative:** **Lower**
**Actual:** **520 ft.**

RCRA NonGen / NLR:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20190517 |
| Handler Name: | ANN DOWD | |
| Handler Address: | | 445 MILLARD ST |
| Handler City,State,Zip: | | MOORPARK, CA 93021 |
| EPA ID: | | CAC003015546 |
| Contact Name: | | ANN DOWD |
| Contact Address: | | 445 MILLARD ST |
| Contact City,State,Zip: | | MOORPARK, CA 93021 |
| Contact Telephone: | | 805-285-1798 |
| Contact Fax: | | Not reported |
| Contact Email: | | ANDREWC@PWSEI.COM |
| Contact Title: | | Not reported |
| EPA Region: | | 09 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Handler Activities |
| State District Owner: | | Not reported |
| State District: | | Not reported |
| Mailing Address: | | 445 MILLARD ST |
| Mailing City,State,Zip: | | MOORPARK, CA 93021 |
| Owner Name: | | ANN DOWD |
| Owner Type: | | Other |
| Operator Name: | | ANN DOWD |
| Operator Type: | | Other |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | Yes |
| Universal Waste Destination Facility: | | Yes |
| Federal Universal Waste: | | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | | Not reported |

**ANN DOWD (Continued)** **1025835958**

| | |
|---|---|
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20190627 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | ANN DOWD |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 445 MILLARD ST |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 805-285-1798 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | ANN DOWD |
| Legal Status: | Other |

**ANN DOWD (Continued)** **1025835958**

| | |
|---|---|
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 445 MILLARD ST |
| Owner/Operator City,State,Zip: | MOORPARK, CA 93021 |
| Owner/Operator Telephone: | 805-285-1798 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20190517 |
| Handler Name: ANN DOWD | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 56299 |
| NAICS Description: | ALL OTHER WASTE MANAGEMENT SERVICES |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

---

**39**
**South**
**1/4-1/2**
**0.328 mi.**
**1730 ft.**

**RALPHS GROCERY #723**
**101 W. LOS ANGELES AVENUE**
**MOORPARK, CA 93021**

**SWRCY** **S113148093**
**CERS HAZ WASTE** **N/A**
**HAZNET**
**CERS**
**HWTS**

**Relative:**
**Lower**

**Actual:**
**507 ft.**

SWRCY:

| | |
|---|---|
| Name: | PONCE RECYCLING |
| Address: | 101 W LOS ANGELES AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Reg Id: | Not reported |
| Cert Id: | RC295748.001 |
| Mailing Address: | 5425 W 64th St |
| Mailing City: | Los Angeles |
| Mailing State: | CA |
| Mailing Zip Code: | 90056 |
| Website: | Not reported |
| Email: | poncerecycling@aol.com |
| Phone Number: | (323) 533-4862 |
| Rural: | N |
| Operation Begin Date: | 04/13/2020 |
| Aluminium: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

Glass: Not reported
Plastic: Not reported
Bimetal: Not reported
Hours of Operation: Mon - Sat 9:00 am - 5:00 pm; Sun Closed
Organization ID: Not reported
Organization Name: Ponce Recycling Inc

CERS HAZ WASTE:
Name: RALPHS GROCERY #723
Address: 101 W. LOS ANGELES AVENUE
City,State,Zip: MOORPARK, CA 93021
Site ID: 60149
CERS ID: 10160617
CERS Description: Hazardous Waste Generator

HAZNET:
Name: RALPHS GROCERY #723
Address: 101 W LOS ANGELES AVE
Address 2: Not reported
City,State,Zip: MOORPARK, CA 930211868
Contact: SHERRIE WALTERS
Telephone: 3108844016
Mailing Name: Not reported
Mailing Address: P.O. BOX 54143

Year: 2015
Gepaid: CAL000320977
TSD EPA ID: OKD000402396
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1895

Year: 2015
Gepaid: CAL000320977
TSD EPA ID: OKD000402396
CA Waste Code: 122 - Alkaline solution without metals pH >= 12.5
Disposal Method: H110 -
Tons: 0.001

Year: 2014
Gepaid: CAL000320977
TSD EPA ID: CAD008364432
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.009

Year: 2014
Gepaid: CAL000320977
TSD EPA ID: CAD008364432
CA Waste Code: -
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0035

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Year: | 2014 |
| Gepaid: | CAL000320977 |
| TSD EPA ID: | CAD008364432 |
| CA Waste Code: | 141 - Off-specification, aged or surplus inorganics |
| Disposal Method: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.0005 |

| | |
|---|---|
| Year: | 2014 |
| Gepaid: | CAL000320977 |
| TSD EPA ID: | CAD008364432 |
| CA Waste Code: | 331 - Off-specification, aged or surplus organics |
| Disposal Method: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.024 |

| | |
|---|---|
| Year: | 2014 |
| Gepaid: | CAL000320977 |
| TSD EPA ID: | CAD008364432 |
| CA Waste Code: | 214 - Unspecified solvent mixture |
| Disposal Method: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.0055 |

| | |
|---|---|
| Year: | 2014 |
| Gepaid: | CAL000320977 |
| TSD EPA ID: | CAD008364432 |
| CA Waste Code: | 122 - Alkaline solution without metals pH >= 12.5 |
| Disposal Method: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.02 |

| | |
|---|---|
| Year: | 2013 |
| Gepaid: | CAL000320977 |
| TSD EPA ID: | CAD008364432 |
| CA Waste Code: | 141 - Off-specification, aged or surplus inorganics |
| Disposal Method: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.006 |

| | |
|---|---|
| Year: | 2013 |
| Gepaid: | CAL000320977 |
| TSD EPA ID: | CAD008364432 |
| CA Waste Code: | 122 - Alkaline solution without metals pH >= 12.5 |
| Disposal Method: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.005 |

Click this hyperlink while viewing on your computer to access
16 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

| | |
|---|---|
| Year: | 2011 |
| Gen EPA ID: | CAL000320977 |
| Shipment Date: | 20110906 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Creation Date: | 7/19/2012 22:00:08 |
| Receipt Date: | 20110912 |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.014 |
| Waste Quantity: | 28 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20110906 |
| Creation Date: | 7/19/2012 22:00:08 |
| Receipt Date: | 20110912 |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.01 |
| Waste Quantity: | 20 |
| Quantity Unit: | P |
| Additional Code 1: | D018 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20110906 |
| Creation Date: | 7/19/2012 22:00:08 |
| Receipt Date: | 20110912 |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | 7/19/2012 22:00:08 |
| Receipt Date: | 20110912 |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 352 - Other organic solids |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0295 |
| Waste Quantity: | 59 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.009 |
| Waste Quantity: | 18 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 181 - Other inorganic solid waste Organics |
| RCRA Code: | D009 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.01 |
| Waste Quantity: | 20 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20110906 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000124527MWI |
| Trans EPA ID: | CAD008364432 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H111 - Stabilization Or Chemical Fixation Prior To Disposal At Another Site |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2012 |
| Gen EPA ID: | CAL000320977 |
| Shipment Date: | 20120913 |
| Creation Date: | 12/28/2012 22:15:08 |
| Receipt Date: | 20120919 |
| Manifest ID: | 000369747PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0105 |
| Waste Quantity: | 21 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20120913 |
| Creation Date: | 12/28/2012 22:15:08 |
| Receipt Date: | 20120919 |
| Manifest ID: | 000369747PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.004 |
| Waste Quantity: | 8 |
| Quantity Unit: | P |
| Additional Code 1: | D018 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20120913 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000369747PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | Not reported |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.006 |
| Waste Quantity: | 12 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20120913 |
| Creation Date: | 12/28/2012 22:15:08 |
| Receipt Date: | 20120919 |
| Manifest ID: | 000369747PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 792 - Not reported |
| RCRA Code: | D007 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0005 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Waste Quantity: | 1 |
| Quantity Unit: | P |
| Additional Code 1: | D002 |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20120913 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000369747PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.003 |
| Waste Quantity: | 6 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20120913 |
| Creation Date: | 12/28/2012 22:15:08 |
| Receipt Date: | 20120919 |
| Manifest ID: | 000369747PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | D001 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0005 |
| Waste Quantity: | 1 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

Additional Info:

| | |
|---|---|
| Year: | 2015 |
| Gen EPA ID: | CAL000320977 |
| Shipment Date: | 20150603 |
| Creation Date: | 1/20/2016 22:15:20 |
| Receipt Date: | 20150618 |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.01 |
| Waste Quantity: | 20 |
| Quantity Unit: | P |
| Additional Code 1: | D002 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20150603 |
| Creation Date: | 1/20/2016 22:15:20 |
| Receipt Date: | 20150618 |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | U205 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.1645 |
| Waste Quantity: | 329 |
| Quantity Unit: | P |
| Additional Code 1: | D010 |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20150603 |
| Creation Date: | 1/20/2016 22:15:20 |
| Receipt Date: | 20150618 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D011 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.015 |
| Waste Quantity: | 30 |
| Quantity Unit: | P |
| Additional Code 1: | D010 |
| Additional Code 2: | D008 |
| Additional Code 3: | D007 |
| Additional Code 4: | D005 |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20150603 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | - Not reported |
| Quantity Tons: | 0.0095 |
| Waste Quantity: | 19 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20150603 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H110 - Not reported |
| Quantity Tons: | 0.0045 |
| Waste Quantity: | 9 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20150603 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | D001 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0005 |
| Waste Quantity: | 1 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20150603 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 181 - Other inorganic solid waste Organics |
| RCRA Code: | D009 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0025 |
| Waste Quantity: | 5 |
| Quantity Unit: | P |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20150603 |
| Creation Date: | 1/20/2016 22:15:20 |
| Receipt Date: | 20150618 |
| Manifest ID: | 009105653JJK |
| Trans EPA ID: | MIK435642742 |
| Trans Name: | EQ INDUSTRIAL SERVICES |
| Trans 2 EPA ID: | NED986382133 |
| Trans 2 Name: | SMITH SYSTEMS TRANS |
| TSDF EPA ID: | OKD000402396 |
| Trans Name: | EQ OKLAHOMA INC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H110 - Not reported |
| Quantity Tons: | 0.001 |
| Waste Quantity: | 2 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2013 |
| Gen EPA ID: | CAL000320977 |
| | |
| Shipment Date: | 20131211 |
| Creation Date: | 2/7/2014 22:15:07 |
| Receipt Date: | 20131218 |
| Manifest ID: | 000657582PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0105 |
| Waste Quantity: | 21 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20131211 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000657582PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0035 |
| Waste Quantity: | 7 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20131211 |
| Creation Date: | 2/7/2014 22:15:07 |
| Receipt Date: | 20131218 |
| Manifest ID: | 000657582PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0065 |
| Waste Quantity: | 13 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20131211 |
| Creation Date: | 2/7/2014 22:15:07 |
| Receipt Date: | 20131218 |
| Manifest ID: | 000657582PSC |
| Trans EPA ID: | CAD008364432 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D016 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.008 |
| Waste Quantity: | 16 |
| Quantity Unit: | P |
| Additional Code 1: | D011 |
| Additional Code 2: | D008 |
| Additional Code 3: | D007 |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20131211 |
| Creation Date: | 2/7/2014 22:15:07 |
| Receipt Date: | 20131218 |
| Manifest ID: | 000657582PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | D001 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.006 |
| Waste Quantity: | 12 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20130613 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000540817PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0105 |
| Waste Quantity: | 21 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20130613 |
| Creation Date: | 9/17/2013 22:15:12 |
| Receipt Date: | 20130628 |
| Manifest ID: | 000540817PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 181 - Other inorganic solid waste Organics |
| RCRA Code: | D009 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0015 |
| Waste Quantity: | 3 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20130613 |
| Creation Date: | 9/17/2013 22:15:12 |
| Receipt Date: | 20130628 |
| Manifest ID: | 000540817PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.005 |
| Waste Quantity: | 10 |
| Quantity Unit: | P |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20130613 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000540817PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 181 - Other inorganic solid waste Organics |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0025 |
| Waste Quantity: | 5 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20130613 |
| Creation Date: | 9/17/2013 22:15:12 |
| Receipt Date: | 20130628 |
| Manifest ID: | 000540817PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.009 |
| Waste Quantity: | 18 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

Additional Info:

| | |
|---|---|
| Year: | 2009 |
| Gen EPA ID: | CAL000320977 |
| Shipment Date: | 20091012 |
| Creation Date: | 1/8/2010 18:30:08 |
| Receipt Date: | 20091012 |
| Manifest ID: | 005463598JJK |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.018 |
| Waste Quantity: | 36 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20091012 |
| Creation Date: | 1/8/2010 18:30:08 |
| Receipt Date: | 20091012 |
| Manifest ID: | 005463598JJK |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.003 |
| Waste Quantity: | 6 |
| Quantity Unit: | P |
| Additional Code 1: | D018 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20091012 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 005463598JJK |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 352 - Other organic solids |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.003 |
| Waste Quantity: | 6 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20091012 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 005463598JJK |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.006 |
| Waste Quantity: | 12 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20091012 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 005463598JJK |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 291 - Latex waste |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0045 |
| Waste Quantity: | 9 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20091012 |
| Creation Date: | 1/8/2010 18:30:08 |
| Receipt Date: | 20091012 |
| Manifest ID: | 005463598JJK |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.002 |
| Waste Quantity: | 4 |
| Quantity Unit: | P |
| Additional Code 1: | D001 |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2010 |
| Gen EPA ID: | CAL000320977 |
| | |
| Shipment Date: | 20101015 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000028708MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD980584510 |
| Trans 2 Name: | PHILIP WEST INDUSTRIAL SERVICES |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D007 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Meth Code: | - Not reported |
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20101015 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000028708MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD980584510 |
| Trans 2 Name: | PHILIP WEST INDUSTRIAL SERVICES |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.019 |
| Waste Quantity: | 38 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20101015 |
| Creation Date: | 1/3/2011 18:30:46 |
| Receipt Date: | 20101018 |
| Manifest ID: | 000028708MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD980584510 |
| Trans 2 Name: | PHILIP WEST INDUSTRIAL SERVICES |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.001 |
| Waste Quantity: | 2 |
| Quantity Unit: | P |
| Additional Code 1: | D001 |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20101015 |
| Creation Date: | 1/3/2011 18:30:46 |
| Receipt Date: | 20101018 |
| Manifest ID: | 000028708MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD980584510 |
| Trans 2 Name: | PHILIP WEST INDUSTRIAL SERVICES |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.009 |
| Waste Quantity: | 18 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20101015 |
| Creation Date: | 1/3/2011 18:30:46 |
| Receipt Date: | 20101018 |
| Manifest ID: | 000028708MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD980584510 |
| Trans 2 Name: | PHILIP WEST INDUSTRIAL SERVICES |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.003 |
| Waste Quantity: | 6 |
| Quantity Unit: | P |
| Additional Code 1: | D018 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20101015 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000028708MWI |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans 2 EPA ID: | CAD980584510 |
| Trans 2 Name: | PHILIP WEST INDUSTRIAL SERVICES |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 181 - Other inorganic solid waste Organics |
| RCRA Code: | D009 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0055 |
| Waste Quantity: | 11 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

Additional Info:

| | |
|---|---|
| Year: | 2014 |
| Gen EPA ID: | CAL000320977 |
| Shipment Date: | 20141211 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000903988PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0355 |
| Waste Quantity: | 71 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| Shipment Date: | 20141211 |
| Creation Date: | 2/26/2015 22:14:59 |
| Receipt Date: | 20141216 |
| Manifest ID: | 000903988PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0075 |
| Waste Quantity: | 15 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20141211 |
| Creation Date: | 2/26/2015 22:14:59 |
| Receipt Date: | 20141216 |
| Manifest ID: | 000903988PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0035 |
| Waste Quantity: | 7 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20141211 |
| Creation Date: | 2/26/2015 22:14:59 |
| Receipt Date: | 20141216 |
| Manifest ID: | 000903988PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | - Not reported |
| RCRA Code: | Not reported |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Quantity Tons: | Not reported |
| Waste Quantity: | Not reported |
| Quantity Unit: | Not reported |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20141211 |
| Creation Date: | Not reported |
| Receipt Date: | Not reported |
| Manifest ID: | 000903988PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D035 |
| Meth Code: | H061 - Fuel Blending Prior To Energy Recovery At Another Site |
| Quantity Tons: | 0.0055 |
| Waste Quantity: | 11 |
| Quantity Unit: | P |
| Additional Code 1: | D018 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |
| | |
| Shipment Date: | 20141211 |
| Creation Date: | 2/26/2015 22:14:59 |
| Receipt Date: | 20141216 |
| Manifest ID: | 000903988PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 181 - Other inorganic solid waste Organics |
| RCRA Code: | D009 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.009 |
| Waste Quantity: | 18 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Shipment Date: | 20140612 |
| Creation Date: | 9/9/2014 22:15:03 |
| Receipt Date: | 20140618 |
| Manifest ID: | 000781815PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 122 - Alkaline solution without metals (pH > 12.5 |
| RCRA Code: | D002 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.02 |
| Waste Quantity: | 40 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20140612 |
| Creation Date: | 9/9/2014 22:15:03 |
| Receipt Date: | 20140618 |
| Manifest ID: | 000781815PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 331 - Off-specification, aged, or surplus organics |
| RCRA Code: | D016 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0165 |
| Waste Quantity: | 33 |
| Quantity Unit: | P |
| Additional Code 1: | D011 |
| Additional Code 2: | D008 |
| Additional Code 3: | D007 |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20140612 |
| Creation Date: | 9/9/2014 22:15:03 |
| Receipt Date: | 20140618 |
| Manifest ID: | 000781815PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | D001 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0005 |
| Waste Quantity: | 1 |
| Quantity Unit: | P |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

| | |
|---|---|
| Shipment Date: | 20140612 |
| Creation Date: | 9/9/2014 22:15:03 |
| Receipt Date: | 20140618 |
| Manifest ID: | 000781815PSC |
| Trans EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| Trans 2 EPA ID: | CAD983649880 |
| Trans 2 Name: | PSC ENVIRONMENTAL SERVICES OF POMONA LP |
| TSDF EPA ID: | CAD008364432 |
| Trans Name: | RHO CHEM LLC |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 214 - Unspecified solvent mixture |
| RCRA Code: | D035 |
| Meth Code: | H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Quantity Tons: | 0.0055 |
| Waste Quantity: | 11 |
| Quantity Unit: | P |
| Additional Code 1: | D005 |
| Additional Code 2: | D001 |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

CERS:

| | |
|---|---|
| Name: | RALPHS GROCERY #723 |
| Address: | 101 W. LOS ANGELES AVENUE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 60149 |
| CERS ID: | 10160617 |
| CERS Description: | Chemical Storage Facilities |

Violations:

| | |
|---|---|
| Site ID: | 60149 |
| Site Name: | Ralphs Grocery #723 |
| Violation Date: | 10-02-2017 |
| Citation: | HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4) |

**RALPHS GROCERY #723 (Continued)** **S113148093**

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 60149
Site Name: Ralphs Grocery #723
Violation Date: 11-05-2018
Citation: HSC 6.5 25123.3(h)(2) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(2)
Violation Description: Failure to determine the status of any hazardous waste if a signed copy of the manifest isn t received within 35 days of the date the waste was accepted by the initial transporter and/or to submit an Exception Report to DTSC if a signed copy of the manifest isn t received within 60 days of the date the waste was accepted by the initial transporter.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Ventura County Environmental Health
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-09-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-02-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-05-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-19-2014
Violations Found: No
Eval Type: Routine done by local agency

**RALPHS GROCERY #723 (Continued)** **S113148093**

Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-10-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-09-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-09-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-09-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-02-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-28-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP

**RALPHS GROCERY #723 (Continued)** **S113148093**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-28-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-05-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-19-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-10-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Ventura County Environmental Health
Entity Title: Not reported
Affiliation Address: 800 South Victoria Avenue
Affiliation City: Ventura
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93009
Affiliation Phone: (805) 654-2813,

Affiliation Type Desc: Parent Corporation
Entity Name: Ralphs Grocery Company
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

**RALPHS GROCERY #723 (Continued)** **S113148093**

Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: P.O. Box 54143
Affiliation City: Los Angeles
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 90054-0143
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Matthew Eaton
Entity Title: Manager Environmental Affairs
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Ralphs Grocery Company
Entity Title: Not reported
Affiliation Address: P.O. Box 54143
Affiliation City: Los Angeles
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90054-0143
Affiliation Phone: (310) 884-9000,

Affiliation Type Desc: Operator
Entity Name: Ralphs Grocery Company
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (310) 884-9000,

Affiliation Type Desc: Document Preparer
Entity Name: Ralphs Grocery Company
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Matthew Eaton
Entity Title: Not reported
Affiliation Address: P.O. Box 54143
Affiliation City: Los Angeles

**RALPHS GROCERY #723 (Continued)** **S113148093**

| | |
|---|---|
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 90054-0143 |
| Affiliation Phone: | , |
| Affiliation Type Desc: | Property Owner |
| Entity Name: | ROIC California, LLC |
| Entity Title: | Not reported |
| Affiliation Address: | 8905 Towne Centre Drive, Suite 108 |
| Affiliation City: | San Diego |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 92122- |
| Affiliation Phone: | (858) 255-4902, |

HWTS:

| | |
|---|---|
| Name: | RALPHS GROCERY #723 |
| Address: | 101 W LOS ANGELES AVE |
| Address 2: | Not reported |
| City,State,Zip: | MOORPARK, CA 93021 |
| EPA ID: | CAL000320977 |
| Inactive Date: | 06/08/2015 |
| Create Date: | 06/19/2007 |
| Last Act Date: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | P.O. BOX 54143 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | LOS ANGELES, CA 900540000 |
| Owner Name: | RALPHS GROCERY CO |
| Owner Address: | PO BOX 54143 |
| Owner Address 2: | Not reported |
| Owner City,State,Zip: | LOS ANGELES, CA 900540000 |
| Contact Name: | SHERRIE WALTERS |
| Contact Address: | 1100 W. ARTESIA BLVD. |
| Contact Address 2: | Not reported |
| City,State,Zip: | COMPTON, CA 90220 |
| Facility Status: | Inactive |
| Facility Type: | PERMANENT |
| Category: | STATE |
| Latitude: | 34.279027 |
| Longitude: | -118.884171 |

NAICS:

| | |
|---|---|
| EPA ID: | CAL000320977 |
| Create Date: | 2009-12-03 12:41:18.000 |
| NAICS Code: | 45291 |
| NAICS Description: | Warehouse Clubs and Superstores |
| Issued EPA ID Date: | 2007-06-19 16:02:40.22000 |
| Inactive Date: | 2015-06-08 00:00:00 |
| Facility Name: | RALPHS GROCERY #723 |
| Facility Address: | 101 W LOS ANGELES AVE |
| Facility Address 2: | Not reported |
| Facility City: | MOORPARK |
| Facility County: | Not reported |
| Facility State: | CA |
| Facility Zip: | 930211868 |

**I40** **J. E. CLARK II CORP** **LUST** **S106163753**
**ESE** **450 HIGH ST** **N/A**
**1/4-1/2** **MOORPARK, CA 93021**
**0.339 mi.**
**1792 ft.** **Site 1 of 4 in cluster I**

**Relative:** **Higher**

**Actual:** **532 ft.**

LUST REG 4:

| | | |
|---|---|---|
| Region: | 4 | |
| Regional Board: | 04 | |
| County: | Ventura | |
| Facility Id: | C-98026 | |
| Status: | Preliminary site assessment workplan submitted | |
| Substance: | Diesel | |
| Substance Quantity: | Not reported | |
| Local Case No: | 98026 | |
| Case Type: | Soil | |
| Abatement Method Used at the Site: | | Not reported |
| Global ID: | T0611101184 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 56000L | |
| Cross Street: | Not reported | |
| Enforcement Type: | NOV | |
| Date Leak Discovered: | 8/17/1998 | |
| Date Leak First Reported: | | 8/17/1998 |
| Date Leak Record Entered: | Not reported | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | Not reported |
| Date the Case was Closed: | | Not reported |
| How Leak Discovered: | Not reported | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | Not reported | |
| Leak Source: | Not reported | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 5854.756730659538721803626863 4 |
| Source of Cleanup Funding: | | F |
| Preliminary Site Assessment Workplan Submitted: | | 8/17/1998 |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |
| Remediation Plan Submitted: | | Not reported |
| Remedial Action Underway: | | Not reported |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | Not reported |
| Historical Max MTBE Date: | | 7/5/2002 |
| Hist Max MTBE Conc in Groundwater: | | 9.4 |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | = | |
| Soil Qualifier: | Not reported | |
| Organization: | Not reported | |
| Owner Contact: | Not reported | |
| Responsible Party: | J. E. CLARK II CORP | |
| RP Address: | Not reported | |
| Program: | LUST | |
| Lat/Long: | 34.2852254 / -1 | |
| Local Agency Staff: | KEA | |

**J. E. CLARK II CORP (Continued)** **S106163753**

| | |
|---|---|
| Beneficial Use: | Not reported |
| Priority: | Not reported |
| Cleanup Fund Id: | Not reported |
| Suspended: | Not reported |
| Assigned Name: | Not reported |
| Summary: | Not reported |

---

**I41** **J. E. CLARK** **LUST** **S103317827**
**ESE** **450 HIGH ST** **Cortese** **N/A**
**1/4-1/2** **MOORPARK, CA 93021** **CERS**
**0.339 mi.**
**1792 ft.** **Site 2 of 4 in cluster I**

**Relative:**
**Higher**

**Actual:**
**532 ft.**

LUST REG 4:

| | | |
|---|---|---|
| Region: | 4 | |
| Regional Board: | 04 | |
| County: | Ventura | |
| Facility Id: | C-93014 | |
| Status: | Case Closed | |
| Substance: | Diesel | |
| Substance Quantity: | Not reported | |
| Local Case No: | 93014 | |
| Case Type: | Soil | |
| Abatement Method Used at the Site: | | EDET |
| Global ID: | T0611100842 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 56000L | |
| Cross Street: | Not reported | |
| Enforcement Type: | Informal Enforcement Actions,including Notices of Violations and Staff Enforcement Letters | |
| Date Leak Discovered: | 4/18/1993 | |
| Date Leak First Reported: | | 4/18/1993 |
| Date Leak Record Entered: | Not reported | |
| Date Confirmation Began: | 4/18/1993 | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | Not reported |
| Date the Case was Closed: | | 4/3/1995 |
| How Leak Discovered: | Not reported | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | Not reported | |
| Leak Source: | Not reported | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 5724.27163859643968922437014 32 |
| Source of Cleanup Funding: | | F |
| Preliminary Site Assessment Workplan Submitted: | | 4/18/1993 |
| Preliminary Site Assessment Began: | | 7/31/1994 |
| Pollution Characterization Began: | | 7/31/1994 |
| Remediation Plan Submitted: | | 8/3/1994 |
| Remedial Action Underway: | | 11/16/1994 |
| Post Remedial Action Monitoring Began: | | 3/21/1995 |
| Enforcement Action Date: | | 1/1/1965 |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | Not reported | |

**J. E. CLARK (Continued)** **S103317827**

| | |
|---|---|
| Soil Qualifier: | Not reported |
| Organization: | Not reported |
| Owner Contact: | Not reported |
| Responsible Party: | JAMES CLARK |
| RP Address: | Not reported |
| Program: | LUST |
| Lat/Long: | 34.2854244 / -1 |
| Local Agency Staff: | EHD |
| Beneficial Use: | Not reported |
| Priority: | Not reported |
| Cleanup Fund Id: | Not reported |
| Suspended: | Not reported |
| Assigned Name: | Not reported |
| Summary: | Not reported |

VENTURA CO. LUST:

| | |
|---|---|
| Name: | J.E. CLARK II CORP. - HIGH ST. |
| Address: | 450 HIGH ST |
| City: | MOORPARK |
| Region: | VENTURA |
| Facility ID: | 98026 |
| Status: | Case Closed |

| | |
|---|---|
| Name: | J.E. CLARK |
| Address: | 450 HIGH ST |
| City: | MOORPARK |
| Region: | VENTURA |
| Facility ID: | 93014 |
| Status: | Case Closed |

CORTESE:

| | |
|---|---|
| Name: | J.E. CLARK |
| Address: | 450 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Region: | CORTESE |
| Envirostor Id: | Not reported |
| Global ID: | T0611100842 |
| Site/Facility Type: | LUST CLEANUP SITE |
| Cleanup Status: | COMPLETED - CASE CLOSED |
| Status Date: | Not reported |
| Site Code: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

**J. E. CLARK (Continued)** **S103317827**

| | |
|---|---|
| Name: | J.E. CLARK II CORP. - HIGH ST. |
| Address: | 450 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Region: | CORTESE |
| Envirostor Id: | Not reported |
| Global ID: | T0611101184 |
| Site/Facility Type: | LUST CLEANUP SITE |
| Cleanup Status: | COMPLETED - CASE CLOSED |
| Status Date: | Not reported |
| Site Code: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

CERS:

| | |
|---|---|
| Name: | J.E. CLARK |
| Address: | 450 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 197208 |
| CERS ID: | T0611100842 |
| CERS Description: | Leaking Underground Storage Tank Cleanup Site |

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | Regional Board Caseworker |
| Entity Name: | DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4) |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | R4 UNKNOWN |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 2135766714, |

| | |
|---|---|
| Name: | J.E. CLARK II CORP. - HIGH ST. |
| Address: | 450 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 244107 |
| CERS ID: | T0611101184 |
| CERS Description: | Leaking Underground Storage Tank Cleanup Site |

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | Regional Board Caseworker |
| Entity Name: | DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4) |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | R4 UNKNOWN |

**J. E. CLARK (Continued)** **S103317827**

| | |
|---|---|
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 2135766714, |
| Affiliation Type Desc: | Local Agency Caseworker |
| Entity Name: | DIANE B. WAHL - VENTURA COUNTY |
| Entity Title: | Not reported |
| Affiliation Address: | 800 S. VICTORIA AVE. |
| Affiliation City: | VENTURA |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 8056545040, |

---

**I42** **J. E. CLARK II CORP** **LUST** **S103971832**
**ESE** **450 HIGH** **HIST CORTESE** **N/A**
**1/4-1/2** **MOORPARK, CA 93021**
**0.339 mi.**
**1792 ft.** **Site 3 of 4 in cluster I**

**Relative:** **Higher**
**Actual:** **532 ft.**

LUST:

| | |
|---|---|
| Name: | J.E. CLARK II CORP. - HIGH ST. |
| Address: | 450 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Lead Agency: | VENTURA COUNTY |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101184 |
| Global Id: | T0611101184 |
| Latitude: | 34.2852254 |
| Longitude: | -118.875702 |
| Status: | Completed - Case Closed |
| Status Date: | 01/09/2007 |
| Case Worker: | DBW |
| RB Case Number: | C98026 |
| Local Agency: | VENTURA COUNTY |
| File Location: | All Files are on GeoTracker or in the Local Agency Database |
| Local Case Number: | 98026 |
| Potential Media Affect: | Other Groundwater (uses other than drinking water) |
| Potential Contaminants of Concern: | Diesel |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0611101184 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | DANIEL PIROTTON |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | Not reported |
| City: | R4 UNKNOWN |
| Email: | dpirotton@waterboards.ca.gov |
| Phone Number: | 2135766714 |
| Global Id: | T0611101184 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | DIANE B. WAHL |
| Organization Name: | VENTURA COUNTY |
| Address: | 800 S. VICTORIA AVE. |

**J. E. CLARK II CORP (Continued)** **S103971832**

City: VENTURA
Email: diane.wahl@ventura.org
Phone Number: 8056545040

LUST:
Global Id: T0611101184
Action Type: Other
Date: 08/17/1998
Action: Leak Reported

Global Id: T0611101184
Action Type: RESPONSE
Date: 10/31/2003
Action: Monitoring Report - Quarterly

Global Id: T0611101184
Action Type: RESPONSE
Date: 10/24/2003
Action: Other Workplan

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 05/15/2005
Action: * No Action - #3

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 06/07/2005
Action: * Historical Enforcement - #4

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 04/11/2006
Action: Technical Correspondence / Assistance / Other - #6

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 05/30/2006
Action: LOP Case Closure Summary to RB - #7

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 11/14/2006
Action: Technical Correspondence / Assistance / Other - #10

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 10/30/2006
Action: Technical Correspondence / Assistance / Other - #9

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 08/03/2006
Action: Technical Correspondence / Assistance / Other - #8

Global Id: T0611101184
Action Type: ENFORCEMENT

**J. E. CLARK II CORP (Continued)** **S103971832**

Date: 10/04/2005
Action: * Historical Enforcement - #5

Global Id: T0611101184
Action Type: RESPONSE
Date: 04/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0611101184
Action Type: RESPONSE
Date: 03/14/2003
Action: Other Workplan

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 02/11/2003
Action: * Historical Enforcement - #1

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 09/30/2003
Action: Notice of Violation - #2

Global Id: T0611101184
Action Type: RESPONSE
Date: 12/07/2006
Action: Unknown

Global Id: T0611101184
Action Type: Other
Date: 08/17/1998
Action: Leak Discovery

LUST:
Global Id: T0611101184
Status: Open - Case Begin Date
Status Date: 08/17/1998

Global Id: T0611101184
Status: Open - Site Assessment
Status Date: 08/17/1998

Global Id: T0611101184
Status: Open - Site Assessment
Status Date: 11/15/2000

Global Id: T0611101184
Status: Open - Site Assessment
Status Date: 06/15/2002

Global Id: T0611101184
Status: Open - Verification Monitoring
Status Date: 06/15/2003

Global Id: T0611101184
Status: Completed - Case Closed
Status Date: 01/09/2007

**J. E. CLARK II CORP (Continued)** **S103971832**

| | |
|---|---|
| Name: | J.E. CLARK |
| Address: | 450 HIGH ST |
| City,State,Zip: | MOORPARK, CA 93021 |
| Lead Agency: | VENTURA COUNTY |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100842 |
| Global Id: | T0611100842 |
| Latitude: | 34.285161 |
| Longitude: | -118.876227 |
| Status: | Completed - Case Closed |
| Status Date: | 04/03/1995 |
| Case Worker: | Not reported |
| RB Case Number: | C-93014 |
| Local Agency: | Not reported |
| File Location: | Not reported |
| Local Case Number: | 93014 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Diesel |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0611100842 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | DANIEL PIROTTON |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | Not reported |
| City: | R4 UNKNOWN |
| Email: | dpirotton@waterboards.ca.gov |
| Phone Number: | 2135766714 |

LUST:

| | |
|---|---|
| Global Id: | T0611100842 |
| Action Type: | Other |
| Date: | 04/18/1993 |
| Action: | Leak Reported |

| | |
|---|---|
| Global Id: | T0611100842 |
| Action Type: | Other |
| Date: | 04/18/1993 |
| Action: | Leak Discovery |

LUST:

| | |
|---|---|
| Global Id: | T0611100842 |
| Status: | Open - Case Begin Date |
| Status Date: | 04/18/1993 |

| | |
|---|---|
| Global Id: | T0611100842 |
| Status: | Open - Site Assessment |
| Status Date: | 04/18/1993 |

| | |
|---|---|
| Global Id: | T0611100842 |
| Status: | Open - Site Assessment |
| Status Date: | 07/31/1994 |

| | |
|---|---|
| Global Id: | T0611100842 |
| Status: | Open - Remediation |
| Status Date: | 08/03/1994 |

**J. E. CLARK II CORP (Continued)** **S103971832**

Global Id: T0611100842
Status: Open - Remediation
Status Date: 11/16/1994

Global Id: T0611100842
Status: Open - Verification Monitoring
Status Date: 03/21/1995

Global Id: T0611100842
Status: Completed - Case Closed
Status Date: 04/03/1995

HIST CORTESE:
edr_fname: J. E. CLARK II CORP
edr_fadd1: 450 HIGH
City,State,Zip: MOORPARK, CA 93021
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-98026

---

**I43** **J.E. CLARK II CORP PLANT 2** **SWEEPS UST** **S102859875**
**ESE** **412 HIGH ST** **VENTURA CO. BWT** **N/A**
**1/4-1/2** **MOORPARK, CA** **HIST CORTESE**
**0.344 mi.**
**1814 ft.** **Site 4 of 4 in cluster I**

**Relative:**
**Higher**

**Actual:**
**532 ft.**

SWEEPS UST:
Name: J.E. CLARK II CORP PLANT 2
Address: 412 HIGH ST
City: MOORPARK
Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000001
Tank Status: A
Capacity: 8000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 5

Name: J.E. CLARK II CORP PLANT 2
Address: 412 HIGH ST
City: MOORPARK
Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92

**J.E. CLARK II CORP PLANT 2 (Continued)** **S102859875**

| | |
|---|---|
| Action Date: | 09-30-92 |
| Created Date: | 02-29-88 |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 56-000-000758-000002 |
| Tank Status: | A |
| Capacity: | 8000 |
| Active Date: | Not reported |
| Tank Use: | UNKNOWN |
| STG: | P |
| Content: | Not reported |
| Number Of Tanks: | Not reported |

| | |
|---|---|
| Name: | J.E. CLARK II CORP PLANT 2 |
| Address: | 412 HIGH ST |
| City: | MOORPARK |
| Status: | Active |
| Comp Number: | 758 |
| Number: | 9 |
| Board Of Equalization: | 44-030702 |
| Referral Date: | 09-30-92 |
| Action Date: | 09-30-92 |
| Created Date: | 02-29-88 |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 56-000-000758-000003 |
| Tank Status: | A |
| Capacity: | 10000 |
| Active Date: | Not reported |
| Tank Use: | UNKNOWN |
| STG: | P |
| Content: | Not reported |
| Number Of Tanks: | Not reported |

| | |
|---|---|
| Name: | J.E. CLARK II CORP PLANT 2 |
| Address: | 412 HIGH ST |
| City: | MOORPARK |
| Status: | Active |
| Comp Number: | 758 |
| Number: | 9 |
| Board Of Equalization: | 44-030702 |
| Referral Date: | 09-30-92 |
| Action Date: | 09-30-92 |
| Created Date: | 02-29-88 |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 56-000-000758-000004 |
| Tank Status: | A |
| Capacity: | 10000 |
| Active Date: | Not reported |
| Tank Use: | UNKNOWN |
| STG: | P |
| Content: | Not reported |
| Number Of Tanks: | Not reported |

| | |
|---|---|
| Name: | J.E. CLARK II CORP PLANT 2 |
| Address: | 412 HIGH ST |
| City: | MOORPARK |
| Status: | Active |
| Comp Number: | 758 |

**J.E. CLARK II CORP PLANT 2 (Continued)** **S102859875**

Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000005
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

VENTURA CO. BWT:
Name: J.E. CLARK CORPORATION
Address: 412 HIGH ST
City,State,Zip: MOORPARK, CA
Facility ID: HM 3699
Program: Not reported

Name: J.E. CLARK CORP
Address: 412 HIGH ST
City,State,Zip: MOORPARK, CA
Facility ID: HM 3893
Program: Not reported

Name: J.E. CLARK CORPORATION
Address: 412 HIGH ST
City,State,Zip: MOORPARK, CA
Facility ID: HM 2830
Program: Not reported

HIST CORTESE:
edr_fname: J. E. CLARK
edr_fadd1: 412 HIGH
City,State,Zip: MOORPARK, CA
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-93014

---

**44** **MOORPARK UNIF. SCHOOL DIST.** **LUST** **1000368487**
**SSE** **30 FLORY AVE** **UST** **N/A**
**1/4-1/2** **MOORPARK, CA** **SWEEPS UST**
**0.403 mi.** **HIST UST**
**2129 ft.** **CA FID UST**
**VENTURA CO. BWT**
**Relative:** **Cortese**
**Lower** **HIST CORTESE**
**CERS**
**Actual:**
**513 ft.**

LUST:
Name: MOORPARK UNIFIED SCHOOL DIST
Address: 30 FLORY AVE
City,State,Zip: MOORPARK, CA 93021

**MOORPARK UNIF. SCHOOL DIST. (Continued)** **1000368487**

| | |
|---|---|
| Lead Agency: | VENTURA COUNTY |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101132 |
| Global Id: | T0611101132 |
| Latitude: | 34.279263 |
| Longitude: | -118.880981 |
| Status: | Completed - Case Closed |
| Status Date: | 04/02/1997 |
| Case Worker: | Not reported |
| RB Case Number: | C-97012 |
| Local Agency: | Not reported |
| File Location: | Not reported |
| Local Case Number: | 97012 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Diesel |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0611101132 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | DANIEL PIROTTON |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | Not reported |
| City: | R4 UNKNOWN |
| Email: | dpirotton@waterboards.ca.gov |
| Phone Number: | 2135766714 |

LUST:

| | |
|---|---|
| Global Id: | T0611101132 |
| Action Type: | Other |
| Date: | 01/12/1997 |
| Action: | Leak Reported |

| | |
|---|---|
| Global Id: | T0611101132 |
| Action Type: | Other |
| Date: | 01/12/1997 |
| Action: | Leak Discovery |

LUST:

| | |
|---|---|
| Global Id: | T0611101132 |
| Status: | Open - Case Begin Date |
| Status Date: | 01/06/1996 |

| | |
|---|---|
| Global Id: | T0611101132 |
| Status: | Open - Site Assessment |
| Status Date: | 01/06/1996 |

| | |
|---|---|
| Global Id: | T0611101132 |
| Status: | Open - Remediation |
| Status Date: | 03/17/1996 |

| | |
|---|---|
| Global Id: | T0611101132 |
| Status: | Open - Site Assessment |
| Status Date: | 12/16/1996 |

| | |
|---|---|
| Global Id: | T0611101132 |
| Status: | Open - Site Assessment |

**MOORPARK UNIF. SCHOOL DIST. (Continued)** **1000368487**

Status Date: 01/12/1997

Global Id: T0611101132
Status: Completed - Case Closed
Status Date: 04/02/1997

LUST REG 4:
Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-97012
Status: Case Closed
Substance: Diesel
Substance Quantity: Not reported
Local Case No: 97012
Case Type: Soil
Abatement Method Used at the Site: Excavate and Dispose
Global ID: T0611101132
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: Not reported
Date Leak Discovered: 1/12/1997
Date Leak First Reported: 1/12/1997
Date Leak Record Entered: Not reported
Date Confirmation Began: 1/12/1997
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 4/2/1997
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 7613.1515842730846554779268592
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 12/16/1996
Preliminary Site Assessment Began: 1/6/1996
Pollution Characterization Began: 12/16/1996
Remediation Plan Submitted: 3/17/1996
Remedial Action Underway: 3/17/1996
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: MOORPARK UNIFIED SCHOOL DISTRI
RP Address: Not reported

**MOORPARK UNIF. SCHOOL DIST. (Continued)** **1000368487**

Program: LUST
Lat/Long: 34.2792117 / -1
Local Agency Staff: KCK
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:
Name: MOORPARK UNIFIED SCHOOL DIST
Address: 30 FLORY AVE
City: MOORPARK
Region: VENTURA
Facility ID: 97012
Status: Case Closed

VENTURA CO. UST:
Name: MOORPARK UNIF. SCHOOL DIST.
Address: 30 FLORY AVE
City: MOORPARK
Facility ID: D 1266
Facility Status: Inactive

SWEEPS UST:
Name: MOORPARK UNIF. SCHOOL DIST.
Address: 30 FLORY AVE
City: MOORPARK
Status: Active
Comp Number: 644
Number: 9
Board Of Equalization: 44-030671
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000644-000001
Tank Status: A
Capacity: 2000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 2

Name: MOORPARK UNIF. SCHOOL DIST.
Address: 30 FLORY AVE
City: MOORPARK
Status: Active
Comp Number: 644
Number: 9
Board Of Equalization: 44-030671
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88

**MOORPARK UNIF. SCHOOL DIST. (Continued)** **1000368487**

Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000644-000002
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
Name: MOORPARK UNIFIED SCHOOL DISTRI
Address: 30 FLORY AVE
City,State,Zip: MOORPARK, CA 93021
File Number: 0002CB57
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CB57.pdf
Region: STATE
Facility ID: 00000044551
Facility Type: Other
Other Type: PUBLIC SCHOOL
Contact Name: Not reported
Telephone: 8055291149
Owner Name: MOORPARK UNIFIED SCHOOL DISTRI
Owner Address: 30 FLORY AVE.
Owner City,St,Zip: MOORPARK, CA 93021
Total Tanks: 0002

Tank Num: 001
Container Num: 02
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 01
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 56002593
Regulated By: UTNKA
Regulated ID: 44551
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 30 FLORY AVE

**MOORPARK UNIF. SCHOOL DIST. (Continued)** **1000368487**

Mailing Address 2: Not reported
Mailing City,St,Zip: MOORPARK 93021
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

VENTURA CO. BWT:
Name: MOORPARK UNIFIED SCHOOL DISTRICT
Address: 30 FLORY AVE.
City,State,Zip: MOORPARK, CA
Facility ID: HM 436
Program: Not reported

Name: MOORPARK UNIFIED SCHOOL DISTRICT
Address: 30 FLORY AVE.
City,State,Zip: MOORPARK, CA
Facility ID: BP 1867
Program: Not reported

CORTESE:
Name: MOORPARK UNIFIED SCHOOL DIST
Address: 30 FLORY AVE
City,State,Zip: MOORPARK, CA 93021
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0611101132
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:
edr_fname: MOORPARK UNIFIED SCHOOL D
edr_fadd1: 30 FLORY
City,State,Zip: MOORPARK, CA 93021
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA

**MOORPARK UNIF. SCHOOL DIST. (Continued)** **1000368487**

Reg Id: C-97012

CERS:
Name: MOORPARK UNIFIED SCHOOL DIST
Address: 30 FLORY AVE
City,State,Zip: MOORPARK, CA 93021
Site ID: 257260
CERS ID: T0611101132
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4)
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: R4 UNKNOWN
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 2135766714,

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**45**
**NNE**
**1/4-1/2**
**0.415 mi.**
**2191 ft.**

**ANTONIO M. PEREZ**
**1363 WALNUT CANYON ROAD**
**MOORPARK, CA 93021**

**CPS-SLIC** **S103950371**
**CERS** **N/A**

**Relative:**
**Higher**

**Actual:**
**625 ft.**

CPS-SLIC:
Name: ANTONIO M. PEREZ
Address: 1363 WALNUT CANYON ROAD
City,State,Zip: MOORPARK, CA 93021
Region: STATE
**Facility Status:** **Completed - Case Closed**
Status Date: 02/18/2009
Global Id: T10000000782
Lead Agency: VENTURA COUNTY
Lead Agency Case Number: SR3146629
Latitude: 34.297798
Longitude: -118.878046
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: Not reported
File Location: Local Agency Warehouse
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

CERS:
Name: ANTONIO M. PEREZ
Address: 1363 WALNUT CANYON ROAD
City,State,Zip: MOORPARK, CA 93021
Site ID: 227491
CERS ID: T10000000782

**ANTONIO M. PEREZ (Continued)** **S103950371**

CERS Description: Cleanup Program Site

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**46**
**East**
**1/4-1/2**
**0.445 mi.**
**2347 ft.**

**CONOCOPHILLIPS STN 254945**
**13800 PRINCETON AVENUE**
**MOORPARK, CA 93020**

**LUST** **S111083121**
**Cortese** **N/A**
**CERS**

**Relative:**
**Higher**

**Actual:**
**538 ft.**

LUST:
Name: CONOCOPHILLIPS STN 254945
Address: 13800 PRINCETON AVENUE
City,State,Zip: MOORPARK, CA 93020
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003241
Global Id: T10000003241
Latitude: 34.2853705
Longitude: -118.8743297
Status: Completed - Case Closed
Status Date: 01/01/2008
Case Worker: Not reported
RB Case Number: Not reported
Local Agency: Not reported
File Location: Not reported
Local Case Number: SR0000000
Potential Media Affect: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

LUST:
Global Id: T10000003241
Action Type: RESPONSE
Date: 10/25/2007
Action: Other Report / Document

LUST:
Global Id: T10000003241
Status: Open - Case Begin Date
Status Date: 10/25/2007

Global Id: T10000003241
Status: Completed - Case Closed
Status Date: 01/01/2008

CORTESE:
Name: CONOCOPHILLIPS STN 254945
Address: 13800 PRINCETON AVENUE
City,State,Zip: MOORPARK, CA 93020
Region: CORTESE
Envirostor Id: Not reported
Global ID: T10000003241
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported

**CONOCOPHILLIPS STN 254945 (Continued)** **S111083121**

| | |
|---|---|
| Longitude: | Not reported |
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

CERS:

| | |
|---|---|
| Name: | CONOCOPHILLIPS STN 254945 |
| Address: | 13800 PRINCETON AVENUE |
| City,State,Zip: | MOORPARK, CA 93020 |
| Site ID: | 195971 |
| CERS ID: | T10000003241 |
| CERS Description: | Leaking Underground Storage Tank Cleanup Site |

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**47**
**SSW**
**1/4-1/2**
**0.446 mi.**
**2353 ft.**

**MOORPARK CHEVRON**
**502 LOS ANGELES AVE**
**MOORPARK, CA 93021**

**CERS HAZ WASTE**
**CERS TANKS**
**VENTURA CO. BWT**
**HIST CORTESE**
**CERS**

**S103684163**
**N/A**

**Relative:**
**Lower**

**Actual:**
**497 ft.**

CERS HAZ WASTE:

| | |
|---|---|
| Name: | MOORPARK CHEVRON |
| Address: | 502 LOS ANGELES AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 397839 |
| CERS ID: | 10331788 |
| CERS Description: | Hazardous Waste Generator |

CERS TANKS:

| | |
|---|---|
| Name: | MOORPARK CHEVRON |
| Address: | 502 LOS ANGELES AVE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 397839 |
| CERS ID: | 10331788 |
| CERS Description: | Underground Storage Tank |

VENTURA CO. BWT:

| | |
|---|---|
| Name: | MOORPARK CHEVRON |
| Address: | 502 LOS ANGELES AVE |
| City,State,Zip: | MOORPARK, CA |
| Facility ID: | FA0004873 |
| Program: | HAZARDOUS WASTE GENERATOR/CUPA UNDERGROUND TANKS/BUSINESS PLAN |

HIST CORTESE:

| | |
|---|---|
| edr_fname: | CHEVRON SS #0688 |
| edr_fadd1: | 502 LOS ANGELES |
| City,State,Zip: | MOORPARK, CA 93021 |
| Region: | CORTESE |

**MOORPARK CHEVRON (Continued)** **S103684163**

Facility County Code: 56
Reg By: LTNKA
Reg Id: C-88067

CERS:
Name: MOORPARK CHEVRON
Address: 502 LOS ANGELES AVE
City,State,Zip: MOORPARK, CA 93021
Site ID: 397839
CERS ID: 10331788
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 05-14-2015
Citation: 23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)
Violation Description: Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed.
Violation Notes: Returned to compliance on 05/14/2015.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-08-2017
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure to comply with one or more of the following: Failure to install or maintain a liquid-tight spill bucket. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container. Be resistant to galvanic corrosion.
Violation Notes: Returned to compliance on 03/08/2017.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-08-2017
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings

**MOORPARK CHEVRON (Continued)** **S103684163**

located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 03/08/2017.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 05-14-2015
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.
Violation Notes: Returned to compliance on 05/14/2015.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-17-2020
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 04/06/2020.
Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-07-2019
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes: Returned to compliance on 03/19/2019.
Violation Division: Ventura County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-17-2020
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2

**MOORPARK CHEVRON (Continued)** **S103684163**

Violation Description: "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "
Violation Notes: Returned to compliance on 03/17/2020.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-08-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 03/08/2017.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-17-2020
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2
Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.
Violation Notes: Returned to compliance on 03/31/2020.
Violation Division: Ventura County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-10-2016
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure to comply with one or more of the following: Failure to install or maintain a liquid-tight spill bucket. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container. Be resistant to galvanic corrosion.
Violation Notes: Returned to compliance on 03/10/2016.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

**MOORPARK CHEVRON (Continued)** **S103684163**

| | |
|---|---|
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 05-08-2014 |
| Citation: | 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) |
| Violation Description: | Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. |
| Violation Notes: | Returned to compliance on 06/05/2014. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HW |
| Violation Source: | CERS, |

| | |
|---|---|
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-07-2019 |
| Citation: | 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G) |
| Violation Description: | Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months. |
| Violation Notes: | Returned to compliance on 03/07/2019. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | UST |
| Violation Source: | CERS, |

| | |
|---|---|
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-17-2020 |
| Citation: | HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4) |
| Violation Description: | Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years. |

**MOORPARK CHEVRON (Continued)** **S103684163**

| | |
|---|---|
| Violation Notes: | Returned to compliance on 04/03/2020. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HMRRP |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-07-2018 |
| Citation: | Un-Specified |
| Violation Description: | UST Program - Administration/Documentation - General Local Ordinance - Must include violation description and proper ordinance citation in the "comment" section. |
| Violation Notes: | Returned to compliance on 03/07/2018. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | UST |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-08-2017 |
| Citation: | 23 CCR 16 2641(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(a) |
| Violation Description: | Failure of leak detection equipment to be located such that equipment is capable of detecting a leak at the earliest possible opportunity. |
| Violation Notes: | Returned to compliance on 03/08/2017. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | UST |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-15-2021 |
| Citation: | HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2 |
| Violation Description: | "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. " |
| Violation Notes: | Returned to compliance on 03/15/2021. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | UST |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-17-2020 |
| Citation: | 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j) |
| Violation Description: | Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly. |
| Violation Notes: | Returned to compliance on 03/17/2020. |

**MOORPARK CHEVRON (Continued)** **S103684163**

Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-17-2020
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 03/27/2020.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-17-2020
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.
Violation Notes: Returned to compliance on 03/31/2020.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-08-2017
Citation: HSC 6.7 25290.1(c)(3), 25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3), 25290.2(c)(3)
Violation Description: Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003 and before July 1, 2004, or on or after July 1, 2004.
Violation Notes: Returned to compliance on 03/08/2017.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 05-08-2014

**MOORPARK CHEVRON (Continued)** **S103684163**

| | |
|---|---|
| Citation: | 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f) |
| Violation Description: | Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected. |
| Violation Notes: | Returned to compliance on 05/08/2014. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | UST |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-08-2017 |
| Citation: | HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f) |
| Violation Description: | Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name. A substantial change in the handler's operations that requires modification to any portion of the business plan. |
| Violation Notes: | Returned to compliance on 03/15/2017. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HMRRP |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 03-15-2021 |
| Citation: | HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1) |
| Violation Description: | Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days. |
| Violation Notes: | Returned to compliance on 03/18/2021. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HW |
| Violation Source: | CERS, |
| | |
| Site ID: | 397839 |
| Site Name: | MOORPARK CHEVRON |
| Violation Date: | 05-08-2014 |
| Citation: | HSC 6.95 25510 - California Health and Safety Code, Chapter 6.95, Section(s) 25510 |
| Violation Description: | Failure to update hazardous material inventory within 30 days when one of the following occurs: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials A change of business address, business ownership, or business name. |
| Violation Notes: | Returned to compliance on 06/05/2014. |

**MOORPARK CHEVRON (Continued)** **S103684163**

Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-07-2019
Citation: HSC 6.5 25123.3(h)(2) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(2)
Violation Description: Failure to determine the status of any hazardous waste if a signed copy of the manifest isn t received within 35 days of the date the waste was accepted by the initial transporter and/or to submit an Exception Report to DTSC if a signed copy of the manifest isn t received within 60 days of the date the waste was accepted by the initial transporter.
Violation Notes: Returned to compliance on 03/19/2019.
Violation Division: Ventura County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-15-2021
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 03/18/2021.
Violation Division: Ventura County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-07-2019
Citation: HSC 6.5 25160(b)(1)(C) - California Health and Safety Code, Chapter 6.5, Section(s) 25160(b)(1)(C)
Violation Description: Failure to send a legible copy of each hazardous waste manifest to the Department within 30 days of each shipment of hazardous waste.
Violation Notes: Returned to compliance on 03/19/2019.
Violation Division: Ventura County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-08-2017
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description: Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.
Violation Notes: Returned to compliance on 03/08/2017.
Violation Division: Ventura County Environmental Health
Violation Program: UST

**MOORPARK CHEVRON (Continued)** **S103684163**

Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 05-14-2015
Citation: 23 CCR 16 2712(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)
Violation Description: Failure to maintain records of repairs, lining, and upgrades on site, or off site if approved by the CUPA, for the life of the underground storage tank and/or failure to maintain written monitoring and maintenance records on site, or off site if approved by the CUPA, for a period of 3 years, 6 1/2 years for cathodic protection, and 5 years for written performance claims pertaining to release detection systems and calibration and maintenance records for such systems.
Violation Notes: Returned to compliance on 05/14/2015.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 397839
Site Name: MOORPARK CHEVRON
Violation Date: 03-15-2021
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 03/15/2021.
Violation Division: Ventura County Environmental Health
Violation Program: UST
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-08-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST

**MOORPARK CHEVRON (Continued)** **S103684163**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-10-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-19-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: FOLLOW-UP INSPECTION
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-08-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

**MOORPARK CHEVRON (Continued)** **S103684163**

| | |
|---|---|
| Eval Date: | 03-10-2016 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Ventura County Environmental Health |
| Eval Program: | HMRRP |
| Eval Source: | CERS, |
| | |
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 03-10-2016 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Ventura County Environmental Health |
| Eval Program: | HW |
| Eval Source: | CERS, |
| | |
| Eval General Type: | Other/Unknown |
| Eval Date: | 03-19-2019 |
| Violations Found: | No |
| Eval Type: | Other, not routine, done by local agency |
| Eval Notes: | FOLLOW-UP INSPECTION |
| Eval Division: | Ventura County Environmental Health |
| Eval Program: | HW |
| Eval Source: | CERS, |
| | |
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 05-08-2014 |
| Violations Found: | Yes |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Ventura County Environmental Health |
| Eval Program: | HMRRP |
| Eval Source: | CERS, |
| | |
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 05-14-2015 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Ventura County Environmental Health |
| Eval Program: | HW |
| Eval Source: | CERS, |
| | |
| Eval General Type: | Other/Unknown |
| Eval Date: | 11-26-2014 |
| Violations Found: | No |
| Eval Type: | Other, not routine, done by local agency |
| Eval Notes: | ENFORCEMENT ACTIVITY |
| Eval Division: | Ventura County Environmental Health |
| Eval Program: | UST |
| Eval Source: | CERS, |
| | |
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 03-07-2018 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |

**MOORPARK CHEVRON (Continued)** **S103684163**

Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-14-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP

**MOORPARK CHEVRON (Continued)** **S103684163**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-14-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-08-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-19-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: FOLLOW-UP INSPECTION
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: UST
Eval Source: CERS,

**MOORPARK CHEVRON (Continued)** **S103684163**

Coordinates:

| | |
|---|---|
| Site ID: | 397839 |
| Facility Name: | MOORPARK CHEVRON |
| Env Int Type Code: | HMBP |
| Program ID: | 10331788 |
| Coord Name: | Not reported |
| Ref Point Type Desc: | Center of a facility or station., |
| Latitude: | 34.278900 |
| Longitude: | -118.887070 |

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | Document Preparer |
| Entity Name: | PARVIZ (DAVID) NATANZI |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |

| | |
|---|---|
| Affiliation Type Desc: | Operator |
| Entity Name: | DAVID NATANZI |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | (818) 414-9901, |

| | |
|---|---|
| Affiliation Type Desc: | Parent Corporation |
| Entity Name: | MOORPARK CHEVRON |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |

| | |
|---|---|
| Affiliation Type Desc: | UST Permit Applicant |
| Entity Name: | Parviz (David) Natanzi |
| Entity Title: | President |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | (805) 523-7709, |

| | |
|---|---|
| Affiliation Type Desc: | UST Property Owner Name |
| Entity Name: | MOORPARK OIL, LLC |
| Entity Title: | Not reported |
| Affiliation Address: | 502 EAST LOS ANGELES AVENUE |
| Affiliation City: | MOORPARK |

**MOORPARK CHEVRON (Continued)** **S103684163**

Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93021
Affiliation Phone: (805) 523-7709,

Affiliation Type Desc: UST Tank Owner
Entity Name: MOORPARK OIL, LLC
Entity Title: Not reported
Affiliation Address: 502 EAST LOS ANGELES AVENUE
Affiliation City: MOORPARK
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93021
Affiliation Phone: (818) 414-9901,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 502 LOS ANGELES AVENUE
Affiliation City: MOORPARK
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93021
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Parviz (David) Natanzi
Entity Title: President
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: UST Tank Operator
Entity Name: MOORPARK OIL, LLC
Entity Title: Not reported
Affiliation Address: 502 EAST LOS ANGELES AVENUE
Affiliation City: MOORPARK
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93021
Affiliation Phone: (805) 523-7709,

Affiliation Type Desc: CUPA District
Entity Name: Ventura County Environmental Health
Entity Title: Not reported
Affiliation Address: 800 South Victoria Avenue
Affiliation City: Ventura
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93009
Affiliation Phone: (805) 654-2813,

Affiliation Type Desc: Environmental Contact
Entity Name: State UST Fund Advisory & Services, Inc.

**MOORPARK CHEVRON (Continued)** **S103684163**

| | |
|---|---|
| Entity Title: | Not reported |
| Affiliation Address: | 22930 CALABASH STREET |
| Affiliation City: | WOODLAND HILLS |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 91364 |
| Affiliation Phone: | , |
| | |
| Affiliation Type Desc: | Legal Owner |
| Entity Name: | RED HAIR OIL, INC dba: MOORPARK CHEVRON |
| Entity Title: | Not reported |
| Affiliation Address: | 502 LOS ANGELES AVENUE |
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 91360 |
| Affiliation Phone: | (805) 523-7709, |
| | |
| Affiliation Type Desc: | Property Owner |
| Entity Name: | PARVIZ (DAVID) NATANZI |
| Entity Title: | Not reported |
| Affiliation Address: | 3505 NORTH MOORPARK ROAD |
| Affiliation City: | THOUSAND OAKS |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 91360 |
| Affiliation Phone: | (805) 523-7709, |

---

**48**
**South**
**1/4-1/2**
**0.446 mi.**
**2357 ft.**

**SUMMIT GAS STATION - LA AVE**
**50 LOS ANGELES AVE.**
**MOORPARK, CA 93021**

**LUST** **U003778477**
**VENTURA CO. BWT** **N/A**
**Cortese**
**CERS**

**Relative:**
**Lower**

**Actual:**
**508 ft.**

LUST:

| | |
|---|---|
| Name: | SUMMIT GAS STATION - LA AVE |
| Address: | 50 LOS ANGELES AVE. |
| City,State,Zip: | MOORPARK, CA 93021 |
| Lead Agency: | VENTURA COUNTY |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101370 |
| Global Id: | T0611101370 |
| Latitude: | 34.278667005 |
| Longitude: | -118.882413205 |
| Status: | Completed - Case Closed |
| Status Date: | 06/01/2010 |
| Case Worker: | DBW |
| RB Case Number: | C01011 |
| Local Agency: | VENTURA COUNTY |
| File Location: | All Files are on GeoTracker or in the Local Agency Database |
| Local Case Number: | 01011 |
| Potential Media Affect: | Other Groundwater (uses other than drinking water) |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0611101370 |

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Global Id: T0611101370
Contact Type: Local Agency Caseworker
Contact Name: DIANE B. WAHL
Organization Name: VENTURA COUNTY
Address: 800 S. VICTORIA AVE.
City: VENTURA
Email: diane.wahl@ventura.org
Phone Number: 8056545040

LUST:
Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 01/01/2008
Action: File Review - Closure

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/01/2010
Action: Closure/No Further Action Letter

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/02/2010
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0611101370
Action Type: Other
Date: 06/28/2001
Action: Leak Reported

Global Id: T0611101370
Action Type: RESPONSE
Date: 11/21/2003
Action: Interim Remedial Action Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 09/26/2003
Action: Sensitive Receptor Survey Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 02/27/2004
Action: Soil and Water Investigation Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 11/30/2003
Action: Soil and Water Investigation Report

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/24/2003
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/30/2003
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/30/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 10/10/2003
Action: Meeting

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 01/13/2004
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 05/11/2005
Action: * Historical Enforcement - #20

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 08/03/2006
Action: Technical Correspondence / Assistance / Other - #23

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 07/05/2006
Action: Technical Correspondence / Assistance / Other - #22

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Technical Correspondence / Assistance / Other - #25

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 12/11/2006
Action: Technical Correspondence / Assistance / Other - #24

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/05/2008
Action: Technical Correspondence / Assistance / Other - #26

Global Id: T0611101370
Action Type: ENFORCEMENT

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Date: 04/20/2009
Action: File review

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/08/2009
Action: LOP Case Closure Summary to RB

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/13/2003
Action: Unknown

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/10/2003
Action: Unknown

Global Id: T0611101370
Action Type: RESPONSE
Date: 06/18/2004
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 01/31/2004
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/11/2003
Action: Interim Remedial Action Plan

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/31/2003
Action: Interim Remedial Action Plan

Global Id: T0611101370
Action Type: RESPONSE
Date: 04/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/31/2007
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 08/10/2007
Action: Unknown

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Global Id: T0611101370
Action Type: REMEDIATION
Date: 09/22/2004
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 05/12/2006
Action: Technical Correspondence / Assistance / Other - #21

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/12/2003
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 09/17/2003
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 05/21/2003
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 07/07/2003
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: RESPONSE
Date: 08/15/2005
Action: Well Installation Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/29/2005
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/29/2005
Action: Remedial Progress Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 06/09/2006
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 06/09/2006
Action: Soil and Water Investigation Workplan

Global Id: T0611101370
Action Type: RESPONSE

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Date: 10/20/2006
Action: Other Report / Document

Global Id: T0611101370
Action Type: Other
Date: 06/21/2001
Action: Leak Stopped

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/30/2009
Action: Well Destruction Report

Global Id: T0611101370
Action Type: Other
Date: 06/21/2001
Action: Leak Discovery

Global Id: T0611101370
Action Type: RESPONSE
Date: 01/31/2005
Action: Remedial Progress Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/31/2006
Action: Remedial Progress Report

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 07/27/2009
Action: Staff Letter - #27

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 08/26/2009
Action: Staff Letter

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 12/24/2009
Action: Staff Letter

LUST:
Global Id: T0611101370
Status: Open - Case Begin Date
Status Date: 06/21/2001

Global Id: T0611101370
Status: Open - Site Assessment
Status Date: 12/08/2003

Global Id: T0611101370
Status: Open - Site Assessment
Status Date: 02/27/2004

Global Id: T0611101370

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Status: Open - Remediation
Status Date: 01/01/2005

Global Id: T0611101370
Status: Open - Remediation
Status Date: 01/31/2005

Global Id: T0611101370
Status: Open - Remediation
Status Date: 07/29/2005

Global Id: T0611101370
Status: Open - Site Assessment
Status Date: 06/09/2006

Global Id: T0611101370
Status: Open - Remediation
Status Date: 07/31/2006

Global Id: T0611101370
Status: Open - Verification Monitoring
Status Date: 04/30/2008

Global Id: T0611101370
Status: Completed - Case Closed
Status Date: 06/01/2010

LUST REG 4:
Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-01011
Status: Preliminary site assessment underway
Substance: Hydrocarbons
Substance Quantity: Not reported
Local Case No: 01011
Case Type: Undefined
Abatement Method Used at the Site: Not reported
Global ID: T0611101370
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: MOORPARK AVE.
Enforcement Type: LFOR
Date Leak Discovered: 6/21/2001
Date Leak First Reported: 6/28/2001
Date Leak Record Entered: Not reported
Date Confirmation Began: Not reported
Date Leak Stopped: 6/21/2001
Date Case Last Changed on Database: Not reported
Date the Case was Closed: Not reported
How Leak Discovered: Subsurface Monitoring
How Leak Stopped: Other Means
Cause of Leak: UNK
Leak Source: UNK
Operator: Not reported

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

| | |
|---|---|
| Water System: | Not reported |
| Well Name: | Not reported |
| Approx. Dist To Production Well (ft): | 7642.641373977398903808194 4832 |
| Source of Cleanup Funding: | UNK |
| Preliminary Site Assessment Workplan Submitted: | Not reported |
| Preliminary Site Assessment Began: | 12/8/2003 |
| Pollution Characterization Began: | Not reported |
| Remediation Plan Submitted: | Not reported |
| Remedial Action Underway: | Not reported |
| Post Remedial Action Monitoring Began: | Not reported |
| Enforcement Action Date: | Not reported |
| Historical Max MTBE Date: | 2/18/2004 |
| Hist Max MTBE Conc in Groundwater: | 57000 |
| Hist Max MTBE Conc in Soil: | 28700 |
| Significant Interim Remedial Action Taken: | Not reported |
| GW Qualifier: | = |
| Soil Qualifier: | = |
| Organization: | Not reported |
| Owner Contact: | Not reported |
| Responsible Party: | SAM ATASSI |
| RP Address: | 1842 ROSCOMARE RD. |
| Program: | LUST |
| Lat/Long: | 34.279037 / -1 |
| Local Agency Staff: | KEA |
| Beneficial Use: | Not reported |
| Priority: | Not reported |
| Cleanup Fund Id: | Not reported |
| Suspended: | Not reported |
| Assigned Name: | Not reported |
| Summary: | Not reported |

VENTURA CO. LUST:

| | |
|---|---|
| Name: | SUMMIT GAS STATION - LA AVE |
| Address: | 50 LOS ANGELES AVE. |
| City: | MOORPARK |
| Region: | VENTURA |
| Facility ID: | 01011 |
| Status: | Remedial action (cleanup) Underway |

VENTURA CO. BWT:

| | |
|---|---|
| Name: | ARCO AM/PM #CO-247 (2) |
| Address: | 50 LOS ANGELES AVE. |
| City,State,Zip: | MOORPARK, CA |
| Facility ID: | HM 738 |
| Program: | Not reported |

| | |
|---|---|
| Name: | MOORPARK OIL CO INC |
| Address: | 50 LOS ANGELES AVE |
| City,State,Zip: | MOORPARK, CA |
| Facility ID: | HM 2955 |
| Program: | Not reported |

| | |
|---|---|
| Name: | MOORPARK OIL CO INC |
| Address: | 50 LOS ANGELES AVE |
| City,State,Zip: | MOORPARK, CA |
| Facility ID: | HM 3720 |

**SUMMIT GAS STATION - LA AVE (Continued)** **U003778477**

Program: Not reported

CORTESE:

| | |
|---|---|
| Name: | SUMMIT GAS STATION - LA AVE |
| Address: | 50 LOS ANGELES AVE. |
| City,State,Zip: | MOORPARK, CA 93021 |
| Region: | CORTESE |
| Envirostor Id: | Not reported |
| Global ID: | T0611101370 |
| Site/Facility Type: | LUST CLEANUP SITE |
| Cleanup Status: | COMPLETED - CASE CLOSED |
| Status Date: | Not reported |
| Site Code: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

CERS:

| | |
|---|---|
| Name: | SUMMIT GAS STATION - LA AVE |
| Address: | 50 LOS ANGELES AVE. |
| City,State,Zip: | MOORPARK, CA 93021 |
| Site ID: | 187308 |
| CERS ID: | T0611101370 |
| CERS Description: | Leaking Underground Storage Tank Cleanup Site |

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | Local Agency Caseworker |
| Entity Name: | DIANE B. WAHL - VENTURA COUNTY |
| Entity Title: | Not reported |
| Affiliation Address: | 800 S. VICTORIA AVE. |
| Affiliation City: | VENTURA |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 8056545040, |

| | |
|---|---|
| Affiliation Type Desc: | Regional Board Caseworker |
| Entity Name: | DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4) |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | R4 UNKNOWN |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | 2135766714, |

**49**
**SSW**
**1/4-1/2**
**0.480 mi.**
**2536 ft.**

**Relative:**
**Lower**

**Actual:**
**499 ft.**

**PARK LANE CAR WASH**
**75 PARK LN**
**MOORPARK, CA**

**Database(s):** LUST, UST, CERS HAZ WASTE, VENTURA CO. BWT, Cortese, CERS

**EDR ID Number:** U003978807
**EPA ID Number:** N/A

LUST:

| | |
|---|---|
| Name: | PARK LANE CAR WASH |
| Address: | 75 PARK LANE |
| City,State,Zip: | MOORPARK, CA 93021 |
| Lead Agency: | VENTURA COUNTY |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611137666 |
| Global Id: | T0611137666 |
| Latitude: | 34.278256 |
| Longitude: | -118.885918 |
| Status: | Completed - Case Closed |
| Status Date: | 08/31/2005 |
| Case Worker: | DBW |
| RB Case Number: | C04035 |
| Local Agency: | VENTURA COUNTY |
| File Location: | Local Agency Warehouse |
| Local Case Number: | 04035 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Xylene |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0611137666 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | DANIEL PIROTTON |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | Not reported |
| City: | R4 UNKNOWN |
| Email: | dpirotton@waterboards.ca.gov |
| Phone Number: | 2135766714 |

| | |
|---|---|
| Global Id: | T0611137666 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | DIANE B. WAHL |
| Organization Name: | VENTURA COUNTY |
| Address: | 800 S. VICTORIA AVE. |
| City: | VENTURA |
| Email: | diane.wahl@ventura.org |
| Phone Number: | 8056545040 |

LUST:

| | |
|---|---|
| Global Id: | T0611137666 |
| Action Type: | Other |
| Date: | 03/25/2004 |
| Action: | Leak Reported |

| | |
|---|---|
| Global Id: | T0611137666 |
| Action Type: | ENFORCEMENT |
| Date: | 11/03/2004 |
| Action: | * Historical Enforcement - #1 |

| | |
|---|---|
| Global Id: | T0611137666 |

**PARK LANE CAR WASH (Continued)** **U003978807**

Action Type: ENFORCEMENT
Date: 05/31/2005
Action: * Historical Enforcement - #3

Global Id: T0611137666
Action Type: ENFORCEMENT
Date: 08/15/2005
Action: * Historical Enforcement - #4

Global Id: T0611137666
Action Type: ENFORCEMENT
Date: 01/03/2005
Action: * Historical Enforcement - #2

Global Id: T0611137666
Action Type: ENFORCEMENT
Date: 08/31/2005
Action: Closure/No Further Action Letter - #5

Global Id: T0611137666
Action Type: ENFORCEMENT
Date: 01/01/2016
Action: File review

Global Id: T0611137666
Action Type: Other
Date: 03/24/2004
Action: Leak Discovery

Global Id: T0611137666
Action Type: RESPONSE
Date: 11/29/2004
Action: Other Report / Document

Global Id: T0611137666
Action Type: RESPONSE
Date: 02/28/2005
Action: Other Report / Document

Global Id: T0611137666
Action Type: RESPONSE
Date: 11/30/2004
Action: Other Report / Document

LUST:
Global Id: T0611137666
Status: Open - Case Begin Date
Status Date: 03/24/2004

Global Id: T0611137666
Status: Open - Site Assessment
Status Date: 03/25/2004

Global Id: T0611137666
Status: Open - Site Assessment
Status Date: 01/01/2005

**PARK LANE CAR WASH (Continued)** **U003978807**

Global Id: T0611137666
Status: Completed - Case Closed
Status Date: 08/31/2005

VENTURA CO. LUST:
Name: PARK LANE CAR WASH
Address: 75 PARK LANE
City: MOORPARK
Region: VENTURA
Facility ID: 04035
Status: Case Closed

VENTURA CO. UST:
Name: PARK LANE CAR WASH
Address: 75 PARK LN
City: MOORPARK
Facility ID: D 1503
Facility Status: Inactive

CERS HAZ WASTE:
Name: MOORPARK CAR WASH
Address: 75 PARK LN
City,State,Zip: MOORPARK, CA 93021
Site ID: 136283
CERS ID: 10333579
CERS Description: Hazardous Waste Generator

VENTURA CO. BWT:
Name: MOORPARK CAR WASH
Address: 75 PARK LN
City,State,Zip: MOORPARK, CA
Facility ID: FA0005785
Program: HAZARDOUS WASTE GENERATOR/BUSINESS PLAN

CORTESE:
Name: PARK LANE CAR WASH
Address: 75 PARK LANE
City,State,Zip: MOORPARK, CA 93021
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0611137666
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported

**PARK LANE CAR WASH (Continued)** **U003978807**

Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: PARK LANE CAR WASH
Address: 75 PARK LANE
City,State,Zip: MOORPARK, CA 93021
Site ID: 210087
CERS ID: T0611137666
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: DANIEL PIROTTON - LOS ANGELES RWQCB (REGION 4)
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: R4 UNKNOWN
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 2135766714,

Affiliation Type Desc: Local Agency Caseworker
Entity Name: DIANE B. WAHL - VENTURA COUNTY
Entity Title: Not reported
Affiliation Address: 800 S. VICTORIA AVE.
Affiliation City: VENTURA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 8056545040,

Name: MOORPARK CAR WASH
Address: 75 PARK LN
City,State,Zip: MOORPARK, CA 93021
Site ID: 136283
CERS ID: 10333579
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 136283
Site Name: MOORPARK CAR WASH
Violation Date: 05-23-2019
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 05/30/2019.
Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

**PARK LANE CAR WASH (Continued)** **U003978807**

| | |
|---|---|
| Site ID: | 136283 |
| Site Name: | MOORPARK CAR WASH |
| Violation Date: | 05-23-2019 |
| Citation: | HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c) |
| Violation Description: | Failure to have a business plan readily available to personnel of the business or the unified program facility with responsibilities for emergency response or training. |
| Violation Notes: | Returned to compliance on 05/30/2019. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HMRRP |
| Violation Source: | CERS, |

| | |
|---|---|
| Site ID: | 136283 |
| Site Name: | MOORPARK CAR WASH |
| Violation Date: | 05-01-2018 |
| Citation: | 22 CCR 11 66261.7 - California Code of Regulations, Title 22, Chapter 11, Section(s) 66261.7 |
| Violation Description: | Failure to manage empty containers greater than 5 gallons in capacity that previously held a hazardous material/waste in accordance with 22 CCR 11 66261.7 including but not limited to the following: (e)(2)By reclaiming its scrap value onsite or shipping the container or inner liner to a person who reclaims its scrap value; or (3) By reconditioning or re manufacturing the container or inner liner onsite for subsequent reuse, or shipping the container or inner liner to a person who reconditions or re-manufactures the container or inner liner; or (4) By shipping the container or inner liner to a supplier or to another intermediate collection location for accumulation prior to managing the container or inner liner pursuant to subsections (e)(2) or (e)(3) of 22 CCR 11 66261.7; or (i) By shipping the container or inner liner back to the supplier for the purpose of being refilled. (f) A container or an inner liner removed from a container larger than five gallons in capacity which is managed pursuant to subsection (e) of 22 CCR 11 66261.7 shall be marked with the date it has been emptied and shall be managed within one year of being emptied. |
| Violation Notes: | Returned to compliance on 05/09/2018. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HW |
| Violation Source: | CERS, |

| | |
|---|---|
| Site ID: | 136283 |
| Site Name: | MOORPARK CAR WASH |
| Violation Date: | 05-23-2019 |
| Citation: | HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2 |
| Violation Description: | Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years. |
| Violation Notes: | Returned to compliance on 05/30/2019. |
| Violation Division: | Ventura County Environmental Health |
| Violation Program: | HW |
| Violation Source: | CERS, |

| | |
|---|---|
| Site ID: | 136283 |
| Site Name: | MOORPARK CAR WASH |

**PARK LANE CAR WASH (Continued)** **U003978807**

Violation Date: 05-01-2018
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 05/07/2018.
Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 136283
Site Name: MOORPARK CAR WASH
Violation Date: 08-02-2016
Citation: HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Description: Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name. A substantial change in the handler's operations that requires modification to any portion of the business plan.
Violation Notes: Returned to compliance on 08/02/2016.
Violation Division: Ventura County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-01-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-10-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

**PARK LANE CAR WASH (Continued)** **U003978807**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-09-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-09-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-14-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-10-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-24-2016
Violations Found: No

**PARK LANE CAR WASH (Continued)** **U003978807**

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-24-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-01-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-14-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Ventura County Environmental Health
Eval Program: HW
Eval Source: CERS,

Coordinates:
Site ID: 136283
Facility Name: MOORPARK CAR WASH
Env Int Type Code: HWG
Program ID: 10333579
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 34.278260
Longitude: -118.885920

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Ventura County Environmental Health
Entity Title: Not reported

**PARK LANE CAR WASH (Continued)** **U003978807**

| | |
|---|---|
| Affiliation Address: | 800 South Victoria Avenue |
| Affiliation City: | Ventura |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 93009 |
| Affiliation Phone: | (805) 654-2813, |
| | |
| Affiliation Type Desc: | Document Preparer |
| Entity Name: | Zachary White |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |
| | |
| Affiliation Type Desc: | Identification Signer |
| Entity Name: | Zachary White |
| Entity Title: | Owner |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |
| | |
| Affiliation Type Desc: | Parent Corporation |
| Entity Name: | MOORPARK CAR PROS |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | , |
| | |
| Affiliation Type Desc: | Legal Owner |
| Entity Name: | Zachary White |
| Entity Title: | Not reported |
| Affiliation Address: | 75 PARK LN |
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 93021 |
| Affiliation Phone: | (805) 402-5059, |
| | |
| Affiliation Type Desc: | Operator |
| Entity Name: | Zachary White |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | (805) 402-5059, |

**PARK LANE CAR WASH (Continued)** **U003978807**

| | |
|---|---|
| Affiliation Type Desc: | Environmental Contact |
| Entity Name: | Zachary White |
| Entity Title: | Not reported |
| Affiliation Address: | 75 PARK LN |
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 93021 |
| Affiliation Phone: | , |

| | |
|---|---|
| Affiliation Type Desc: | Facility Mailing Address |
| Entity Name: | Mailing Address |
| Entity Title: | Not reported |
| Affiliation Address: | 75 PARK LN |
| Affiliation City: | MOORPARK |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 93021 |
| Affiliation Phone: | , |

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**50**
**WSW**
**1/2-1**
**0.541 mi.**
**2855 ft.**

**VIKING ELECTRONICS INC**
**5455 ENDEAVOUR CT**
**MOORPARK, CA 93021**

**ENVIROSTOR** **S104579043**
**WDS** **N/A**

**Relative:**
**Lower**

**Actual:**
**483 ft.**

ENVIROSTOR:

| | |
|---|---|
| Name: | VIKING ELECTRONICS, INC |
| Address: | 5455 ENDEAVOUR CT |
| City,State,Zip: | MOORPARK, CA 93021 |
| Facility ID: | 71003350 |
| Status: | Refer: Other Agency |
| Status Date: | Not reported |
| Site Code: | Not reported |
| Site Type: | Tiered Permit |
| Site Type Detailed: | Tiered Permit |
| Acres: | Not reported |
| NPL: | NO |
| Regulatory Agencies: | NONE SPECIFIED |
| Lead Agency: | NONE SPECIFIED |
| Program Manager: | Not reported |
| Supervisor: | Not reported |
| Division Branch: | Cleanup Chatsworth |
| Assembly: | 44 |
| Senate: | 27 |
| Special Program: | Not reported |
| Restricted Use: | NO |
| Site Mgmt Req: | NONE SPECIFIED |
| Funding: | Not reported |
| Latitude: | 34.28387 |
| Longitude: | -118.8948 |
| APN: | NONE SPECIFIED |
| Past Use: | NONE SPECIFIED |
| Potential COC: | NONE SPECIFIED |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | NONE SPECIFIED |
| Alias Name: | CAL000140644 |

**VIKING ELECTRONICS INC (Continued)** **S104579043**

Alias Type: EPA Identification Number
Alias Name: 71003350
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

WDS:
Name: VIKING ELECTRONICS INC
Address: 5455 Endeavour Ct
City: MOORPARK
Facility ID: 4 56I014978
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 4
Facility Telephone: 8055539655
Facility Contact: JUSTIN KILLGORE
Agency Name: VIKING ELECTRONICS INC
Agency Address: 5455 Endeavour Ct
Agency City,St,Zip: Moorpark 930211712
Agency Contact: JUSTIN KILLGORE
Agency Telephone: 8055539655
Agency Type: Private
SIC Code: 0
SIC Code 2: Not reported
Primary Waste Type: Not reported
Primary Waste: Not reported
Waste Type2: Not reported
Waste2: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported

**VIKING ELECTRONICS INC (Continued)** **S104579043**

POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

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**51** **WALNUT CANYON TRACT** **ENVIROSTOR** **S100204264**
**North** **WALNUT CANYON RD-N OF MOORPARK 32&33** **N/A**
**1/2-1** **MOORPARK, CA 93021**
**0.724 mi.**
**3821 ft.**

**Relative:** **Higher**
**Actual:** **710 ft.**

ENVIROSTOR:
Name: WALNUT CANYON TRACT
Address: WALNUT CANYON RD-N OF MOORPARK 32&33
City,State,Zip: MOORPARK, CA 93021
Facility ID: 56490100
Status: No Further Action
Status Date: 06/30/1991
Site Code: 300266
Site Type: Historical
Site Type Detailed: * Historical
Acres: 350
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Chatsworth
Assembly: 37
Senate: 27
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.31505
Longitude: -118.8807
APN: NONE SPECIFIED
Past Use: ILLEGAL DUMPING
Potential COC: Arsenic Asbestos Containing Materials (ACM Total Chromium (1:6 ratio Cr VI:Cr III Lead TPH-gas Aluminum Beryllium and compounds Cadmium and compounds
Confirmed COC: 30001-NO 30005-NO 30013-NO 30025-NO 30047-NO 30080-NO 30108-NO 40001-NO
Potential Description: SOIL
Alias Name: WALNUT CANYON ASSOCIATION
Alias Type: Alternate Name
Alias Name: 300266
Alias Type: Project Code (Site Code)
Alias Name: 56490100

**WALNUT CANYON TRACT (Continued)** **S100204264**

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/27/1994
Comments: CalSites Validation Program confirms NFA for DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/30/1991
Comments: Based on the information provided in the PEA and the addendum reports, the contamination at the site may not constitute a threat to human health and environment. Therefore, the Dept concurs with the PEA recommendation that no further action is needed at the site at this time.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/20/1990
Comments: Did not address the surface water and groundwater targets, did not put in any monitoring wells. Residential house in proximity. Few groundwater wells within one mile radius. Did not address metal contamination and did not take any deep soil samples to confirm petroleum hydrocarbon migration Medium priority PEA recommended.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Count: 0 records.

ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| | | NO SITES FOUND | | | |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of Federal NPL (Superfund) sites***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

***Lists of Federal Delisted NPL sites***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

***Lists of Federal RCRA TSD facilities***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

***Lists of Federal RCRA generators***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

***Federal institutional controls / engineering controls registries***

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 88

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 9

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/22/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

***Lists of state- and tribal (Superfund) equivalent sites***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

***Lists of state- and tribal hazardous waste facilities***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/07/2022
Date Data Arrived at EDR: 02/08/2022
Date Made Active in Reports: 05/05/2022
Number of Days to Update: 86

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Quarterly

***Lists of state and tribal leaking storage tanks***

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

***Lists of state and tribal registered storage tanks***

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 03/02/2022
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

***Lists of state and tribal voluntary cleanup sites***

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

***Lists of state and tribal brownfield sites***

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 12

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 76
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 12/10/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

***Local Lists of Registered Storage Tanks***

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

***Local Land Records***

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 84

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 84

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/18/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/19/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/28/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/16/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/02/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/14/2021
Date Data Arrived at EDR: 12/15/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 85

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/04/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 95

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/22/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 82
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/16/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 12/07/2021
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 05/17/2022
Number of Days to Update: 8
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 82

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/17/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 84

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/14/2022
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/12/2022
Number of Days to Update: 86

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/14/2022
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/12/2022
Number of Days to Update: 86

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/07/2022
Date Data Arrived at EDR: 02/08/2022
Date Made Active in Reports: 05/05/2022
Number of Days to Update: 86
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/14/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2022
Next Scheduled EDR Contact: 06/26/2022
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3
Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29
Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/05/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/26/2022
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**COUNTY RECORDS**

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 02/04/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 79

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/16/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 82

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/04/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 8

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 83

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/21/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/13/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/01/2022
Date Made Active in Reports: 04/18/2022
Number of Days to Update: 76

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/03/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/29/2022
Date Data Arrived at EDR: 04/29/2022
Date Made Active in Reports: 05/05/2022
Number of Days to Update: 6

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/12/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/27/2022
Number of Days to Update: 97

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/16/2022
Date Made Active in Reports: 05/13/2022
Number of Days to Update: 86

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/14/2022
Date Data Arrived at EDR: 02/16/2022
Date Made Active in Reports: 05/12/2022
Number of Days to Update: 85
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 81

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2022
Date Data Arrived at EDR: 01/27/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 77
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/06/2022
Number of Days to Update: 84
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/16/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

MOORPARK CIVIC CENTER MASTER PLAN PROJECT
799 MOORPARK AVENUE
MOORPARK, CA 93021

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 34.286393 - 34ˆ 17’ 11.01’’ |
| Longitude (West): | 118.883033 - 118ˆ 52’ 58.92’’ |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 326676.3 |
| UTM Y (Meters): | 3795320.8 |
| Elevation: | 523 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 11994278 MOORPARK, CA |
| Version Date: | 2018 |
| Northeast Map: | 11994308 SIMI VALLEY WEST, CA |
| Version Date: | 2018 |

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

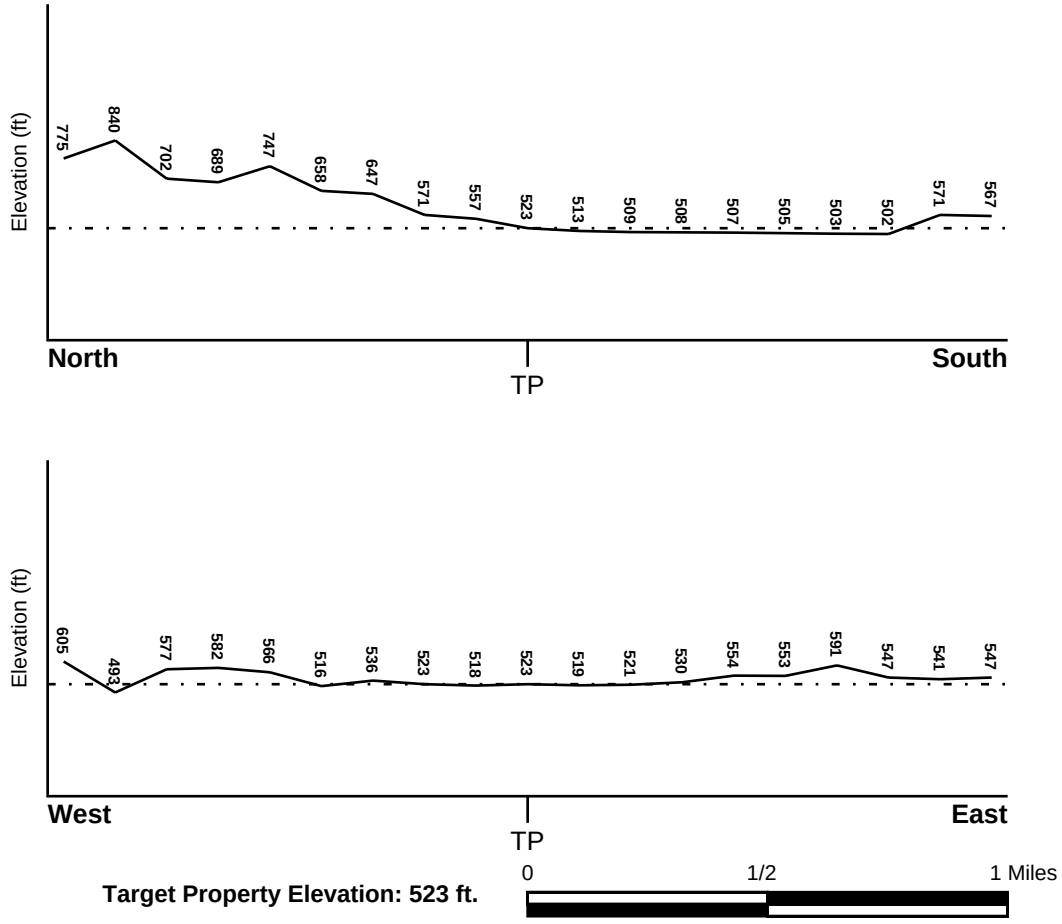
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General SSE

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 06111C0817E | FEMA FIRM Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 06111C0836E | FEMA FIRM Flood data |
| 06111C0819E | FEMA FIRM Flood data |
| 06111C0838E | FEMA FIRM Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| MOORPARK | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

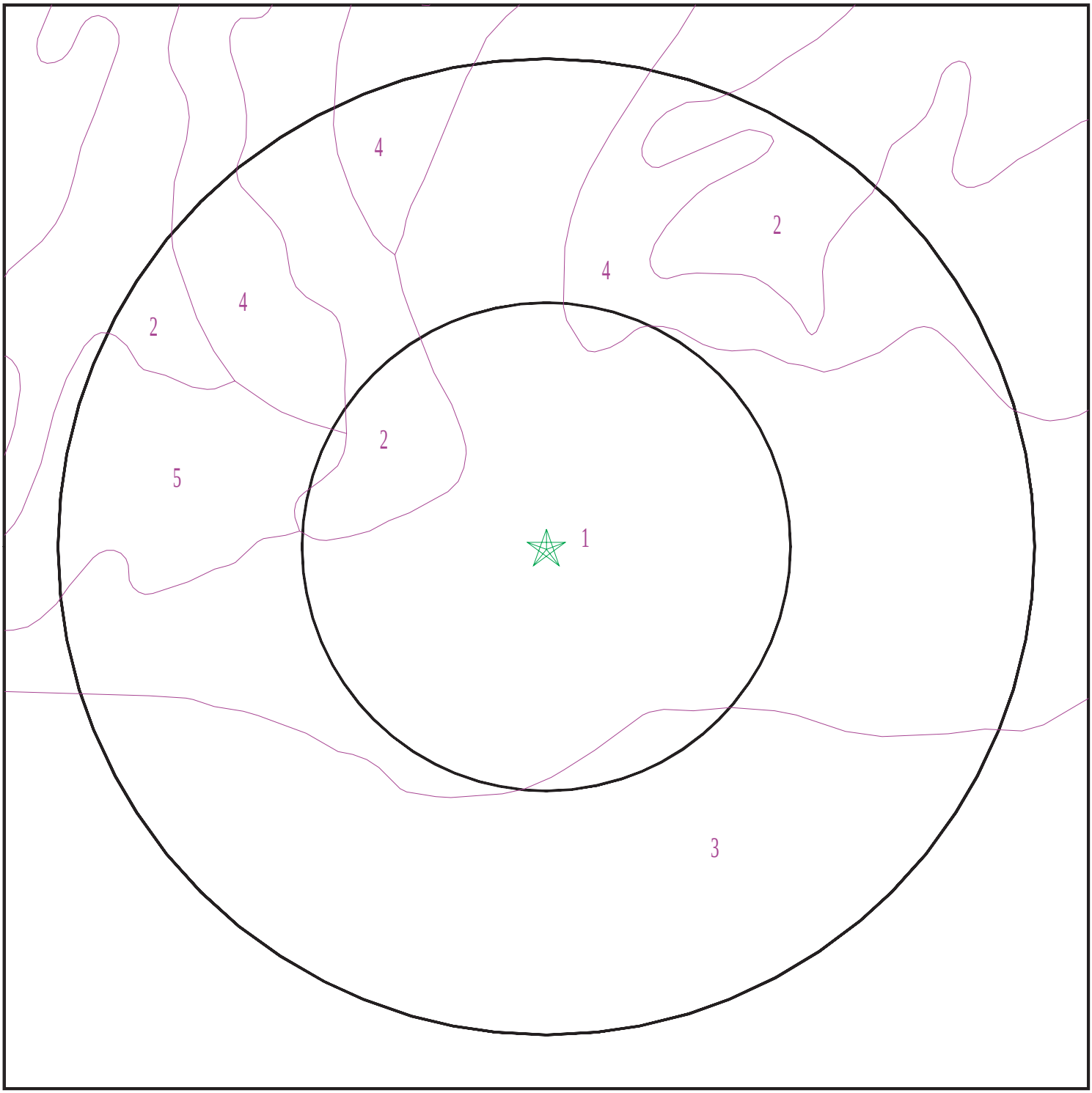
| | |
|---|---|
| Era: | Cenozoic |
| System: | Tertiary |
| Series: | Pliocene |
| Code: | Tp *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 6987243.2s




Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

| | | | |
|---|---|---|---|
| SITE NAME: | Moorpark Civic Center Master Plan Project | CLIENT: | Psomas |
| ADDRESS: | 799 Moorpark Avenue<br>Moorpark CA 93021 | CONTACT: | Jsnet Powell |
| LAT/LONG: | 34.286393 / 118.883033 | INQUIRY #: | 6987243.2s |
| | | DATE: | May 19, 2022 4:12 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

---

**Soil Map ID: 1**

Soil Component Name: GARRETSON

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 22 inches | loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 14<br>Min: 4 | Max: 7.8<br>Min: 6.1 |
| 2 | 22 inches | 59 inches | loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 14<br>Min: 4 | Max: 7.8<br>Min: 6.1 |

---

**Soil Map ID: 2**

Soil Component Name: CHESTERTON

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 9 inches | coarse sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. | Max: 4<br>Min: 1.4 | Max: 7.8<br>Min: 7.4 |
| 2 | 9 inches | 25 inches | sandy clay | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. | Max: 4<br>Min: 1.4 | Max: 7.8<br>Min: 7.4 |
| 3 | 25 inches | 35 inches | indurated | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. | Max: 4<br>Min: 1.4 | Max: 7.8<br>Min: 7.4 |
| 4 | 35 inches | 59 inches | sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. | Max: 4<br>Min: 1.4 | Max: 7.8<br>Min: 7.4 |

---

**Soil Map ID: 3**

Soil Component Name: MOCHO

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 14<br>Min: 4 | Max: 8.4<br>Min: 7.9 |
| 2 | 16 inches | 59 inches | loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 14<br>Min: 4 | Max: 8.4<br>Min: 7.9 |

---

**Soil Map ID: 4**

Soil Component Name: SOPER

Soil Surface Texture: gravelly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 11 inches | gravelly loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0<br>Min: 0 | Max: Min: |
| 2 | 11 inches | 40 inches | very gravelly clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0<br>Min: 0 | Max: Min: |
| 3 | 40 inches | 44 inches | weathered bedrock | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0<br>Min: 0 | Max: Min: |

---

**Soil Map ID: 5**

Soil Component Name: SAN ANDREAS

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 20 inches | sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 5.6<br>Min: 5.1 |
| 2 | 20 inches | 37 inches | sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 5.6<br>Min: 5.1 |
| 3 | 37 inches | 59 inches | loamy coarse sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 5.6<br>Min: 5.1 |

**LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

**WELL SEARCH DISTANCE INFORMATION**

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No Wells Found | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | CA5603108 | 0 - 1/8 Mile SE |

Note: PWS System location is not always the same as well location.

**STATE DATABASE WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A2 | CADWR0000003339 | 1/8 - 1/4 Mile WSW |
| A3 | CADWR0000014055 | 1/8 - 1/4 Mile WSW |
| A4 | CADWR0000013775 | 1/8 - 1/4 Mile WSW |
| B5 | CADWR0000026937 | 1/4 - 1/2 Mile WSW |
| B6 | CADWR9000008160 | 1/4 - 1/2 Mile WSW |
| C7 | CAEDF0000009837 | 1/4 - 1/2 Mile ESE |
| C8 | CAEDF0000074118 | 1/4 - 1/2 Mile ESE |
| C9 | CAEDF0000055829 | 1/4 - 1/2 Mile ESE |
| C10 | CAEDF0000126395 | 1/4 - 1/2 Mile ESE |
| 11 | CADWR0000002973 | 1/4 - 1/2 Mile West |
| D12 | CAEDF0000091856 | 1/2 - 1 Mile SSW |
| D13 | CAEDF0000047245 | 1/2 - 1 Mile SSW |
| D14 | CAEDF0000076633 | 1/2 - 1 Mile SSW |
| D15 | CAEDF0000119551 | 1/2 - 1 Mile SSW |
| D16 | CAEDF0000049617 | 1/2 - 1 Mile SSW |
| D17 | CAEDF0000032136 | 1/2 - 1 Mile SSW |
| D18 | CAEDF0000067248 | 1/2 - 1 Mile SSW |
| E19 | CAEDF0000037418 | 1/2 - 1 Mile South |
| E20 | CAEDF0000140982 | 1/2 - 1 Mile South |
| E21 | CAEDF0000054727 | 1/2 - 1 Mile South |
| F22 | CADWR9000008149 | 1/2 - 1 Mile ESE |
| E23 | CAEDF0000142936 | 1/2 - 1 Mile South |
| E24 | CAEDF0000095094 | 1/2 - 1 Mile South |
| E25 | CAEDF0000142598 | 1/2 - 1 Mile South |
| E26 | CAEDF0000124845 | 1/2 - 1 Mile South |
| E27 | CAEDF0000005191 | 1/2 - 1 Mile South |
| E28 | CAEDF0000084741 | 1/2 - 1 Mile South |
| E29 | CAEDF0000121546 | 1/2 - 1 Mile South |
| E30 | CAEDF0000041552 | 1/2 - 1 Mile South |
| E31 | CAEDF0000070917 | 1/2 - 1 Mile South |
| E32 | CAEDF0000015500 | 1/2 - 1 Mile South |
| E33 | CAEDF0000138904 | 1/2 - 1 Mile South |
| E34 | CAEDF0000065187 | 1/2 - 1 Mile South |
| F35 | CADWR0000017415 | 1/2 - 1 Mile ESE |
| 36 | CADWR0000025641 | 1/2 - 1 Mile ESE |
| G37 | CADWR0000027497 | 1/2 - 1 Mile SSW |
| G38 | CAEDF0000043971 | 1/2 - 1 Mile SSW |
| G39 | CAEDF0000015130 | 1/2 - 1 Mile SSW |
| 40 | CADWR0000009069 | 1/2 - 1 Mile SSE |
| 41 | CADWR0000024408 | 1/2 - 1 Mile North |
| 42 | CADWR0000008222 | 1/2 - 1 Mile NNW |
| H43 | CAEDF0000040152 | 1/2 - 1 Mile SE |
| I44 | CADWR0000013770 | 1/2 - 1 Mile NNE |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**STATE DATABASE WELL INFORMATION**

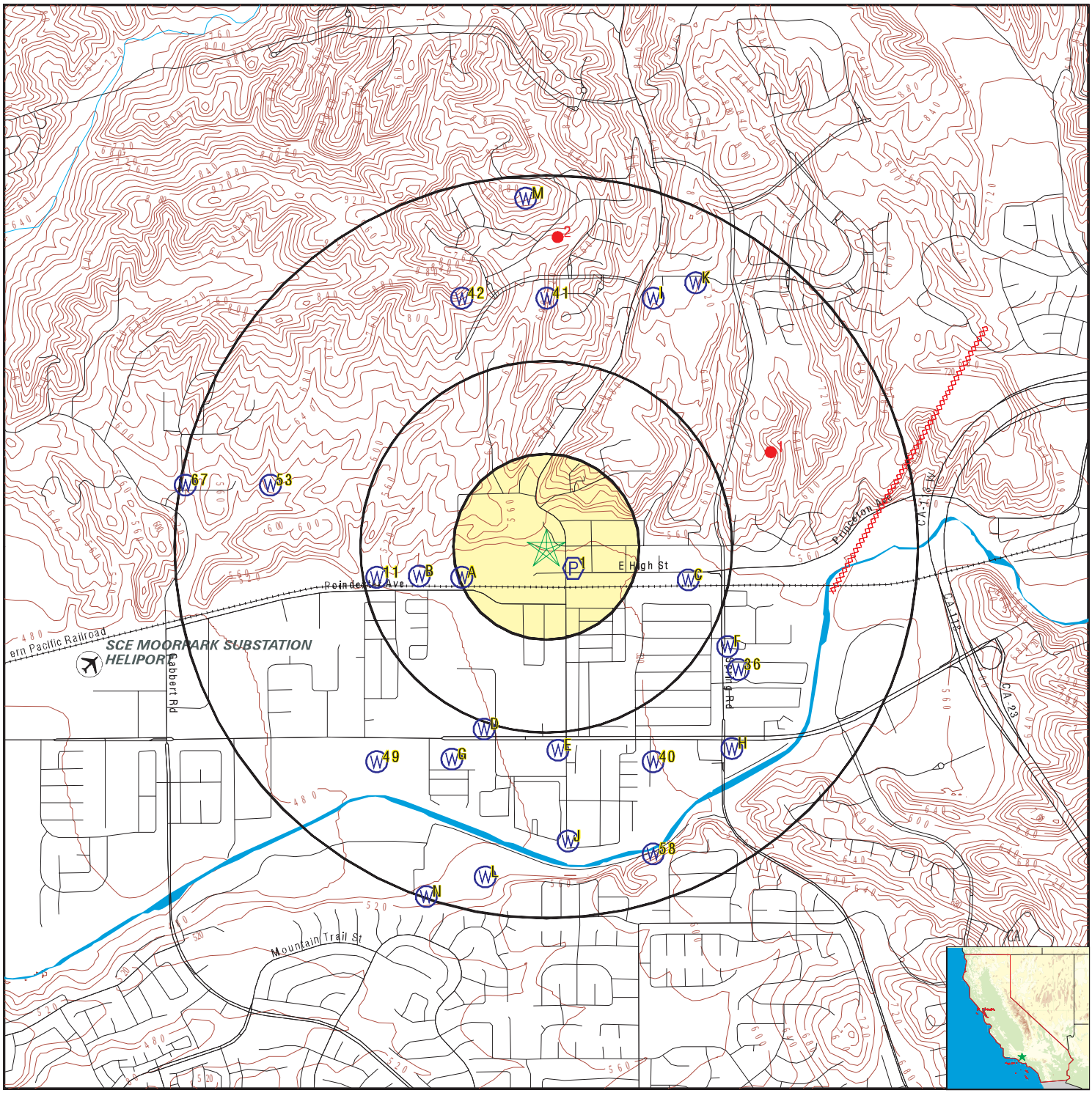
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| I45 | CADWR0000020657 | 1/2 - 1 Mile NNE |
| I46 | CADWR0000004027 | 1/2 - 1 Mile NNE |
| H47 | CAEDF0000113498 | 1/2 - 1 Mile SE |
| H48 | CAEDF0000126154 | 1/2 - 1 Mile SE |
| 49 | CADWR0000005279 | 1/2 - 1 Mile SW |
| H50 | CAEDF0000064852 | 1/2 - 1 Mile SE |
| H51 | CAEDF0000015488 | 1/2 - 1 Mile SE |
| H52 | CAEDF0000081523 | 1/2 - 1 Mile SE |
| 53 | CADWR0000018936 | 1/2 - 1 Mile WNW |
| J54 | CADWR9000008090 | 1/2 - 1 Mile South |
| J55 | CADWR9000008091 | 1/2 - 1 Mile South |
| K56 | CADWR9000008224 | 1/2 - 1 Mile NNE |
| K57 | CADWR0000034052 | 1/2 - 1 Mile NNE |
| 58 | CADWR0000030467 | 1/2 - 1 Mile SSE |
| L59 | CAEDF0000035863 | 1/2 - 1 Mile South |
| L60 | CAEDF0000012969 | 1/2 - 1 Mile South |
| L61 | CAEDF0000131258 | 1/2 - 1 Mile South |
| L62 | CAEDF0000044618 | 1/2 - 1 Mile South |
| M63 | CADDW0000005261 | 1/2 - 1 Mile North |
| M64 | 3393 | 1/2 - 1 Mile North |
| M65 | 3395 | 1/2 - 1 Mile North |
| M66 | 3396 | 1/2 - 1 Mile North |
| 67 | CADWR0000024943 | 1/2 - 1 Mile West |
| N68 | CADWR9000008063 | 1/2 - 1 Mile SSW |
| N69 | CADWR9000008074 | 1/2 - 1 Mile SSW |
| N70 | CADWR0000015932 | 1/2 - 1 Mile SSW |

**OTHER STATE DATABASE INFORMATION**

**STATE OIL/GAS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | CAOG14000000372 | 1/2 - 1 Mile ENE |
| 2 | CAOG14000186927 | 1/2 - 1 Mile North |

# PHYSICAL SETTING SOURCE MAP - 6987243.2s




- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

| | | | |
|---|---|---|---|
| SITE NAME: | Moorpark Civic Center Master Plan Project | CLIENT: | Psomas |
| ADDRESS: | 799 Moorpark Avenue<br>Moorpark CA 93021 | CONTACT: | Jsnet Powell |
| LAT/LONG: | 34.286393 / 118.883033 | INQUIRY #: | 6987243.2s |
| | | DATE: | May 19, 2022 4:12 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**SE**
**0 - 1/8 Mile**
**Lower**

**FRDS PWS** **CA5603108**

| | | | |
|---|---|---|---|
| Epa region: | 09 | State: | CA |
| Pwsid: | CA5603108 | Pwsname: | THERMIC MUTUAL WATER CO |
| Cityserved: | Not Reported | Stateserved: | CA |
| Zipserved: | Not Reported | Fipscounty: | 06111 |
| Status: | Closed | Retpopsrvd: | 38 |
| Pwssvcconn: | 18 | Psource longname: | Purch_groundwater |
| Pwstype: | CWS | Owner: | Private |
| Contact: | J. Andy Waters | Contactorgname: | THERMIC MUTUAL WATER CO |
| Contactphone: | 8057326003 | Contactaddress1: | 11003 Broadway |
| Contactaddress2: | Not Reported | Contactcity: | Moorpark |
| Contactstate: | CA | Contactzip: | 93021 |
| Pwsactivitycode: | N | | |

| | | | |
|---|---|---|---|
| PWS ID: | CA5603108 | PWS name: | THERMIC MUTUAL WATER CO |
| Address: | Not Reported | Care of: | Not Reported |
| City: | MOORPARK | State: | CA |
| Zip: | 93021 | Owner: | THERMIC MUTUAL WATER CO |
| Source code: | Ground water | Population: | 38 |

| | | | |
|---|---|---|---|
| PWS ID: | CA5603108 | PWS type: | System Owner/Responsible Party |
| PWS name: | THERMIC MUTUAL WATER CO | PWS address: | Not Reported |
| PWS city: | MOORPARK | PWS state: | CA |
| PWS zip: | 93021 | PWS name: | THERMIC MUTUAL WATER CO |
| PWS type code: | C | Retail population served: | 38 |
| Contact: | J. Andy Waters | Contact address: | 11003 Broadway |
| Contact address: | Moorpark | Contact city: | CA |
| Contact state: | 93 | Contact zip: | 8057326003 |
| Contact telephone: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS ID: | CA5603108 | Activity status: | Active |
| Date system activated: | 9309 | Date system deactivated: | Not Reported |
| Retail population: | 00000035 | System name: | THERMIC MUTUAL WATER CO |
| System address: | THERMIC MUTUAL WATER CO | System address: | 11003 BROADWAY |
| System city: | MOORPARK | System state: | CA |
| System zip: | 93021 | | |

| | | | |
|---|---|---|---|
| Population served: | Under 101 Persons | Treatment: | Untreated |

| | | | |
|---|---|---|---|
| Latitude: | 341708 | Longitude: | 1185251 |

| | | | |
|---|---|---|---|
| Violation id: | 106001 | Orig code: | S |
| State: | CA | Violation Year: | 2001 |
| Contamination code: | 5000 | Contamination Name: | Lead and Copper Rule |
| Violation code: | 52 | Violation name: | Follow-up Or Routine LCR Tap M/R |
| Rule code: | 350 | Rule name: | LCR |
| Violation measur: | Not Reported | Unit of measure: | Not Reported |
| State mcl: | Not Reported | Cmp bdt: | 08/30/2001 |
| Cmp edt: | Not Reported | | |

| | | | |
|---|---|---|---|
| Violation id: | 406003 | Orig code: | S |
| State: | CA | Violation Year: | 2004 |
| Contamination code: | 7000 | Contamination Name: | Consumer Confidence Rule |
| Violation code: | 71 | Violation name: | CCR Complete Failure to Report |
| Rule code: | 420 | Rule name: | CCR |
| Violation measur: | Not Reported | Unit of measure: | Not Reported |

State mcl: Not Reported
Cmp bdt: 07/01/2004
Cmp edt: Not Reported

Violation id: 95V0001
Orig code: F
State: CA
Violation Year: 1993
Contamination code: 5000
Contamination Name: Lead and Copper Rule
Violation code: 51
Violation name: Initial Tap Sampling for Pb and Cu
Rule code: 350
Rule name: LCR
Violation measur: 0
Unit of measure: Not Reported
State mcl: 0
Cmp bdt: 07/01/1993
Cmp edt: 12/31/2003

Violation id: 9606002
Orig code: S
State: CA
Violation Year: 1996
Contamination code: 5000
Contamination Name: Lead and Copper Rule
Violation code: 51
Violation name: Initial Tap Sampling for Pb and Cu
Rule code: 350
Rule name: LCR
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 08/30/1996
Cmp edt: Not Reported

Violation ID: 106001
Orig Code: S
Enforcemnt FY: 2007
Enforcement Action: 07/01/2007
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 106001
Orig Code: S
Enforcemnt FY: 2006
Enforcement Action: 09/06/2006
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 106001
Orig Code: S
Enforcemnt FY: 2002
Enforcement Action: 05/07/2002
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 406003
Orig Code: S
Enforcemnt FY: 2006
Enforcement Action: 09/06/2006
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 406003
Orig Code: S
Enforcemnt FY: 2005
Enforcement Action: 01/31/2005
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 406003
Orig Code: S
Enforcemnt FY: 2007
Enforcement Action: 07/01/2007
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 95V0001
Orig Code: F
Enforcemnt FY: 2004
Enforcement Action: 12/31/2003
Enforcement Detail: Fed Compliance achieved
Enforcement Category: Resolving

Violation ID: 9606002
Orig Code: S
Enforcemnt FY: 2006
Enforcement Action: 09/06/2006
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 9606002
Orig Code: S
Enforcemnt FY: 2007
Enforcement Action: 07/01/2007
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

PWS name: THERMIC MUTUAL WATER CO
Population served: 38
PWS type code: C
Violation ID: 0106001
Contaminant: LEAD & COPPER RULE
Violation type: Follow-up and Routine Tap Sampling

| | | | |
|---|---|---|---|
| Compliance start date: | 8/30/2001 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 5/7/2002 0:00:00 | Enforcement action: | State AO (w/o Penalty) Issued |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 0106001 |
| Contaminant: | LEAD & COPPER RULE | Violation type: | Follow-up and Routine Tap Sampling |
| Compliance start date: | 8/30/2001 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 7/1/2007 0:00:00 | Enforcement action: | State Compliance Achieved |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 0106001 |
| Contaminant: | LEAD & COPPER RULE | Violation type: | Follow-up and Routine Tap Sampling |
| Compliance start date: | 8/30/2001 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 9/6/2006 0:00:00 | Enforcement action: | State Compliance Achieved |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 0406003 |
| Contaminant: | 7000 | Violation type: | 71 |
| Compliance start date: | 7/1/2004 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 1/31/2005 0:00:00 | Enforcement action: | State AO (w/o Penalty) Issued |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 0406003 |
| Contaminant: | 7000 | Violation type: | 71 |
| Compliance start date: | 7/1/2004 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 7/1/2007 0:00:00 | Enforcement action: | State Compliance Achieved |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 0406003 |
| Contaminant: | 7000 | Violation type: | 71 |
| Compliance start date: | 7/1/2004 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 9/6/2006 0:00:00 | Enforcement action: | State Compliance Achieved |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 95V0001 |
| Contaminant: | LEAD & COPPER RULE | Violation type: | Initial Tap Sampling for Pb and Cu |
| Compliance start date: | 7/1/1993 0:00:00 | Compliance end date: | 12/31/2003 0:00:00 |
| Enforcement date: | 12/31/2003 0:00:00 | Enforcement action: | Fed Compliance Achieved |
| Violation measurement: | 0 | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 9606002 |
| Contaminant: | LEAD & COPPER RULE | Violation type: | Initial Tap Sampling for Pb and Cu |
| Compliance start date: | 8/30/1996 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 7/1/2007 0:00:00 | Enforcement action: | State Compliance Achieved |
| Violation measurement: | Not Reported | | |

| | | | |
|---|---|---|---|
| PWS name: | THERMIC MUTUAL WATER CO | Population served: | 38 |
| PWS type code: | C | Violation ID: | 9606002 |
| Contaminant: | LEAD & COPPER RULE | Violation type: | Initial Tap Sampling for Pb and Cu |
| Compliance start date: | 8/30/1996 0:00:00 | Compliance end date: | 7/1/2007 0:00:00 |
| Enforcement date: | 9/6/2006 0:00:00 | Enforcement action: | State Compliance Achieved |
| Violation measurement: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A2**
**WSW**
**1/8 - 1/4 Mile**
**Lower**

**CA WELLS** **CADWR0000003339**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05J003S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05J003S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05J003S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**A3**
**WSW**
**1/8 - 1/4 Mile**
**Lower**

**CA WELLS** **CADWR0000014055**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05J002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05J002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05J002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**A4**
**WSW**
**1/8 - 1/4 Mile**
**Lower**

**CA WELLS** **CADWR0000013775**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05J001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05J001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05J001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**B5**
**WSW**
**1/4 - 1/2 Mile**
**Lower**

**CA WELLS** **CADWR0000026937**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05K001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05K001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05K001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**B6**
**WSW**
**1/4 - 1/2 Mile**
**Lower**

**CA WELLS** **CADWR9000008160**

| | | | |
|---|---|---|---|
| State Well #: | 02N19W05K001S | Station ID: | 2951 |
| Well Name: | 02N19W05K01S | Basin Name: | Las Posas Valley |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 528 | Well Completion Rpt #: | Not Reported |

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**C7**
**ESE**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **CAEDF0000009837**

| | | | |
|---|---|---|---|
| Well ID: | T0611101184-MW-3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-3 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101184&assigned_name=MW-3&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101184&assigned_name=MW-3 | | |

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**C8**
**ESE**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **CAEDF0000074118**

| | | | |
|---|---|---|---|
| Well ID: | T0611101184-MW-2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101184&assigned_name=MW-2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101184&assigned_name=MW-2 | | |

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**C9**
**ESE**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **CAEDF0000055829**

| | | | |
|---|---|---|---|
| Well ID: | T0611101184-MW-4 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-4 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101184&assigned_name=MW-4&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101184&assigned_name=MW-4 | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**C10**
**ESE**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **CAEDF0000126395**

| | | | |
|---|---|---|---|
| Well ID: | T0611101184-MW-1 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-1 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101184&assigned_name=MW-1&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101184&assigned_name=MW-1 | | |

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**11**
**West**
**1/4 - 1/2 Mile**
**Lower**

**CA WELLS** **CADWR0000002973**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05K005S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05K005S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05K005S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**D12**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000091856**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-6 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-6 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-6&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-6 | | |

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**D13**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000047245**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-1 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-1 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-1&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-1 | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**D14**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000076633**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-7 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-7 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-7&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-7 | | |

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**D15**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000119551**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-2 | | |

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**D16**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000049617**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-5 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-5 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-5&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-5 | | |

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**D17**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000032136**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-3 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-3&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-3 | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**D18**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000067248**

| | | | |
|---|---|---|---|
| Well ID: | T0611123476-MW-4 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-4 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611123476&assigned_name=MW-4&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611123476&assigned_name=MW-4 | | |

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**E19**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000037418**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW12 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW12 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW12&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW12 | | |

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**E20**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000140982**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW3 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW3&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW3 | | |

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**E21**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000054727**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW4 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW4 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW4&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW4 | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**F22**
**ESE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000008149**

| | | | |
|---|---|---|---|
| State Well #: | 02N19W04K001S | Station ID: | 2950 |
| Well Name: | Not Reported | Basin Name: | Las Posas Valley |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

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**E23**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000142936**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW5 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW5 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW5&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW5 | | |

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**E24**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000095094**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-EW2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | EW2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=EW2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=EW2 | | |

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**E25**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000142598**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW1 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW1 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW1&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW1 | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**E26**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000124845**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW11 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW11 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW11&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW11 | | |

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**E27**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000005191**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-EW3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | EW3 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=EW3&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=EW3 | | |

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**E28**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000084741**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-EW1 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | EW1 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=EW1&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=EW1 | | |

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**E29**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000121546**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW6 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW6 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW6&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW6 | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**E30**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000041552**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW7 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW7 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW7&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW7 | | |

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**E31**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000070917**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW10 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW10 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW10&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW10 | | |

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**E32**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000015500**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW2 | | |

---

**E33**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000138904**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW8 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW8 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW8&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW8 | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**E34**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000065187**

| | | | |
|---|---|---|---|
| Well ID: | T0611101370-MW9 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW9 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101370&assigned_name=MW9&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101370&assigned_name=MW9 | | |

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**F35**
**ESE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000017415**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W04K001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W04K001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W04K001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**36**
**ESE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000025641**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W04Q001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W04Q001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W04Q001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**G37**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000027497**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W08A001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W08A001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W08A001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**G38**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000043971**

| | | | |
|---|---|---|---|
| Well ID: | T0611101081-MW-6 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-6 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101081&assigned_name=MW-6&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101081&assigned_name=MW-6 | | |

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**G39**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000015130**

| | | | |
|---|---|---|---|
| Well ID: | T0611101081-MW-7 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-7 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101081&assigned_name=MW-7&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101081&assigned_name=MW-7 | | |

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**40**
**SSE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000009069**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W09C003S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W09C003S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W09C003S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**41**
**North**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000024408**

| | | | |
|---|---|---|---|
| Well ID: | 03N19W33N002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 03N19W33N002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03N19W33N002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**42**
**NNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000008222**

| | | | |
|---|---|---|---|
| Well ID: | 03N19W32R001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 03N19W32R001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03N19W32R001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**H43**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAEDF0000040152**

| | | | |
|---|---|---|---|
| Well ID: | T0611100314-MW-3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-3 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611100314&assigned_name=MW-3&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611100314&assigned_name=MW-3 | | |

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**I44**
**NNE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000013770**

| | | | |
|---|---|---|---|
| Well ID: | 03N19W33P002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 03N19W33P002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03N19W33P002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**I45**
**NNE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000020657**

| | | | |
|---|---|---|---|
| Well ID: | 03N19W33P004S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 03N19W33P004S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03N19W33P004S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**I46**
**NNE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000004027**

| | | | |
|---|---|---|---|
| Well ID: | 03N19W33P001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 03N19W33P001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03N19W33P001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**H47**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAEDF0000113498**

| | | | |
|---|---|---|---|
| Well ID: | T0611100314-MW-1 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-1 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611100314&assigned_name=MW-1&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611100314&assigned_name=MW-1 | | |

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**H48**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAEDF0000126154**

| | | | |
|---|---|---|---|
| Well ID: | T0611100314-MW-5 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-5 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611100314&assigned_name=MW-5&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611100314&assigned_name=MW-5 | | |

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**49**
**SW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000005279**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W08B002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W08B002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W08B002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**H50**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAEDF0000064852**

| | | | |
|---|---|---|---|
| Well ID: | T0611100314-MW-2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611100314&assigned_name=MW-2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611100314&assigned_name=MW-2 | | |

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**H51**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAEDF0000015488**

| | | | |
|---|---|---|---|
| Well ID: | T0611100314-MW-4 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-4 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611100314&assigned_name=MW-4&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611100314&assigned_name=MW-4 | | |

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**H52**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAEDF0000081523**

| | | | |
|---|---|---|---|
| Well ID: | T0611100314-MW-6 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-6 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611100314&assigned_name=MW-6&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611100314&assigned_name=MW-6 | | |

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**53**
**WNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000018936**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05F002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05F002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05F002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**J54**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000008090**

| | | | |
|---|---|---|---|
| State Well #: | 02N19W09E001S | Station ID: | 53508 |
| Well Name: | 02N19W09E01S | Basin Name: | Las Posas Valley |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 155 | Well Completion Rpt #: | Not Reported |

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**J55**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000008091**

| | | | |
|---|---|---|---|
| State Well #: | 02N20W02D002S | Station ID: | 53509 |
| Well Name: | 02N20W02D02S | Basin Name: | Las Posas Valley |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 1238 | Well Completion Rpt #: | Not Reported |

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**K56**
**NNE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000008224**

| | | | |
|---|---|---|---|
| State Well #: | 03N19W33P003S | Station ID: | 2888 |
| Well Name: | Not Reported | Basin Name: | Las Posas Valley |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

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**K57**
**NNE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000034052**

| | | | |
|---|---|---|---|
| Well ID: | 03N19W33P003S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 03N19W33P003S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03N19W33P003S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**58**
**SSE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000030467**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W09F002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W09F002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W09F002S&store_num= | | |

GeoTracker Data: Not Reported

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**L59**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000035863**

| | | | |
|---|---|---|---|
| Well ID: | T0611101081-MW-3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-3 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101081&assigned_name=MW-3&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101081&assigned_name=MW-3 | | |

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**L60**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000012969**

| | | | |
|---|---|---|---|
| Well ID: | T0611101081-MW-2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101081&assigned_name=MW-2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101081&assigned_name=MW-2 | | |

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**L61**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000131258**

| | | | |
|---|---|---|---|
| Well ID: | T0611101081-MW-4 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-4 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101081&assigned_name=MW-4&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101081&assigned_name=MW-4 | | |

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**L62**
**South**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000044618**

| | | | |
|---|---|---|---|
| Well ID: | T0611101081-MW-5 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW-5 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0611101081&assigned_name=MW-5&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0611101081&assigned_name=MW-5 | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**M63**
**North**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADDW0000005261**

| | | | |
|---|---|---|---|
| Well ID: | 5610018-001 | Well Type: | MUNICIPAL |
| Source: | Department of Health Services | | |
| Other Name: | WELL 05 - ABANDONED | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5610018-001&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**M64**
**North**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **3393**

| | | | |
|---|---|---|---|
| Seq: | 3393 | Prim sta c: | 03N/19W-32A01 S |
| Frds no: | 5610018002 | County: | 56 |
| District: | 06 | User id: | TAP |
| System no: | 5610018 | Water type: | G |
| Source nam: | WELL 08 - ABANDONED | Station ty: | WELL/AMBNT/MUN/INTAKE/SUPPLY |
| Latitude: | 341800.0 | Longitude: | 1185300.0 |
| Precision: | 4 | Status: | AB |
| Comment 1: | Not Reported | Comment 2: | Not Reported |
| Comment 3: | Not Reported | Comment 4: | Not Reported |
| Comment 5: | Not Reported | Comment 6: | Not Reported |
| Comment 7: | Not Reported | | |

| | | | |
|---|---|---|---|
| System no: | 5610018 | System nam: | Ventura Cwwd No. 1 - Moorpark |
| Hqname: | VENTURA CWWD NO. 1 | Address: | P O BOX 250 |
| City: | MOORPARK | State: | CA |
| Zip: | 93020 | Zip ext: | 0250 |
| Pop serv: | 28049 | Connection: | 7751 |
| Area serve: | MOORPARK, DIST NO 1 | | |

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**M65**
**North**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **3395**

| | | | |
|---|---|---|---|
| Seq: | 3395 | Prim sta c: | 03N/19W-32G01 S |
| Frds no: | 5610018003 | County: | 56 |
| District: | 06 | User id: | TAP |
| System no: | 5610018 | Water type: | G |
| Source nam: | WELL 09 - ABANDONED | Station ty: | WELL/AMBNT/MUN/INTAKE/SUPPLY |
| Latitude: | 341800.0 | Longitude: | 1185300.0 |
| Precision: | 4 | Status: | AB |
| Comment 1: | Not Reported | Comment 2: | Not Reported |
| Comment 3: | Not Reported | Comment 4: | Not Reported |
| Comment 5: | Not Reported | Comment 6: | Not Reported |
| Comment 7: | Not Reported | | |

| | | | |
|---|---|---|---|
| System no: | 5610018 | System nam: | Ventura Cwwd No. 1 - Moorpark |
| Hqname: | VENTURA CWWD NO. 1 | Address: | P O BOX 250 |
| City: | MOORPARK | State: | CA |
| Zip: | 93020 | Zip ext: | 0250 |

| | | | |
|---|---|---|---|
| Pop serv: | 28049 | Connection: | 7751 |
| Area serve: | MOORPARK, DIST NO 1 | | |

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**M66**
**North**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **3396**

| | | | |
|---|---|---|---|
| Seq: | 3396 | Prim sta c: | 03N/19W-33P02 S |
| Frds no: | 5610018001 | County: | 56 |
| District: | 06 | User id: | TAP |
| System no: | 5610018 | Water type: | G |
| Source nam: | WELL 05 | Station ty: | WELL/AMBNT/MUN/INTAKE/SUPPLY |
| Latitude: | 341800.0 | Longitude: | 1185300.0 |
| Precision: | 4 | Status: | AR |
| Comment 1: | Not Reported | Comment 2: | Not Reported |
| Comment 3: | Not Reported | Comment 4: | Not Reported |
| Comment 5: | Not Reported | Comment 6: | Not Reported |
| Comment 7: | Not Reported | | |

| | | | |
|---|---|---|---|
| System no: | 5610018 | System nam: | Ventura Cwwd No. 1 - Moorpark |
| Hqname: | VENTURA CWWD NO. 1 | Address: | P O BOX 250 |
| City: | MOORPARK | State: | CA |
| Zip: | 93020 | Zip ext: | 0250 |
| Pop serv: | 28049 | Connection: | 7751 |
| Area serve: | MOORPARK, DIST NO 1 | | |

---

**67**
**West**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000024943**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W05E003S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W05E003S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W05E003S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**N68**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000008063**

| | | | |
|---|---|---|---|
| State Well #: | 02N19W08H002S | Station ID: | 2958 |
| Well Name: | 02N19W08H02S | Basin Name: | Las Posas Valley |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 240 | Well Completion Rpt #: | Not Reported |

---

**N69**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000008074**

| | | | |
|---|---|---|---|
| State Well #: | 02N19W08G003S | Station ID: | 26472 |
| Well Name: | Not Reported | Basin Name: | Las Posas Valley |

| | | | |
|---|---|---|---|
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**N70**
**SSW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000015932**

| | | | |
|---|---|---|---|
| Well ID: | 02N19W08G003S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 02N19W08G003S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02N19W08G003S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

**1**
**ENE**
**1/2 - 1 Mile**

**OIL_GAS** **CAOG14000000372**

| | | | |
|---|---|---|---|
| API #: | 0411105681 | Well #: | B-1 |
| Well Status: | Plugged | Well Type: | Dry Hole |
| Lease Name: | Edd H. Williams et ux | Field Name: | Any Field |
| Area Name: | Any Area | GIS Source: | hud |
| Confidential Well: | N | Directionally Drilled: | N |
| Spud Date: | 08/19/1955 | | |

---

**2**
**North**
**1/2 - 1 Mile**

**OIL_GAS** **CAOG14000186927**

| | | | |
|---|---|---|---|
| API #: | 0411100864 | Well #: | 1 |
| Well Status: | Plugged | Well Type: | Dry Hole |
| Lease Name: | Unspecified | Field Name: | Moorpark (ABD) |
| Area Name: | Any Area | GIS Source: | GPS |
| Confidential Well: | N | Directionally Drilled: | N |
| Spud Date: | 05/31/1960 | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---|---|---|
| 93021 | 255 | 11 |

Federal EPA Radon Zone for VENTURA County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for Zip Code: 93021

Number of sites tested: 4

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area - 1st Floor | 1.625 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | Not Reported | Not Reported | Not Reported | Not Reported |
| Basement | Not Reported | Not Reported | Not Reported | Not Reported |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

**STREET AND ADDRESS INFORMATION**

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# APPENDIX J

# NOISE

## Construction Generated Noise

| **Building Type** | Domestic Housing | **Distance (ft)** |
|---|---|---|
| **Construction Noise at 50 Feet (dBA Leq)** | | 50 |
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 83 | |
| Excavation | 88 | |
| Foundation Construction | 81 | |
| Building Construction | 81 | |
| Finishing and Site Cleanup | 88 | |

**North - Residential Uses**

| **Maximum Construction Noise (dBA Leq)** | | 100 |
|---|---|---|
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 77 | |
| Excavation (Site Preparation) | 82 | |
| Foundation Construction | 75 | |
| Building Construction | 75 | |
| Paving | 82 | |
| **Average Construction Noise (dBA Leq)** | | 220 |
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 70 | |
| Excavation (Site Preparation) | 75 | |
| Foundation Construction | 68 | |
| Building Construction | 68 | |
| Paving | 75 | |

**Northwest - Walnut Canyon School**

| **Maximum Construction Noise (dBA Leq)** | | 105 |
|---|---|---|
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 77 | |
| Excavation (Site Preparation) | 82 | |
| Foundation Construction | 75 | |
| Building Construction | 75 | |
| Paving | 82 | |
| **Average Construction Noise (dBA Leq)** | | 370 |
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 66 | |
| Excavation (Site Preparation) | 71 | |
| Foundation Construction | 64 | |
| Building Construction | 64 | |
| Paving | 71 | |

**South - Post Office**

| **Maximum Construction Noise (dBA Leq)** | | 270 |
|---|---|---|
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 68 | |
| Excavation (Site Preparation) | 73 | |
| Foundation Construction | 66 | |
| Building Construction | 66 | |
| Paving | 73 | |
| **Average Construction Noise (dBA Leq)** | | 475 |
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 63 | |
| Excavation (Site Preparation) | 68 | |
| Foundation Construction | 61 | |
| Building Construction | 61 | |
| Paving | 68 | |

**East - Tanner Building**

| **Maximum Construction Noise (dBA Leq)** | | 10 |
|---|---|---|
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 97 | |
| Excavation (Site Preparation) | 102 | |
| Foundation Construction | 95 | |
| Building Construction | 95 | |
| Paving | 102 | |
| **Average Construction Noise (dBA Leq)** | | 85 |
| **Construction Phase** | **All Applicable Equipment in Use**[1] | |
| Ground Clearing/Demolition | 78 | |
| Excavation (Site Preparation) | 83 | |
| Foundation Construction | 76 | |
| Building Construction | 76 | |
| Paving | 83 | |

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.

## Construction Generated Vibration

| **North - Residential Uses** | | Closest Distance (feet): | 55 |
|---|---|---|---|
| | Approximate RMS a<br>66 | Approximate RMS<br>73.000 | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 0.465 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 0.225 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.052 | |
| Vibratory roller | 0.21 | 0.064 | |
| Caisson Drill | 0.089 | 0.027 | |
| Large bulldozer | 0.089 | 0.027 | |
| Small bulldozer | 0.003 | 0.001 | |
| Jackhammer | 0.035 | 0.011 | |
| Loaded trucks | 0.076 | 0.023 | |
| | Criteria | 0.250 | 1700 |
| **Northwest - Walnut Canyon School** | | Closest Distance (feet): | 320 |
| | **Approximate RMS a**<br>Velocity at 25 ft, | Approximate RMS<br>Velocity Level, | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 0.033 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 0.016 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.004 | |
| Vibratory roller | 0.21 | 0.005 | |
| Caisson Drill | 0.089 | 0.002 | |
| Large bulldozer | 0.089 | 0.002 | |
| Small bulldozer | 0.003 | 0.000 | |
| Jackhammer | 0.035 | 0.001 | |
| Loaded trucks | 0.076 | 0.002 | |
| | Criteria | 0.250 | |
| **South - Post Office** | | Closest Distance (feet): | 70 |
| | **Approximate RMS a**<br>Velocity at 25 ft, | Approximate RMS<br>Velocity Level, | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 0.324 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 0.157 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.036 | |
| Vibratory roller | 0.21 | 0.045 | |
| Caisson Drill | 0.089 | 0.019 | |
| Large bulldozer | 0.089 | 0.019 | |
| Small bulldozer | 0.003 | 0.001 | |
| Jackhammer | 0.035 | 0.007 | |
| Loaded trucks | 0.076 | 0.016 | |
| | Criteria | 0.250 | |
| **East - Tanner Building** | | Closest Distance (feet): | 70 |
| | Approximate RMS a<br>Velocity at 25 ft, | Approximate RMS<br>Velocity Level, | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 0.324 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 0.157 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.036 | |
| Vibratory roller | 0.21 | 0.045 | |
| Caisson Drill | 0.089 | 0.019 | |
| Large bulldozer | 0.089 | 0.019 | |
| Small bulldozer | 0.003 | 0.001 | |
| Jackhammer | 0.035 | 0.007 | |
| Loaded trucks | 0.076 | 0.016 | |
| | Criteria | 0.250 | |

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

## Construction Generated Vibration

| **15 Feet** | | Closest Distance (feet): | 15 |
|---|---|---|---|
| | Approximate RMS a<br>66 | Approximate RMS<br>73.000 | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 3.266 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 1.579 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.366 | |
| Vibratory roller | 0.21 | 0.452 | |
| Caisson Drill | 0.089 | 0.191 | |
| Large bulldozer | 0.089 | 0.191 | |
| Small bulldozer | 0.003 | 0.006 | |
| Jackhammer | 0.035 | 0.075 | |
| Loaded trucks | 0.076 | 0.164 | |
| | Criteria | 0.250 | 1700 |

| **20 Feet** | | Closest Distance (feet): | 20 |
|---|---|---|---|
| | **Approximate RMS a**<br>Velocity at 25 ft, | Approximate RMS<br>Velocity Level, | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 2.121 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 1.026 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.238 | |
| Vibratory roller | 0.21 | 0.293 | |
| Caisson Drill | 0.089 | 0.124 | |
| Large bulldozer | 0.089 | 0.124 | |
| Small bulldozer | 0.003 | 0.004 | |
| Jackhammer | 0.035 | 0.049 | |
| Loaded trucks | 0.076 | 0.106 | |
| | Criteria | 0.250 | |

| **25 Feet** | | Closest Distance (feet): | 25 |
|---|---|---|---|
| | **Approximate RMS a**<br>Velocity at 25 ft, | Approximate RMS<br>Velocity Level, | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 1.518 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 0.734 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.170 | |
| Vibratory roller | 0.21 | 0.210 | |
| Caisson Drill | 0.089 | 0.089 | |
| Large bulldozer | 0.089 | 0.089 | |
| Small bulldozer | 0.003 | 0.003 | |
| Jackhammer | 0.035 | 0.035 | |
| Loaded trucks | 0.076 | 0.076 | |
| | Criteria | 0.250 | |

| **55 Feet** | | Closest Distance (feet): | 55 |
|---|---|---|---|
| | Approximate RMS a<br>Velocity at 25 ft, | Approximate RMS<br>Velocity Level, | |
| Equipment | inch/second | inch/second | |
| Pile Driver (Impact) | 1.518 | 0.465 | |
| Pile Driver (Sonic) Upper Range | 0.734 | 0.225 | |
| Pile Driver (Sonic) Typical | 0.17 | 0.052 | |
| Vibratory roller | 0.21 | 0.064 | |
| Caisson Drill | 0.089 | 0.027 | |
| Large bulldozer | 0.089 | 0.027 | |
| Small bulldozer | 0.003 | 0.001 | |
| Jackhammer | 0.035 | 0.011 | |
| Loaded trucks | 0.076 | 0.023 | |
| | Criteria | 0.250 | |

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

**Moorpark Civic Center Traffic Noise 2025**

| Roadway Segment | | Speed | 24-hour Traffic Volume | | | Distance to CNEL from Roadway Centerline | | | | | | | | Noise Level (CNEL or Ldn) at Distance from Roadway Centerline | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | | | | Future No Project | | | | Future With Project | | | | | | Noise Level (CNEL or Ldn) at Distance from Roadway Centerline | | | | | | | | | | | | |
| | | | | Future | Future | 50.0 | 60 | 65 | 70 | 50.0 | 60 | 65 | 70 | 50.0 | 60 | 65 | 70 | Change | Change | Existing | | | Future No Proj | | | Future Plus Proj | | | Change | Change |
| **Roadway Segment** | Roadway Segment | | Existing | Without Project | With Project | Feet | CNEL | CNEL | CNEL | Feet | CNEL | CNEL | CNEL | Feet | CNEL | CNEL | CNEL | From Existing | due to Project | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | From Existing | due to Project |
| Casey Road and Moorpark Avenue/Walnut Canyon Road | East Leg | 25 | 0 | 0 | 0 | 4.8 | 0 | 0 | 0 | 4.8 | 0 | 0 | 0 | 4.8 | 0 | 0 | 0 | 0.0 | 0.0 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | --- | --- |
| | West Leg | 25 | 840 | 5,120 | 5,120 | 52.1 | 15 | 7 | 3 | 59.9 | 50 | 23 | 11 | 59.9 | 50 | 23 | 11 | 7.8 | 0.0 | 52.1 | 52.1 | 52.1 | 59.9 | 59.9 | 59.9 | 59.9 | 59.9 | 59.9 | +7.8 | --- |
| | North Leg | 30 | 3,520 | 6,300 | 6,260 | 60.0 | 50 | 23 | 11 | 62.5 | 73 | 34 | 16 | 62.5 | 73 | 34 | 16 | 2.5 | 0.0 | 60.0 | 60.0 | 60.0 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | +2.5 | -0.0 |
| | South Leg | 30 | 4,280 | 10,460 | 10,420 | 60.8 | 57 | 26 | 12 | 64.7 | 103 | 48 | 22 | 64.7 | 103 | 48 | 22 | 3.9 | 0.0 | 60.8 | 60.8 | 60.8 | 64.7 | 64.7 | 64.7 | 64.7 | 64.7 | 64.7 | +3.9 | -0.0 |
| Charles Street/Civic Center Driveway and Moorpark Avenue | East Leg | 25 | 800 | 830 | 830 | 51.9 | 14 | 7 | 3 | 52.0 | 15 | 7 | 3 | 52.0 | 15 | 7 | 3 | 0.2 | 0.0 | 51.9 | 51.9 | 51.9 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | +0.2 | --- |
| | West Leg | 25 | 480 | 490 | 350 | 49.7 | 10 | 5 | 2 | 49.7 | 10 | 5 | 2 | 48.3 | 8 | 4 | 2 | -1.4 | -1.5 | 49.7 | 49.7 | 49.7 | 49.7 | 49.7 | 49.7 | 48.3 | 48.3 | 48.3 | -1.4 | -1.5 |
| | North Leg | 30 | 9,340 | 15,850 | 15,790 | 64.2 | 96 | 44 | 21 | 66.5 | 136 | 63 | 29 | 66.5 | 136 | 63 | 29 | 2.3 | 0.0 | 64.2 | 64.2 | 64.2 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | +2.3 | -0.0 |
| | South Leg | 30 | 9,360 | 15,870 | 15,730 | 64.2 | 96 | 44 | 21 | 66.5 | 136 | 63 | 29 | 66.5 | 135 | 63 | 29 | 2.3 | 0.0 | 64.2 | 64.2 | 64.2 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | +2.3 | -0.0 |
| High Street and Moorpark Avenue | East Leg | 30 | 6,130 | 9,660 | 9,510 | 62.4 | 72 | 33 | 16 | 64.4 | 98 | 45 | 21 | 64.3 | 97 | 45 | 21 | 1.9 | -0.1 | 62.4 | 62.4 | 62.4 | 64.4 | 64.4 | 64.4 | 64.3 | 64.3 | 64.3 | +1.9 | -0.1 |
| | West Leg | 30 | 380 | 1,380 | 1,120 | 50.3 | 11 | 5 | 2 | 55.9 | 27 | 12 | 6 | 55.0 | 23 | 11 | 5 | 4.7 | -0.9 | 50.3 | 50.3 | 50.3 | 55.9 | 55.9 | 55.9 | 55.0 | 55.0 | 55.0 | +4.7 | -0.9 |
| | North Leg | 30 | 9,270 | 15,780 | 15,650 | 64.2 | 95 | 44 | 20 | 66.5 | 136 | 63 | 29 | 66.5 | 135 | 63 | 29 | 2.3 | 0.0 | 64.2 | 64.2 | 64.2 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | +2.3 | -0.0 |
| | South Leg | 30 | 9,740 | 14,420 | 14,220 | 64.4 | 98 | 46 | 21 | 66.1 | 128 | 59 | 27 | 66.0 | 126 | 59 | 27 | 1.6 | -0.1 | 64.4 | 64.4 | 64.4 | 66.1 | 66.1 | 66.1 | 66.0 | 66.0 | 66.0 | +1.6 | -0.1 |
| High Street/Princeton Avenue and Spring Road | East Leg | 30 | 10,330 | 14,190 | 14,150 | 64.7 | 102 | 47 | 22 | 66.0 | 126 | 59 | 27 | 66.0 | 126 | 58 | 27 | 1.4 | 0.0 | 64.7 | 64.7 | 64.7 | 66.0 | 66.0 | 66.0 | 66.0 | 66.0 | 66.0 | +1.4 | -0.0 |
| | West Leg | 30 | 6,030 | 9,430 | 9,280 | 62.3 | 71 | 33 | 15 | 64.3 | 96 | 45 | 21 | 64.2 | 95 | 44 | 20 | 1.9 | -0.1 | 62.3 | 62.3 | 62.3 | 64.3 | 64.3 | 64.3 | 64.2 | 64.2 | 64.2 | +1.9 | -0.1 |
| | North Leg | 40 | 11,860 | 14,580 | 14,550 | 67.9 | 167 | 78 | 36 | 68.8 | 192 | 89 | 41 | 68.8 | 192 | 89 | 41 | 0.9 | 0.0 | 67.9 | 67.9 | 67.9 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | +0.9 | -0.0 |
| | South Leg | 40 | 11,700 | 13,960 | 13,880 | 67.8 | 166 | 77 | 36 | 68.6 | 187 | 87 | 40 | 68.6 | 186 | 86 | 40 | 0.7 | 0.0 | 67.8 | 67.8 | 67.8 | 68.6 | 68.6 | 68.6 | 68.6 | 68.6 | 68.6 | +0.7 | -0.0 |
| First Street/Poindexter Avenue and Moorpark Avenue | East Leg | 25 | 570 | 610 | 610 | 50.4 | 11 | 5 | 2 | 50.7 | 12 | 6 | 3 | 50.7 | 12 | 6 | 3 | 0.3 | 0.0 | 50.4 | 50.4 | 50.4 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | +0.3 | --- |
| | West Leg | 25 | 3,590 | 4,130 | 4,060 | 58.4 | 39 | 18 | 8 | 59.0 | 43 | 20 | 9 | 58.9 | 42 | 20 | 9 | 0.5 | -0.1 | 58.4 | 58.4 | 58.4 | 59.0 | 59.0 | 59.0 | 58.9 | 58.9 | 58.9 | +0.5 | -0.1 |
| | North Leg | 30 | 5,810 | 10,380 | 10,160 | 62.2 | 70 | 32 | 15 | 64.7 | 102 | 48 | 22 | 64.6 | 101 | 47 | 22 | 2.4 | -0.1 | 62.2 | 62.2 | 62.2 | 64.7 | 64.7 | 64.7 | 64.6 | 64.6 | 64.6 | +2.4 | -0.1 |
| | South Leg | 30 | 3,810 | 8,020 | 7,870 | 60.3 | 53 | 24 | 11 | 63.6 | 86 | 40 | 19 | 63.5 | 85 | 40 | 18 | 3.2 | -0.1 | 60.3 | 60.3 | 60.3 | 63.6 | 63.6 | 63.6 | 63.5 | 63.5 | 63.5 | +3.2 | -0.1 |
| Los Angeles Avenue and Moorpark Avenue | East Leg | 45 | 20,890 | 27,320 | 27,250 | 71.6 | 297 | 138 | 64 | 72.8 | 355 | 165 | 77 | 72.8 | 355 | 165 | 76 | 1.2 | 0.0 | 71.6 | 71.6 | 71.6 | 72.8 | 72.8 | 72.8 | 72.8 | 72.8 | 72.8 | +1.2 | -0.0 |
| | West Leg | 45 | 19,810 | 26,290 | 26,250 | 71.4 | 287 | 133 | 62 | 72.6 | 346 | 161 | 75 | 72.6 | 346 | 161 | 75 | 1.2 | 0.0 | 71.4 | 71.4 | 71.4 | 72.6 | 72.6 | 72.6 | 72.6 | 72.6 | 72.6 | +1.2 | -0.0 |
| | North Leg | 30 | 6,510 | 10,770 | 10,630 | 62.6 | 75 | 35 | 16 | 64.8 | 105 | 49 | 23 | 64.8 | 104 | 48 | 22 | 2.1 | -0.1 | 62.6 | 62.6 | 62.6 | 64.8 | 64.8 | 64.8 | 64.8 | 64.8 | 64.8 | +2.1 | -0.1 |
| | South Leg | 30 | 5,170 | 6,560 | 6,530 | 61.6 | 64 | 30 | 14 | 62.7 | 75 | 35 | 16 | 62.7 | 75 | 35 | 16 | 1.0 | 0.0 | 61.6 | 61.6 | 61.6 | 62.7 | 62.7 | 62.7 | 62.7 | 62.7 | 62.7 | +1.0 | -0.0 |
| Spring Road and Walnut Canyon Road | East Leg | 30 | 7,020 | 9,460 | 9,460 | 63.0 | 79 | 37 | 17 | 64.3 | 96 | 45 | 21 | 64.3 | 96 | 45 | 21 | 1.3 | 0.0 | 63.0 | 63.0 | 63.0 | 64.3 | 64.3 | 64.3 | 64.3 | 64.3 | 64.3 | +1.3 | --- |
| | West Leg | 30 | 90 | 130 | 130 | 44.1 | 4 | 2 | 1 | 45.7 | 6 | 3 | 1 | 45.7 | 6 | 3 | 1 | 1.6 | 0.0 | 44.1 | 44.1 | 44.1 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | +1.6 | --- |
| | North Leg | 40 | 8,550 | 12,900 | 12,870 | 66.5 | 135 | 63 | 29 | 68.2 | 177 | 82 | 38 | 68.2 | 177 | 82 | 38 | 1.8 | 0.0 | 66.5 | 66.5 | 66.5 | 68.2 | 68.2 | 68.2 | 68.2 | 68.2 | 68.2 | +1.8 | -0.0 |
| | South Leg | 40 | 2,380 | 4,370 | 4,340 | 60.9 | 57 | 27 | 12 | 63.5 | 86 | 40 | 19 | 63.5 | 86 | 40 | 18 | 2.6 | 0.0 | 60.9 | 60.9 | 60.9 | 63.5 | 63.5 | 63.5 | 63.5 | 63.5 | 63.5 | +2.6 | -0.0 |
| High Street and Gabbert Road | East Leg | 30 | 0 | 280 | 250 | 4.8 | 0 | 0 | 0 | 49.0 | 9 | 4 | 2 | 48.5 | 9 | 4 | 2 | 43.7 | -0.5 | 4.8 | 4.8 | 4.8 | 49.0 | 49.0 | 49.0 | 48.5 | 48.5 | 48.5 | +43.7 | -0.5 |
| | West Leg | 30 | 0 | 0 | 0 | 4.8 | 0 | 0 | 0 | 4.8 | 0 | 0 | 0 | 4.8 | 0 | 0 | 0 | 0.0 | 0.0 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | --- | --- |
| | North Leg | 25 | 410 | 2,150 | 2,150 | 49.0 | 9 | 4 | 2 | 56.2 | 28 | 13 | 6 | 56.2 | 28 | 13 | 6 | 7.2 | 0.0 | 49.0 | 49.0 | 49.0 | 56.2 | 56.2 | 56.2 | 56.2 | 56.2 | 56.2 | +7.2 | --- |
| | South Leg | 25 | 410 | 2,430 | 2,400 | 49.0 | 9 | 4 | 2 | 56.7 | 30 | 14 | 6 | 56.6 | 30 | 14 | 6 | 7.7 | -0.1 | 49.0 | 49.0 | 49.0 | 56.7 | 56.7 | 56.7 | 56.6 | 56.6 | 56.6 | +7.7 | -0.1 |

Assumptions:

Fleet Mix

97% Autos
2% Medium Trucks
1% Heavy Trucks

Simplified to 2 lanes 6.1 meters= 20.0 feet from centerline
future 6.1 meters= 20.0 feet from centerline Time of Day:

Noise path decay parameter for hard site

74.85% Day
13.68% Evening
11.47% Night
100.0%

Calculations using methods of Federal Highway Administration *Highway Traffic Noise Prediction Model*, December, 1978. Baseline California vehicle noise levels from Caltrans, TAN 95-03, 1995

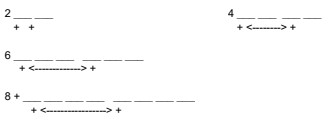
Source of standard assumptions:

Based on Riverside County of Health for sec

Site parameter: 0.0 (0=hard, 1=soft)

HALFSEP 1/2 lane separation 6.1
HALFSEPFUT 1/2 lane separation (future) 6.1

Lane separation:
consider moving lanes only




California base noise levels:

Autos: 5.2+38.8 Log10 (speed, mi/hr) = -2.8 + 38.8 Log10 (speed, km/hr)
Light trucks: 35.3 + 25.6 Log10 (speed, mi/hr) = 30 + 25.6 Log10 (speed, km/hr)
Heavy trucks:
25-31 mi/hr: 51.9 + 19.2 Log10 (speed, mi/hr) = 47.9 + 19.2 Log10 (speed, km/hr)
35-65 mi/hr: 50.4 + 19.2 Log10 (speed, mi/hr) = 46.4 + 19.2 Log10 (speed, km/hr)
31-35 mi/hr: straight line interpolation between above two curves

**Moorpark Civic Center Traffic Noise 2037**

| Roadway Segment | Roadway Segment | Speed | 24-hour Traffic Volume | | | Distance to CNEL from Roadway Centerline | | | | Noise Level (CNEL or Ldn) at Distance from Roadway Centerline | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Existing | | | Future No Proj | | | Future Plus Proj | | | | |
| | | | Existing | Future Without Project | Future With Project | Existing 50.0 Feet | Future With Project 50.0 Feet | Change From Existing | Change due to Project | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | 50 feet | Change From Existing | Change due to Project |
| Casey Road and Moorpark Avenue/Walnut Canyon Road | East Leg | 25 | 0 | 0 | 0 | 4.8 | 4.8 | 0.0 | 0.0 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | --- | --- |
| | West Leg | 25 | 840 | 5,230 | 5,230 | 52.1 | 60.0 | 7.9 | 0.0 | 52.1 | 52.1 | 52.1 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | +7.9 | --- |
| | North Leg | 30 | 3,520 | 6,750 | 6,790 | 60.0 | 62.8 | 2.9 | 0.0 | 60.0 | 60.0 | 60.0 | 62.8 | 62.8 | 62.8 | 62.8 | 62.8 | 62.8 | +2.9 | +0.0 |
| | South Leg | 30 | 4,280 | 11,020 | 11,060 | 60.8 | 65.0 | 4.1 | 0.0 | 60.8 | 60.8 | 60.8 | 64.9 | 64.9 | 64.9 | 65.0 | 65.0 | 65.0 | +4.1 | +0.0 |
| Charles Street/Civic Center Driveway and Moorpark Avenue | East Leg | 25 | 800 | 940 | 940 | 51.9 | 52.6 | 0.7 | 0.0 | 51.9 | 51.9 | 51.9 | 52.6 | 52.6 | 52.6 | 52.6 | 52.6 | 52.6 | +0.7 | --- |
| | West Leg | 25 | 480 | 550 | 700 | 49.7 | 51.3 | 1.6 | 1.0 | 49.7 | 49.7 | 49.7 | 50.2 | 50.2 | 50.2 | 51.3 | 51.3 | 51.3 | +1.6 | +1.0 |
| | North Leg | 30 | 9,340 | 17,070 | 17,110 | 64.2 | 66.8 | 2.6 | 0.0 | 64.2 | 64.2 | 64.2 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 | +2.6 | +0.0 |
| | South Leg | 30 | 9,360 | 17,100 | 17,210 | 64.2 | 66.9 | 2.6 | 0.0 | 64.2 | 64.2 | 64.2 | 66.8 | 66.8 | 66.8 | 66.9 | 66.9 | 66.9 | +2.6 | +0.0 |
| High Street and Moorpark Avenue | East Leg | 30 | 6,130 | 10,470 | 10,610 | 62.4 | 64.8 | 2.4 | 0.1 | 62.4 | 62.4 | 62.4 | 64.7 | 64.7 | 64.7 | 64.8 | 64.8 | 64.8 | +2.4 | +0.1 |
| | West Leg | 30 | 380 | 1,440 | 1,700 | 50.3 | 56.8 | 6.5 | 0.7 | 50.3 | 50.3 | 50.3 | 56.1 | 56.1 | 56.1 | 56.8 | 56.8 | 56.8 | +6.5 | +0.7 |
| | North Leg | 30 | 9,270 | 16,990 | 17,120 | 64.2 | 66.8 | 2.7 | 0.0 | 64.2 | 64.2 | 64.2 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 | +2.7 | +0.0 |
| | South Leg | 30 | 9,740 | 15,720 | 15,930 | 64.4 | 66.5 | 2.1 | 0.1 | 64.4 | 64.4 | 64.4 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | +2.1 | +0.1 |
| High Street/Princeton Avenue and Spring Road | East Leg | 30 | 10,330 | 15,550 | 15,590 | 64.7 | 66.4 | 1.8 | 0.0 | 64.7 | 64.7 | 64.7 | 66.4 | 66.4 | 66.4 | 66.4 | 66.4 | 66.4 | +1.8 | +0.0 |
| | West Leg | 30 | 6,030 | 10,230 | 10,460 | 62.3 | 64.7 | 2.4 | 0.1 | 62.3 | 62.3 | 62.3 | 64.6 | 64.6 | 64.6 | 64.7 | 64.7 | 64.7 | +2.4 | +0.1 |
| | North Leg | 40 | 11,860 | 16,140 | 16,150 | 67.9 | 69.2 | 1.3 | 0.0 | 67.9 | 67.9 | 67.9 | 69.2 | 69.2 | 69.2 | 69.2 | 69.2 | 69.2 | +1.3 | +0.0 |
| | South Leg | 40 | 11,700 | 15,500 | 15,580 | 67.8 | 69.1 | 1.2 | 0.0 | 67.8 | 67.8 | 67.8 | 69.0 | 69.0 | 69.0 | 69.1 | 69.1 | 69.1 | +1.2 | +0.0 |
| First Street/Poindexter Avenue and Moorpark Avenue | East Leg | 25 | 570 | 690 | 690 | 50.4 | 51.2 | 0.8 | 0.0 | 50.4 | 50.4 | 50.4 | 51.2 | 51.2 | 51.2 | 51.2 | 51.2 | 51.2 | +0.8 | --- |
| | West Leg | 25 | 3,590 | 4,600 | 4,670 | 58.4 | 59.5 | 1.1 | 0.1 | 58.4 | 58.4 | 58.4 | 59.5 | 59.5 | 59.5 | 59.5 | 59.5 | 59.5 | +1.1 | +0.1 |
| | North Leg | 30 | 5,810 | 11,150 | 11,360 | 62.2 | 65.1 | 2.9 | 0.1 | 62.2 | 62.2 | 62.2 | 65.0 | 65.0 | 65.0 | 65.1 | 65.1 | 65.1 | +2.9 | +0.1 |
| | South Leg | 30 | 3,810 | 8,520 | 8,660 | 60.3 | 63.9 | 3.6 | 0.1 | 60.3 | 60.3 | 60.3 | 63.8 | 63.8 | 63.8 | 63.9 | 63.9 | 63.9 | +3.6 | +0.1 |
| Los Angeles Avenue and Moorpark Avenue | East Leg | 45 | 20,890 | 30,060 | 30,130 | 71.6 | 73.2 | 1.6 | 0.0 | 71.6 | 71.6 | 71.6 | 73.2 | 73.2 | 73.2 | 73.2 | 73.2 | 73.2 | +1.6 | +0.0 |
| | West Leg | 45 | 19,810 | 28,870 | 28,910 | 71.4 | 73.0 | 1.6 | 0.0 | 71.4 | 71.4 | 71.4 | 73.0 | 73.0 | 73.0 | 73.0 | 73.0 | 73.0 | +1.6 | +0.0 |
| | North Leg | 30 | 6,510 | 11,620 | 11,750 | 62.6 | 65.2 | 2.6 | 0.0 | 62.6 | 62.6 | 62.6 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | +2.6 | +0.0 |
| | South Leg | 30 | 5,170 | 7,230 | 7,250 | 61.6 | 63.1 | 1.5 | 0.0 | 61.6 | 61.6 | 61.6 | 63.1 | 63.1 | 63.1 | 63.1 | 63.1 | 63.1 | +1.5 | +0.0 |
| Spring Road and Walnut Canyon Road | East Leg | 30 | 7,020 | 10,370 | 10,370 | 63.0 | 64.7 | 1.7 | 0.0 | 63.0 | 63.0 | 63.0 | 64.7 | 64.7 | 64.7 | 64.7 | 64.7 | 64.7 | +1.7 | --- |
| | West Leg | 30 | 90 | 130 | 130 | 44.1 | 45.7 | 1.6 | 0.0 | 44.1 | 44.1 | 44.1 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | +1.6 | --- |
| | North Leg | 40 | 8,550 | 14,010 | 14,030 | 66.5 | 68.6 | 2.2 | 0.0 | 66.5 | 66.5 | 66.5 | 68.6 | 68.6 | 68.6 | 68.6 | 68.6 | 68.6 | +2.2 | +0.0 |
| | South Leg | 40 | 2,380 | 4,670 | 4,690 | 60.9 | 63.8 | 2.9 | 0.0 | 60.9 | 60.9 | 60.9 | 63.8 | 63.8 | 63.8 | 63.8 | 63.8 | 63.8 | +2.9 | +0.0 |
| High Street and Gabbert Road | East Leg | 30 | 0 | 280 | 300 | 4.8 | 49.3 | 44.5 | 0.3 | 4.8 | 4.8 | 4.8 | 49.0 | 49.0 | 49.0 | 49.3 | 49.3 | 49.3 | +44.5 | +0.3 |
| | West Leg | 30 | 0 | 0 | 0 | 4.8 | 4.8 | 0.0 | 0.0 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | --- | --- |
| | North Leg | 25 | 410 | 2,200 | 2,200 | 49.0 | 56.3 | 7.3 | 0.0 | 49.0 | 49.0 | 49.0 | 56.3 | 56.3 | 56.3 | 56.3 | 56.3 | 56.3 | +7.3 | --- |
| | South Leg | 25 | 410 | 2,480 | 2,500 | 49.0 | 56.8 | 7.9 | 0.0 | 49.0 | 49.0 | 49.0 | 56.8 | 56.8 | 56.8 | 56.8 | 56.8 | 56.8 | +7.9 | +0.0 |

Assumptions:

Simplified to 2 lanes 6.1 meters= 20.0 feet from centerline

future 6.1 meters= 20.0 feet from centerline

Noise path decay parameter for hard site

Fleet Mix

97% Autos

2% Medium Trucks

1% Heavy Trucks

Time of Day:

75% Day

14% Evening

11% Night

Calculations using methods of Federal Highway Administration *Highway Traffic Noise Prediction Model*, December, 1978. Baseline California vehicle noise levels from Caltrans, TAN 95-03, 1995

Source of standard assumptions: Based on Riverside County of Health for secondary, collectors and smaller

Site parameter: 0.0 (0=hard, 1=soft)

HALFSEP 1/2 lane separation 6.1

HALFSEPFUT 1/2 lane separation (future) 6.1

Lane separation:

consider moving lanes only

2 ___ ___
+ +

4 ___ ___ ___ ___
+ <--------> +

6 ___ ___ ___ ___ ___ ___
+ <------------> +

8 + ___ ___ ___ ___ ___ ___ ___ ___
+ <----------------> +

California base noise levels:

Autos: 5.2+38.8 Log10 (speed, mi/hr) = -2.8 + 38.8 Log10 (speed, km/hr)

Light trucks: 35.3 + 25.6 Log10 (speed, mi/hr) = 30 + 25.6 Log10 (speed, km/hr)

Heavy trucks:

25-31 mi/hr: 51.9 + 19.2 Log10 (speed, mi/hr) = 47.9 + 19.2 Log10 (speed, km/hr)

35-65 mi/hr: 50.4 + 19.2 Log10 (speed, mi/hr) = 46.4 + 19.2 Log10 (speed, km/hr)

31-35 mi/hr: straight line interpolation between above two curves

# APPENDIX K

# TRAFFIC STUDY

# Civic Center Master Plan Project
# Traffic Impact Analysis
# Moorpark, CA

PREPARED FOR

Moorpark
Life can be this good

August 2022

Balancing the Natural and Built Environment

PSOMAS

# CIVIC CENTER MASTER PLAN PROJECT
# TRAFFIC IMPACT ANALYSIS

## MOORPARK, CA

**Prepared For**

Moorpark
Life can be this good

**Prepared By**

PSOMAS

Psomas Project No. 3MOO010100

August 2022

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# 1. INTRODUCTION

This Traffic Impact Analysis provides an evaluation of the proposed Civic Center Master Plan Project located in the central, downtown area of the City of Moorpark in Ventura County, California. The Project location is shown in Figure 1. The project is expected to include construction of a new library with outdoor plaza, a commercial area with a public park, a residential area, a new city hall and mercado, as well as removal of the existing library, city hall and community center/active adult center buildings. The project would include the following phases:

Phase 1: The construction of a 18,000 square foot (sf) library with outdoor plaza and a 4,000 sf future expansion area. The repurpose of the existing city hall into 5,085 sf of office space. Open February 2025.

Phase 2: The construction of a 13,000 sf commercial area with a public park. Open May 2030.

Phase 3: The construction of a 75 unit at 25 dwelling unit per acre residential area. The removal of the existing city hall and community center/active adult center buildings. Open June 2032.

Phase 4: The construction of a 22,000 sf city hall and mercado. Open June 2037.

The site plan is shown in Figure 2. As shown in the site plan, the project will have access from both Moorpark Avenue (SR-23) to the east and West High Street to the south. A detailed site plan with phases will be shown in the EIR report.

## 1.1. STUDY AREA

The eight study intersections analyzed in this study are listed below. As shown, six intersections are currently signalized, one is unsignalized and the intersection of Gabbert Road and proposed High Street extension will be built as unsignalized. Figure 3 shows the location of the eight study intersections. Figure 4 shows the existing or proposed geometry and traffic control at each of the study intersections.

1. Moorpark Avenue/Walnut Canyon Road and Casey Road (signalized)
2. Moorpark Avenue and Charles Street (unsignalized)
3. Moorpark Avenue and High Street (signalized)
4. Spring Road and High Street/Princeton Avenue (signalized)
5. Moorpark Avenue and First Street/Poindexter Avenue (signalized)
6. Moorpark Avenue and Los Angeles Avenue (signalized)
7. Walnut Canyon Road and Spring Road (signalized)
8. Gabbert Road and proposed High Street extension (unsignalized)

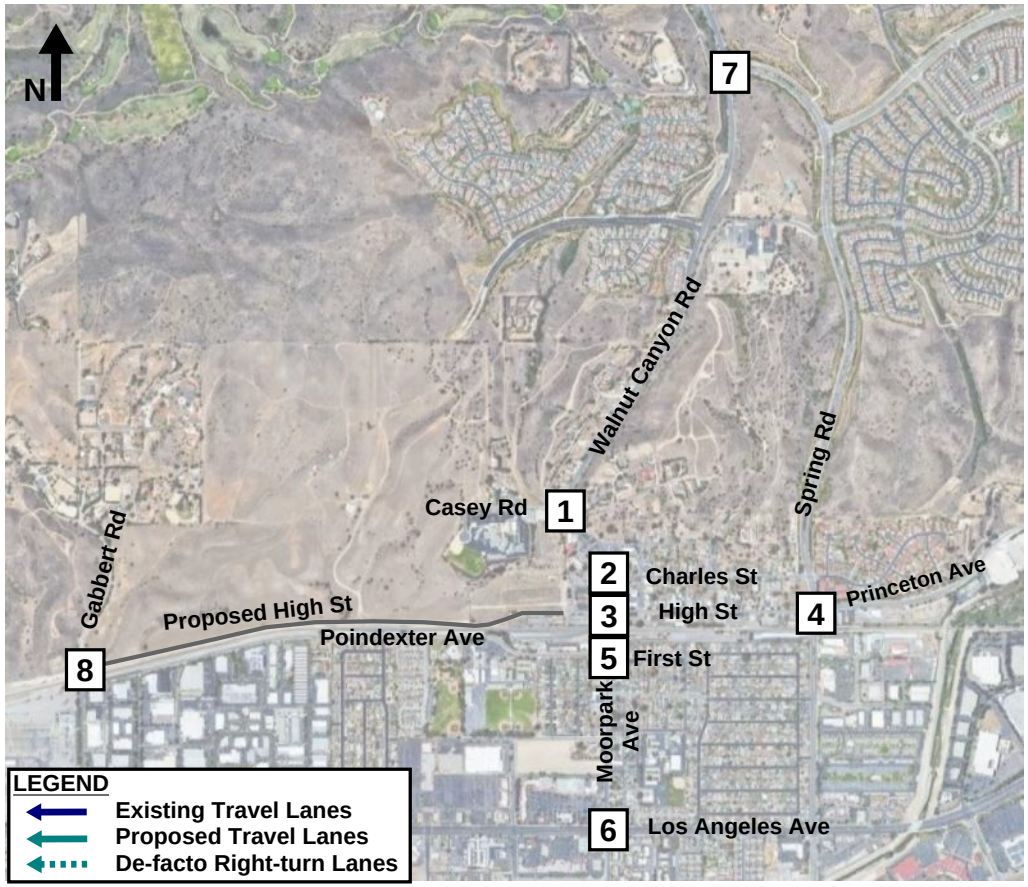
| | | |
|---|---|---|
| Civic Center Master Plan Project<br>Traffic Impact Analysis | *Figure 1. Project Location* | PSOMAS<br>August 2022 |

CWAAIA INC
ARCHITECTURE PLANNING INTERIOR DESIGN
ATTACHMENT 1
CIVIC CENTER MASTER PLAN
Moorpark
Life can be this good
PROPOSED CITY HALL : 22,000 Sq. Ft
PROPOSED LIBRARY : 18,000 Sq. Ft ( 4,000 Sq. Ft FUTURE EXPANSION )
N
SEPTEMBER 03, 2020
FUTURE DEVELOPMENT BY OTHERS WITH JOINT USE PARKING AGREEMENT
EVEREST ST.
EXISTING CITY HALL
20 PARKING SPACES
20 PARKING SPACES
EXISTING COMMUNITY CENTER
71 PARKING SPACES
MOORPARK AVENUE
CHARLES ST.
WALNUT ST.
66 PARKING SPACES
PROPOSED CITY HALL
148 PARKING SPACES
FUTURE LIBRARY EXPANSION
PLAZA
FUTURE DEVELOPMENT BY OTHERS TO BE DETERMINED
FUTURE PARK
PROPOSED LIBRARY
NOT A PART
51 PARKING SPACES - STREET
HIGH ST.
13 PARKING SPACES - STREET
HIGH ST.
EXISTING
POST OFFICE
PROPOSED MERCADO
96 PARKING SPACES
PROPOSED DOWNTOWN STATEMENT FEATURE

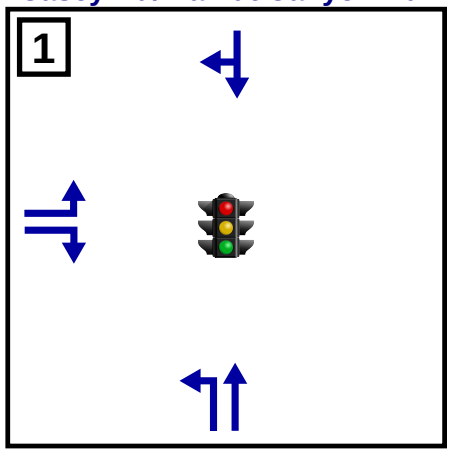
Civic Center Master Plan Project
Traffic Impact Analysis

*Figure 3. Study Intersection Location*

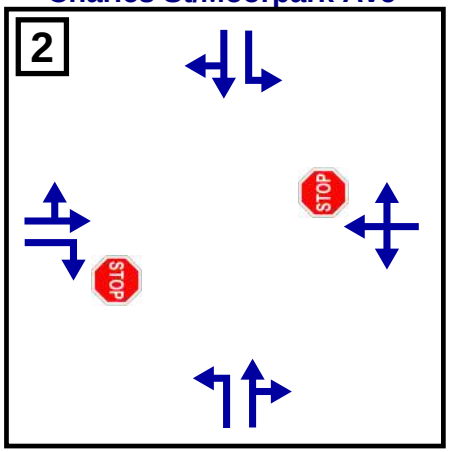
PSOMAS
August 2022



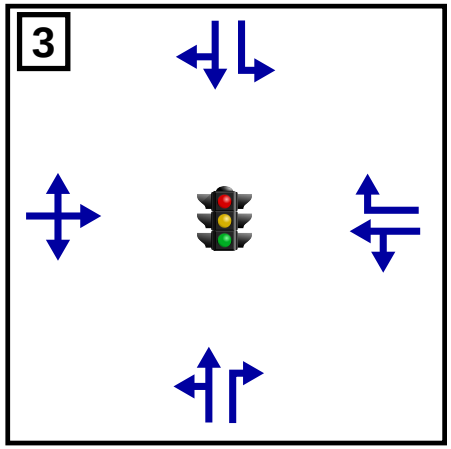

Casey Rd/Walnut Canyon Rd



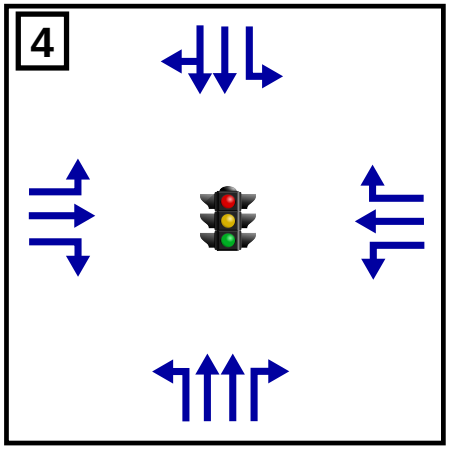

Charles St/Moorpark Ave



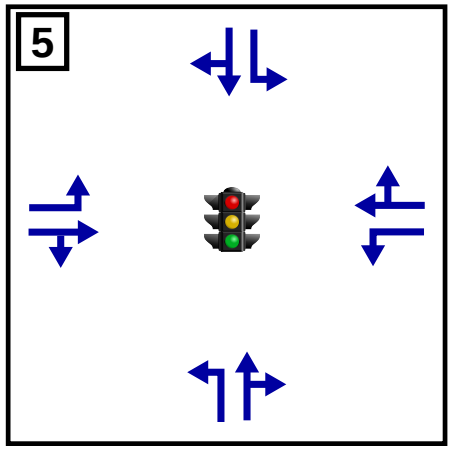

High St/Moorpark Ave



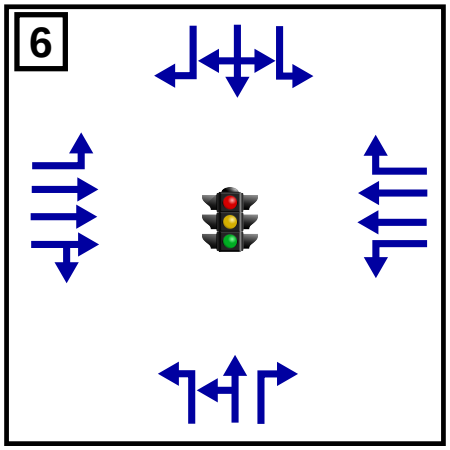

High St/Princeton Ave/Spring Rd



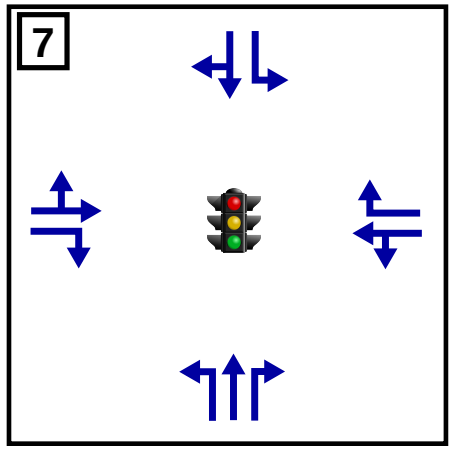

Poindexter Ave/First St/Moorpark Ave



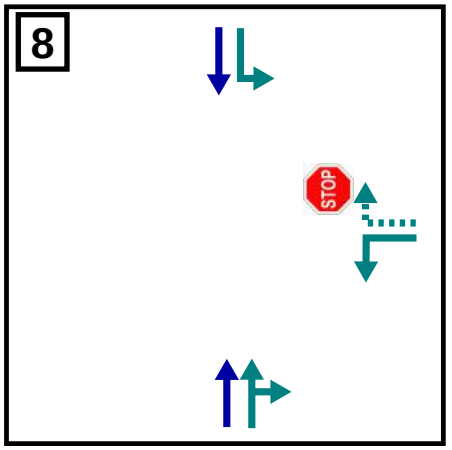

Los Angeles Ave/Moorpark Ave




Spring Rd/Walnut Canyon Rd




Proposed High St/Gabbert Rd




Civic Center Master Plan Project
Traffic Impact Analysis

*Figure 4. Intersection Geometry and Traffic Control*

PSOMAS
August 2022

## 1.2. ANALYSIS METHODOLOGY

Level of Service (LOS) is the typical measure used to characterize the quality of motorized traffic operations at an intersection or roadway segment. LOS A represents relatively free operating conditions, whereas LOS F has unstable flow and congestion with volumes at or near the capacity of the facility. Significant motorist delays and queues can occur when the LOS reaches level F.

Table 1 provides descriptions and thresholds for LOS A through LOS F for each intersection evaluation methodology used in this report.

***Table 1. Intersection Level of Service Definitions***

| Level of Service | Description | Intersection Volume to Capacity (V/C) Ratio/ICU Value | Signalized Intersection Delay (sec/veh) | Unsignalized Intersection Delay (sec/veh) |
|---|---|---|---|---|
| A | Primarily free-flow operation | 0.000 - 0.600 | ≤10 | ≤10 |
| B | Reasonably unimpeded operation | >0.600 - 0.700 | >10 and ≤20 | >10 and ≤15 |
| C | Stable operation | >0.700 - 0.800 | >20 and ≤35 | >15 and ≤25 |
| D | Less than stable conditions - small increases in flow may cause substantial increases in delay | >0.800 - 0.900 | >35 and ≤55 | >25 and ≤35 |
| E | Unstable operation and significant delay | >0.900 - 1.000 | >55 and ≤80 | >35 and ≤50 |
| F | Congested conditions, including flow at extremely low speed | >1.000 | >80 | >50 |

This study follows the *City of Moorpark General Plan Circulation Element*[1] and the *Guidelines for Preparing Traffic and Circulation Studies*[2]. Per the Circulation Element, LOS C shall be the system performance objective for traffic volumes on the circulation system, and for intersections or roadways already operating at less than LOS C, the LOS shall be maintained or improved. Table 2 shows the significant traffic impact standards included in the *Traffic Impact Analysis for Proposed Hitch Ranch Specific Plan*[3] and provided by the City of Moorpark for signalized and un-signalized intersections for use in evaluating the project for significant impacts.

***Table 2. Significant Traffic Impact Standards***

| Intersection Type | Criteria |
|---|---|
| **Signalized** | Degrading the LOS at a signalized intersection to an unacceptable level of Service (LOS D or worse), or |
| | Increasing V/C at a signalized intersection operating at LOS F by 0.020 or more |
| **Unsignalized** | Degrading the LOS at an un-signalized intersection to an unacceptable level of Service (LOS D or worse), or |
| | Increasing delay at an un-signalized intersection operating at unacceptable level by five or more seconds, or |
| | Resulting in satisfying the most recent California Manual on Uniform Traffic Control Devices (CAMUTCD) peak hour volume warrant or other warrants for traffic signal installation at the intersection |

### 1.2.1. Intersection Capacity Utilization (ICU)

The ICU methodology is used to determine the operating LOS of signalized intersections. This methodology requires the calculation of the intersection volume/capacity (V/C) ratio, which is the summation of critical lane group flow ratios with a yellow clearance adjustment. The LOS estimated by the ICU methodology is directly related to the intersection V/C ratio. Per City guidance, a lost time factor of 0.1 and lane capacities of 1,500 vph for left and right turn lanes and 1,600 vph for through lanes should be included throughout the ICU calculation.

### 1.2.2. Highway Capacity Manual (HCM)

This study applied the *HCM*[4] methodology to evaluate unsignalized intersections, which defines LOS based on delay. The analyses for the unsignalized intersections were conducted using the software *Synchro*. For unsignalized intersections, delay and LOS are determined based on the worst intersection movement.

## 1.3. ANALYSIS SCENARIOS

The traffic generated by the project or by the project in combination with other projects in the area could worsen the LOS of an intersection. To assess the potential traffic impacts

due to the project and due to background traffic growth and related projects, the following scenarios were evaluated:

- Existing conditions (2022)
- Opening Year Without Project (2025)
- Opening Year with Project (2025)
- Buildout Year Without Project (2037)
- Buildout Year with Project (2037)

The new library is expected to open to the public in 2025 and the project is expected to be fully built-out by 2037. The existing conditions analysis is included per City requirements to establish a baseline of operations in the study area. The potential impacts and needs for mitigation are determined by the conditions with and without the project from the same year.

# 2. EXISTING STUDY AREA CONDITIONS

## 2.1. ROADWAY NETWORK

The roadways in the study area as shown in Figure 3 include the following:

***Casey Road*** is a two-lane undivided roadway with a posted speed limit of 25 mph. The roadway terminates westerly at Walnut Canyon Road and easterly in a cul-de-sac at Walnut Canyon Elementary School. The roadway is classified as a local collector in the *City of Moorpark General Plan Circulation Element (Circulation Element)*.

***Charles Street*** is a two-lane undivided roadway with a posted speed limit of 25 mph. The roadway starts in a cul-de-sac at a residential area to the east and terminates at the current Moorpark City Hall parking lot to the west.

***High Street*** is a two-lane undivided roadway designated as a local collector in the Circulation Element. The roadway has a posted speed limit of 30 mph in the study area and becomes ***Princeton Avenue*** east of ***Spring Road***. High Street is expected to be extended from its current western terminus westward to ***Gabbert Road***.

***Poindexter Avenue*** is a two-lane undivided roadway with a posted speed limit of 40 mph. The roadway terminates westerly at Moorpark Avenue and easterly at Gabbert Road and is classified as a local collector in the Circulation Element.

***First Street*** is a two-lane undivided roadway in a residential area. First Street with Poindexter Avenue forms an off-set four-leg intersection at Moorpark Avenue.

***Los Angeles Avenue*** is a six-lane undivided roadway which serves as a State Route (SR-118). The roadway has a posted speed limit of 45 mph near the intersection of Los Angeles Avenue and Moorpark Avenue and is classified as a six-lane arterial in the Circulation Element.

***Gabbert Road*** is a two-lane undivided roadway which connects the residences on the north side of Moorpark with Los Angeles Avenue on the south. The roadway is classified as a local collector in the Circulation Element.

***Moorpark Avenue*** is a two-lane undivided roadway and becomes ***Walnut Canyon Road*** north of Everett Street. The roadway serves as a State Route (SR-23) and is classified as a local collector in the Circulation Element. The roadway has a posted speed limit of 30 mph for the segment near the project area.

***Spring Road*** is generally a four-lane divided roadway north of Los Angeles Avenue and narrows to a two-lane divided roadway south of Los Angeles Avenue. The roadway has a 40 mph speed limit between East High Street/Princeton Avenue and Los Angeles Avenue. The roadway speed limit increases to 45 mph north and south of the 40 mph roadway section.

## 2.2. EXISTING SITE

The project site is located at west of Moorpark Avenue, south of Casey Road and north of High Street. The northern portion of the project site is the existing Moorpark Civic Center. The existing Moorpark Civic Center is generally comprised of a 7,800 sf Moorpark City Library, a 9,260 sf Active Adult Center/Community Center and a total floor area of 18,000 sf Moorpark City Hall. The western portion of the project site is currently vacant. Table 3 shows the existing land use statistical summary[5].

***Table 3. Existing Land Use Statistical Summary***

| Land Use | Square Feet (sf) | Parking Spaces | Approximate Acres |
|---|---|---|---|
| **Existing Moorpark Civic Center** | | | |
| Moorpark City Library | 7,800 | 42 | |
| Active Adult Center/Community Center | 9,260 | | |
| Administration Building | 8,000 | | |
| Annex Building[a] | 2,100 | 84 | 4.6 |
| Development Services Building[a] | 5,800 | | |
| File Room/Employee Restrooms/Kitchen[a] | 2,100 | | |
| Playground | N/A | | |
| *Subtotal* | *35,060* | *126* | |
| Public Parking Lot | N/A | 59 | N/A |
| Vacant Property | N/A | N/A | 9.1 |

sf: square feet; N/A: not applicable

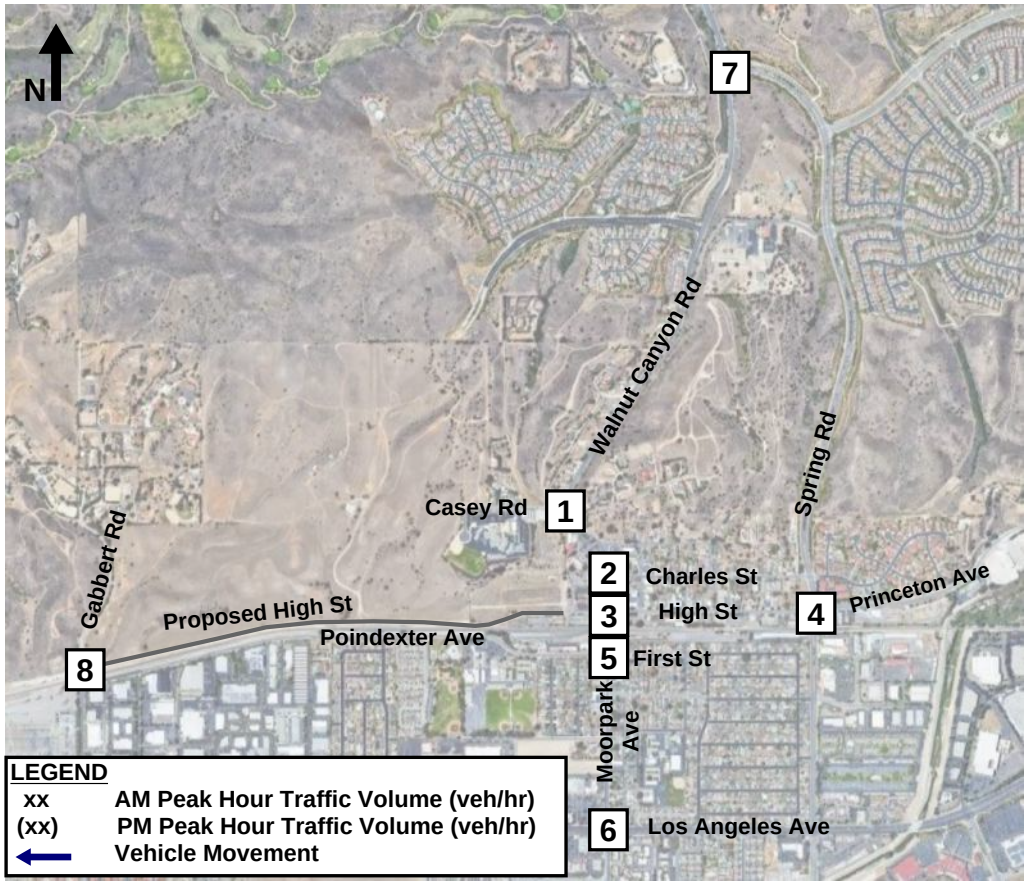
[a.] Modular buildings

## 2.3. TRAFFIC VOLUMES

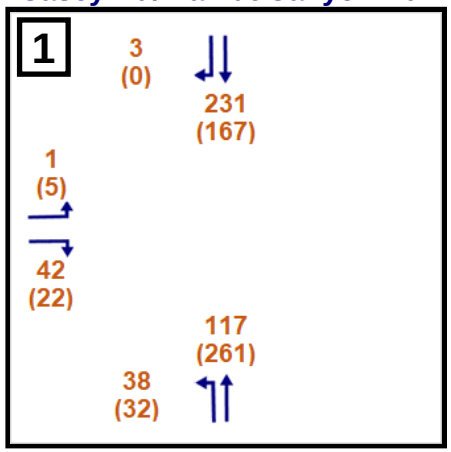
Traffic volume data was collected at the seven intersections in the list in the Section 1.1 and the intersection of Poindexter Avenue and Gabbert Road from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on Wednesdays in June 2022. The peak hours were found to be from 7:30 AM to 8:30 AM and 4:30 PM to 5:30 PM. Figure 5 shows the existing volumes. Note that the traffic volume at the new planned eighth intersection, at the proposed High Street extension and Gabbert Road, was derived from the data at the intersection of Poindexter Avenue and Gabbert Road. The collected data is included in Appendix A.

## 2.4. EXISTING OPERATIONS (2022)

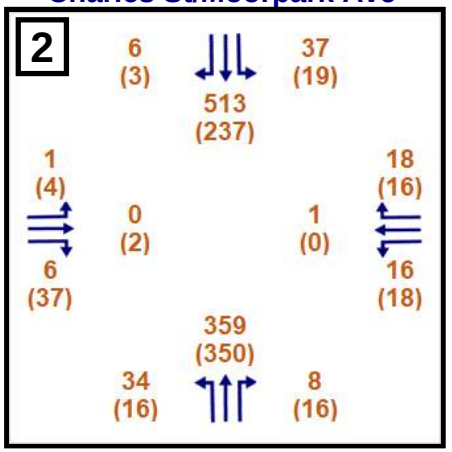
The signalized study intersections were evaluated using the ICU methodology and the unsignalized intersections were evaluated using Synchro delay based methodology. For unsignalized intersections, delay and LOS are evaluated for the worst movement. The LOS is shown in Table 4 for existing conditions. The ICU and Synchro reports are included in Appendix B. As shown in the table, the intersection of Los Angeles Avenue and Moorpark Avenue currently operates at LOS C in the AM peak hour and LOS D in the PM peak hour, all other signalized intersections currently operate at LOS C or better in both peak hours. The worst minor-street (stop controlled) movement at the intersection of Charles Street and Moorpark Avenue currently operates at LOS D in the AM peak hour and LOS C in the PM peak hour.



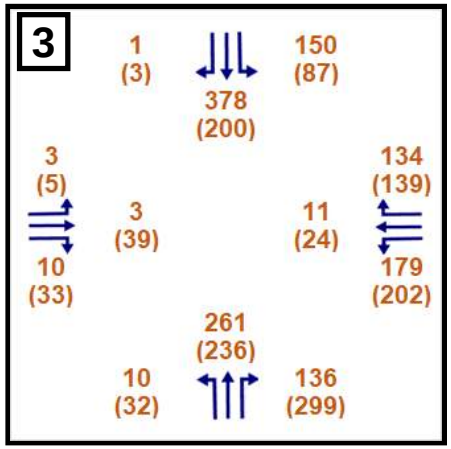

### Casey Rd/Walnut Canyon Rd



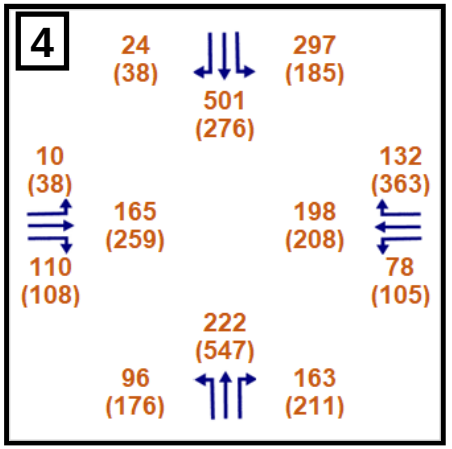

### Charles St/Moorpark Ave



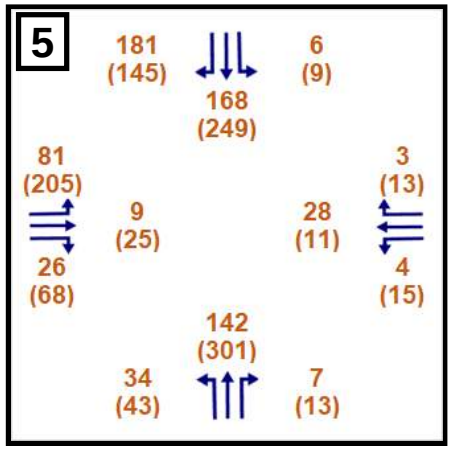

### High St/Moorpark Ave



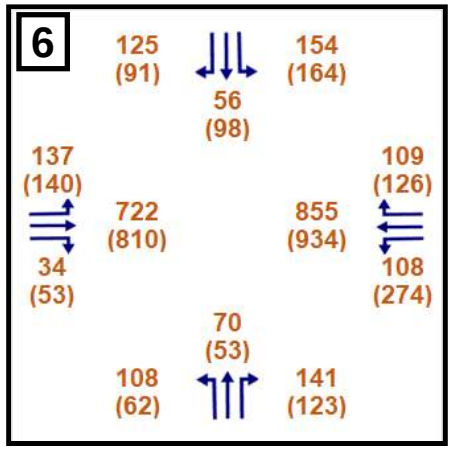

### High St/Princeton Ave/Spring Rd



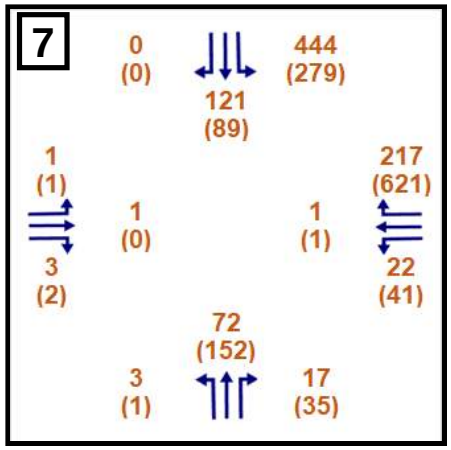

### Poindexter Ave/First St/Moorpark Ave



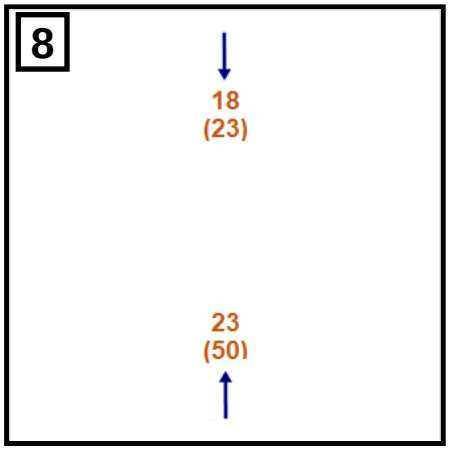

### Los Angeles Ave/Moorpark Ave




### Spring Rd/Walnut Canyon Rd




### High St/Gabbert Rd




Civic Center Master Plan Project
Traffic Impact Analysis

*Figure 5. Existing Traffic Volumes (2022)*

PSOMAS
August 2022

***Table 4. Existing Level of Service Analysis***

| Signalized Intersection | Existing | | | |
|---|---|---|---|---|
| | AM Peak Hour | | PM Peak Hour | |
| | V/C | LOS | V/C | LOS |
| Casey Rd/Walnut Canyon Rd/Moorpark Ave | 0.309 | A | 0.240 | A |
| High St/Moorpark Ave | 0.671 | B | 0.616 | B |
| Princeton Ave/High St/Spring Rd | 0.562 | A | 0.662 | B |
| Poindexter Ave/First Ave/Moorpark Ave | 0.430 | A | 0.544 | A |
| Los Angeles Ave/Moorpark Ave | 0.776 | C | 0.803 | D |
| Spring Rd/Walnut Canyon Rd | 0.587 | A | 0.796 | C |
| **Unsignalized Intersection** | **Existing** | | | |
| | **AM Peak Hour** | | **PM Peak Hour** | |
| | **Delay*** | **LOS** | **Delay*** | **LOS** |
| Charles St/Moorpark Ave | 26.700 | D | 16.300 | C |

*Delays are reported as the worst movement at unsignalized intersections.

# 3. FUTURE TRAFFIC VOLUMES

## 3.1. FUTURE TRAFFIC VOLUMES WITHOUT PROJECT

The cumulative traffic volumes are the anticipated traffic volumes in a future year without the project traffic. The anticipated annual growth for the general plan year was estimated to be 0.65% per year between 2020 and 2035 based on population growth estimates in the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).[6] However, to be conservative, growth between the existing and study years was assumed to occur at 1% per year.

In addition to the growth rate, the estimated traffic from nearby development projects was incorporated. The City of Moorpark provided a list of projects with peak hour and daily trips which are in the entitlement process or are under construction (cumulative projects). There are twenty cumulative projects that could potentially impact traffic at the study intersections, as described in Table 5 and shown in Figure 6. The cumulative project list is included in Appendix C. Twelve of the projects had completed traffic studies which included the trip generation and distribution. For the National Ready Mix batch plant and CEMEX, Wayne J. Sand & Gravel, and Grimes Rock quarry projects, the trip directional distribution rates were calculated based on several similar land use traffic impact study reports. For the remaining projects, the trip directional distribution rates were estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*[7]. The trip distribution was developed based on the location of the project, potential users and different land uses in the study area. The cumulative project volumes were added to the background volumes calculated using the annual growth rate to provide an estimate of study year traffic volumes.

Figure 7 shows the cumulative project traffic volumes. Figures 8 and 9 show the anticipated traffic volumes without the project for 2025 and 2037, respectively.

***Table 5. Cumulative Projects***

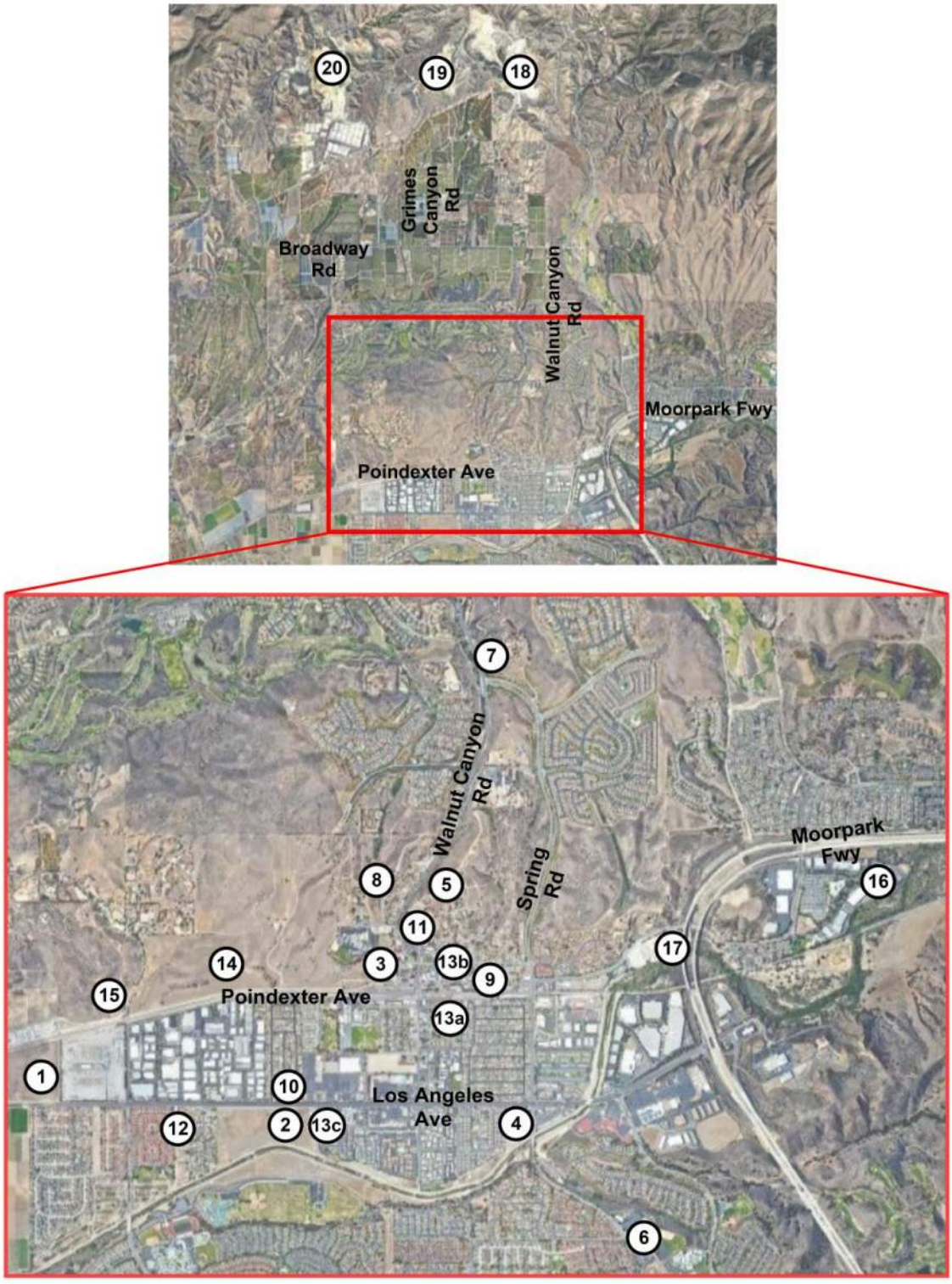
| ID # | Project Name | Land Use | Size | Address |
|---|---|---|---|---|
| 1 | Triliad Development | Movie Studio | 37 Acres | 11289 Los Angeles Ave |
| 2 | Pacific Communities | Single Family Residential | 157 Single Units/300 Condo Units | North of Arroyo Simi creek, south of Los Angeles Avenue, west of Leta Yancy Road |
| 3 | Essex Moorpark, LLC | Multi-Family Residential | 200 Units | South of Casey Road, west of Walnut Canyon Road |
| 4 | Spring Road, LLC | Condominiums | 95 Units | South of Los Angeles Avenue, north of Arroyo River, east of Lorraine Lane, west of Spring Road |
| 5 | City Ventures | Single Family Residential | 110 Units | North of Wicks Road, east of Walnut Canyon Road |
| 6 | Oakmont Senior Living | Senior Residential | 84 Units/Beds | 13960 Peach Hill Rd |
| 7 | Birdsall Group, LLC | Single Family Residential | 21 Units | East of Walnut Canyon Road and Championship Drive |
| 8 | Aldersgate Senior Housing | Senior Residential | 390 Units | North of Casey Road, west of Walnut Canyon Road |
| 9 | High Street Depot/Daly Group | Downtown Mixed-Use | 13,656 SF Retail and 95 Apartments | 226 High Street |
| 10 | Green Island Villas/Kozar | Condominiums | 69 Units | 635 Los Angeles Avenue |
| 11 | Everett Street Terraces/Chiu | Condominiums | 60 Units | Northeast corner of the Everett Street and Walnut Canyon Road Intersection |
| 12 | Beltramo Ranch | Single Family Residential | 47 Units | South side of Los Angeles Avenue between Tierra Rejada Road and Maureen Avenue |
| 13a | AHA Scattered Sites | Multi-family | 22,500 SF | 112, 124, 136 First Street |
| 13b | AHA Scattered Sites | Multi-family | 15,000 SF | 224, 236 Charles Street |
| 13c | AHA Scattered Sites | Multi-family | 69,696 SF | Leta Yancy Site |
| 14 | Hitch Ranch | Single and Multi-Family | 755 units | North of Poindexter Avenue, west of Casey Road, east of Gabbert Road |
| 15 | Moorpark 67/Rasmussen | Single Family Residential | 144 Units | West of Gabbert Road, north of Poindexter Avenue and the future alignment of North Hills Parkway |
| 16 | Amazon Distribution Center* | Industrial | Reuse of 189,364 SF Industrial | 5979 Gabbert Road |
| 17 | National Ready Mix** | Batch Plant | 10 Acres | 13950 Princeton Ave |
| 18 | CEMEX*** | Quarry | N/A | 9035 Roseland Ave |
| 19 | Wayne J. Sand & Gravel*** | Quarry | N/A | 9455 Buena Vista St |
| 20 | Grimes Rock*** | Quarry | N/A | 3500 Grimes Canyon Rd |

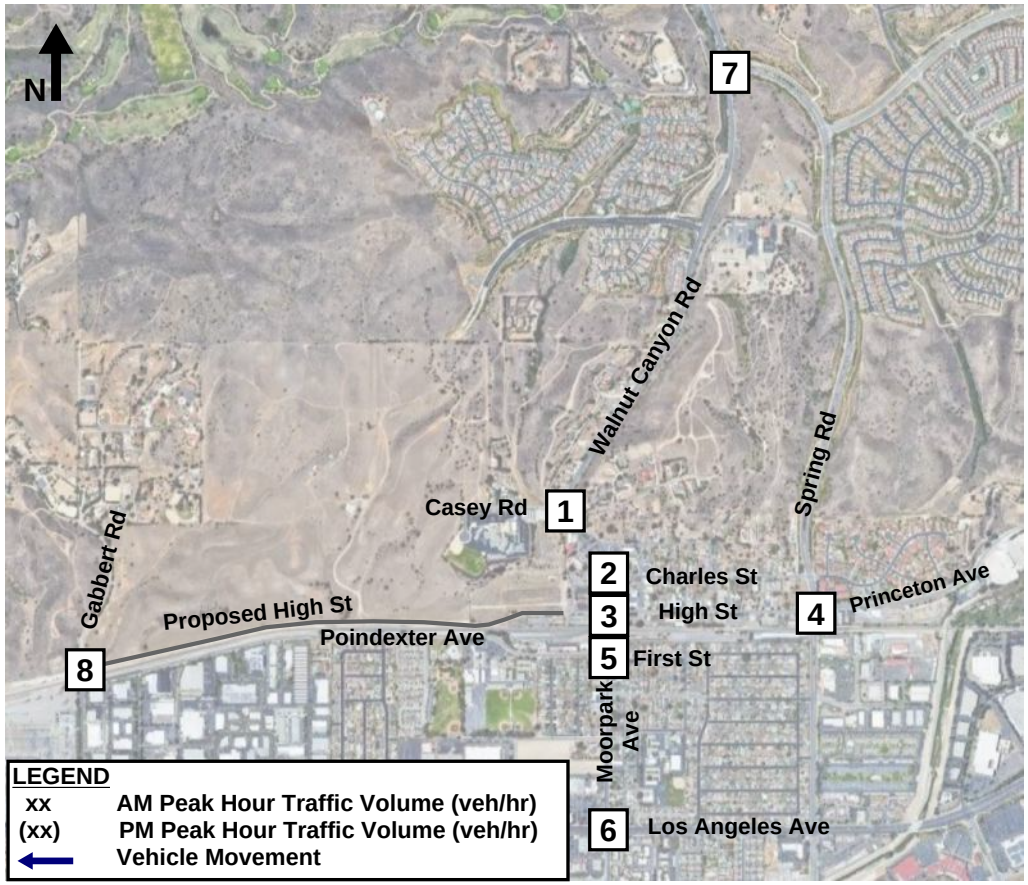
*Trip calculations include baseline of existing industrial use (site is developed). ADT is a gross figure and A.M.

**No proposal to change or expand operations. Existing use creates significant truck traffic through Moorpark.

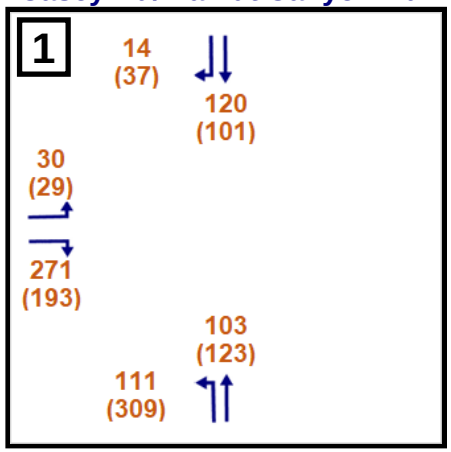
***Operations under County jurisdiction but bring significant truck traffic through Moorpark. Please contact Ventura County to determine whether any active permits for expansion are being reviewed or processed.

***Figure 6. Location of Cumulative Projects***

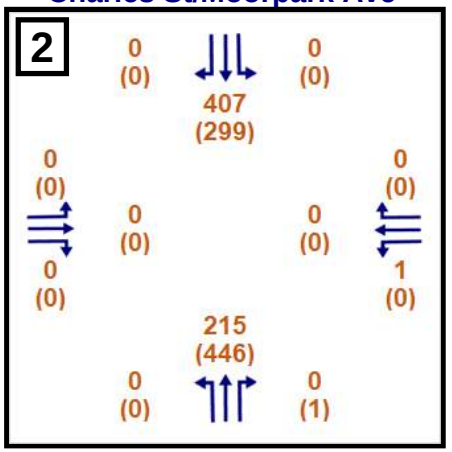




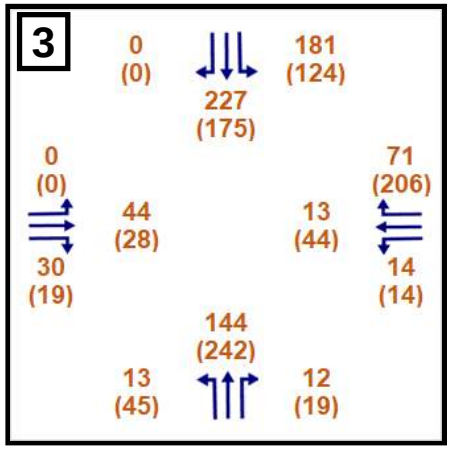

### Casey Rd/Walnut Canyon Rd



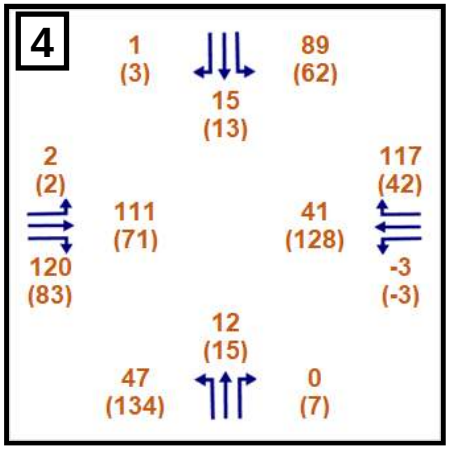

### Charles St/Moorpark Ave



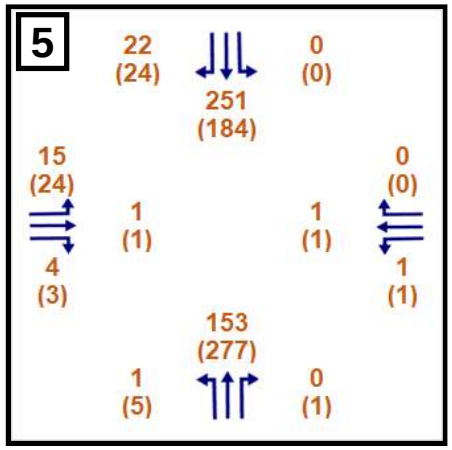

### High St/Moorpark Ave



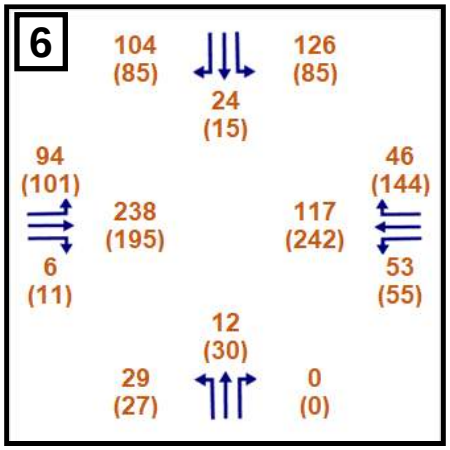

### High St/Princeton Ave/Spring Rd




### Poindexter Ave/First St/Moorpark Ave




### Los Angeles Ave/Moorpark Ave

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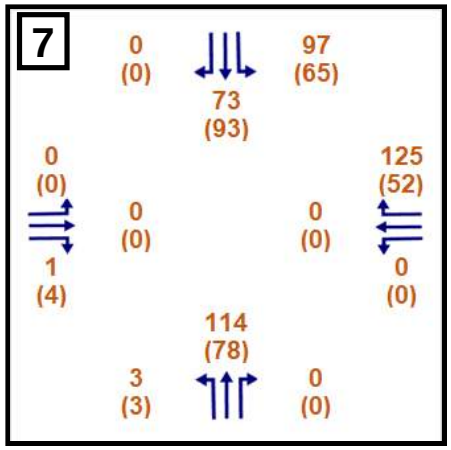


### Proposed High St/Gabbert Rd

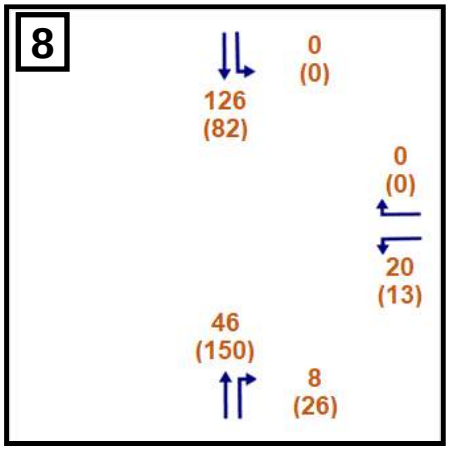


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*Figure 7. Cumulative Project Traffic Volumes*

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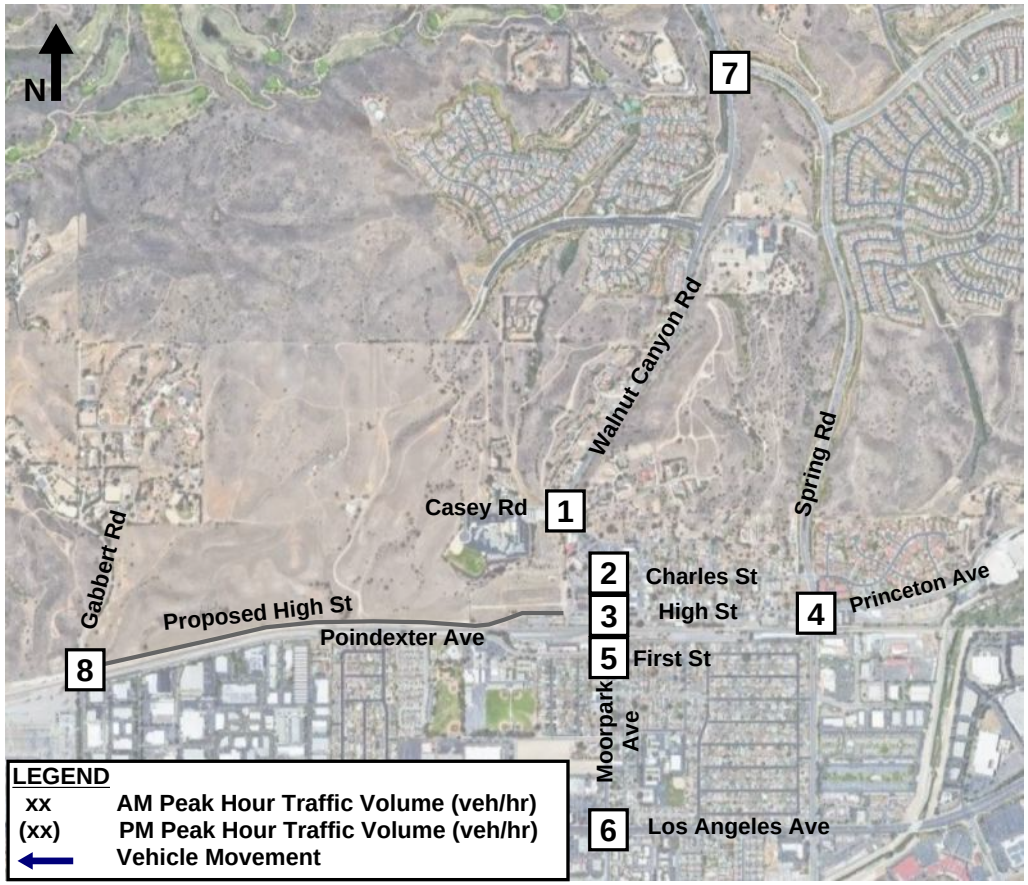
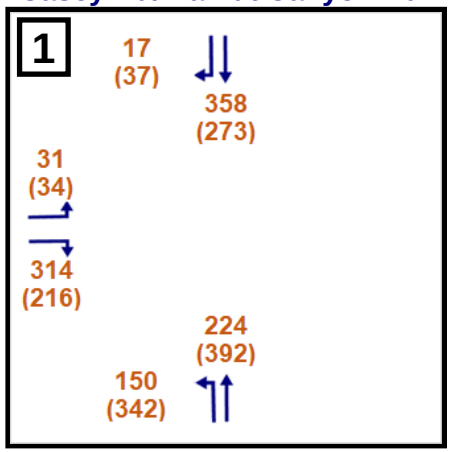



### Casey Rd/Walnut Canyon Rd

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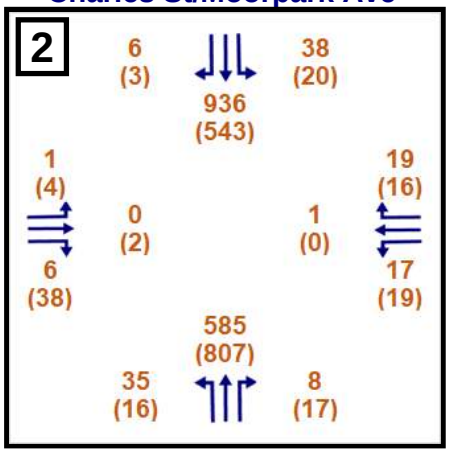


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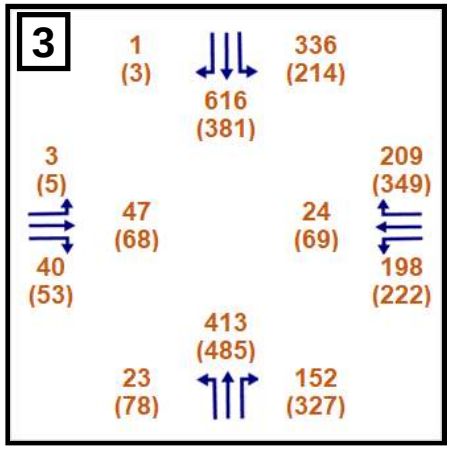


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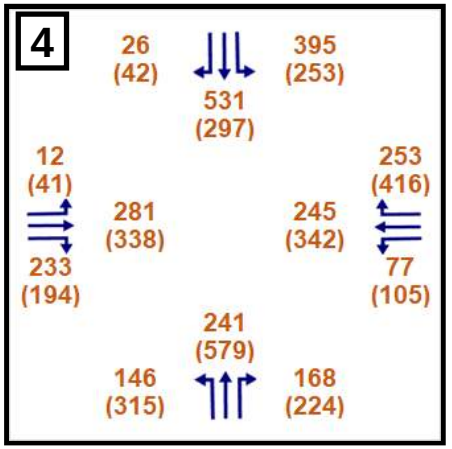
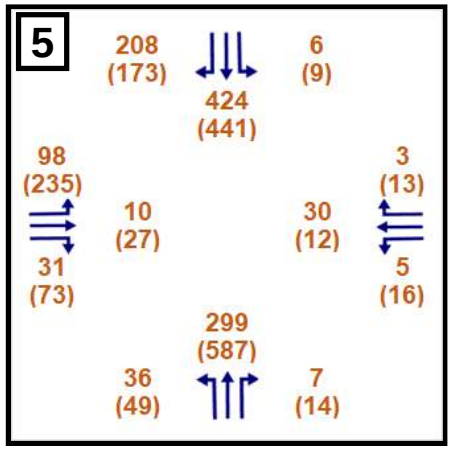
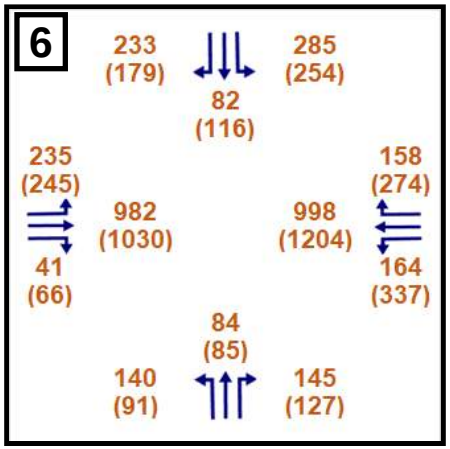


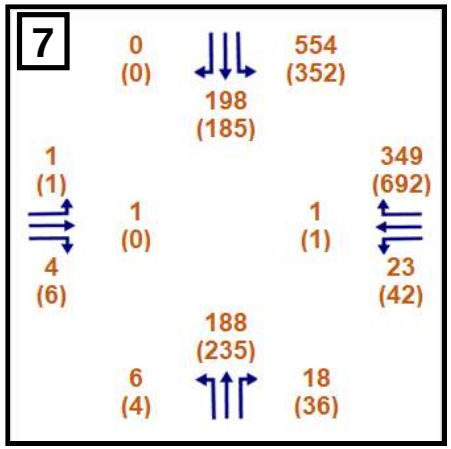

### Poindexter Ave/First St/Moorpark Ave



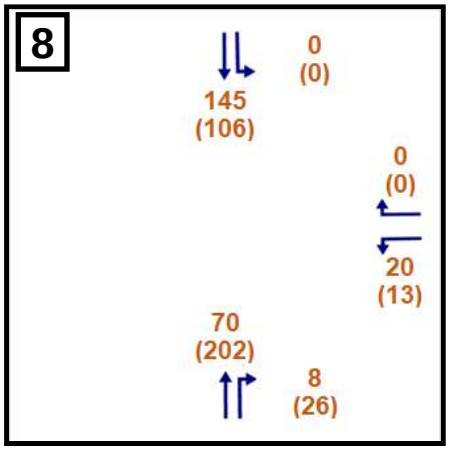

### Los Angeles Ave/Moorpark Ave




### Spring Rd/Walnut Canyon Rd




### Proposed High St/Gabbert Rd

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Traffic Impact Analysis

*Figure 8. 2025 Without Project Traffic Volumes*

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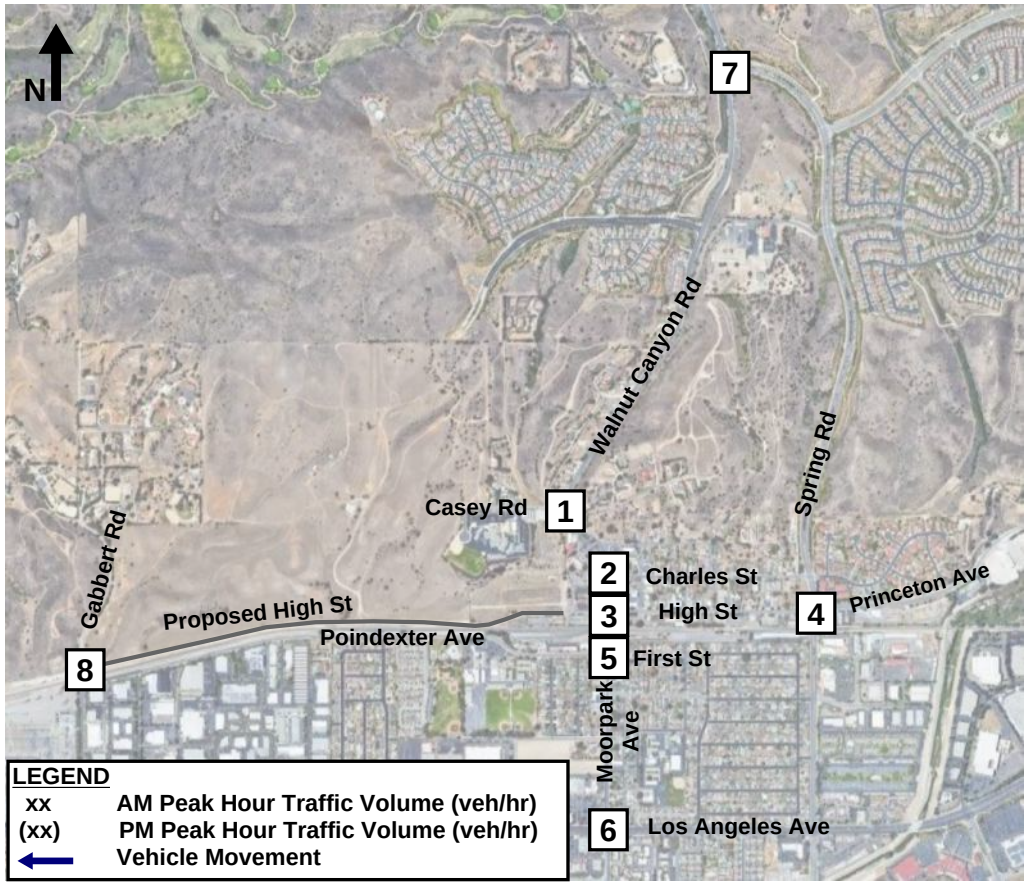
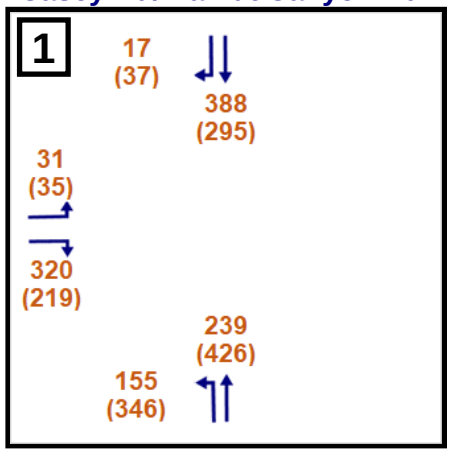
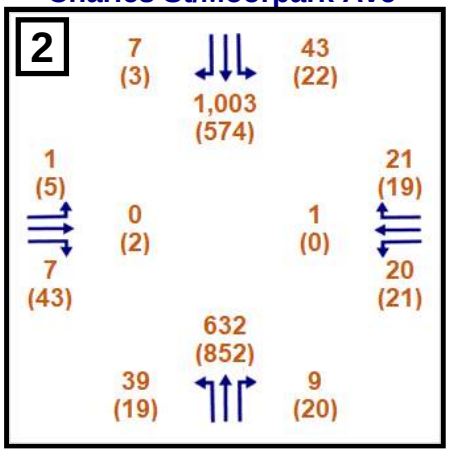


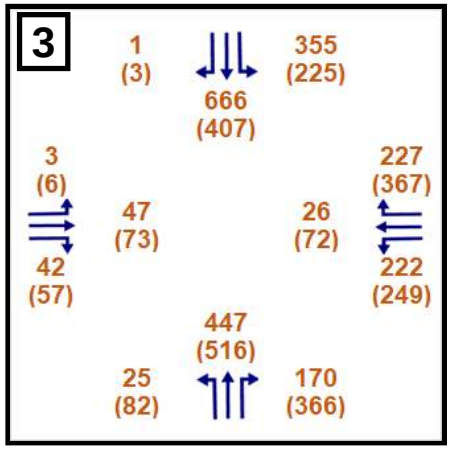

### Casey Rd/Walnut Canyon Rd



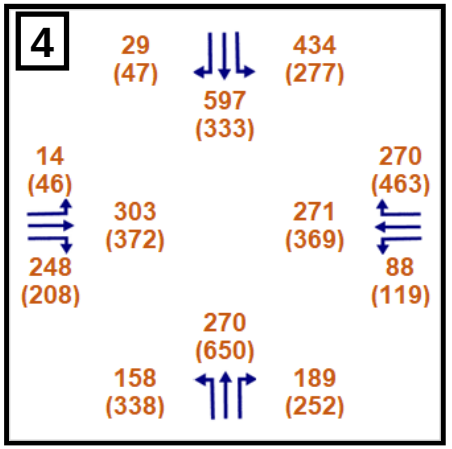

### Charles St/Moorpark Ave



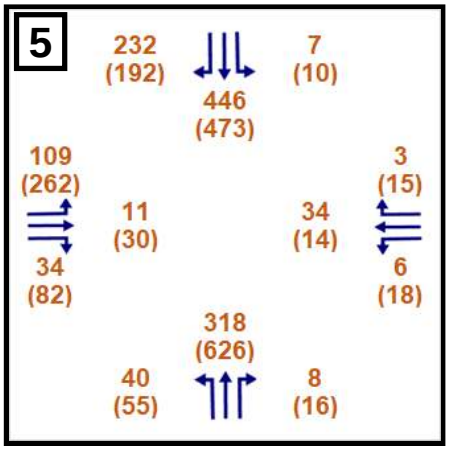

### High St/Moorpark Ave



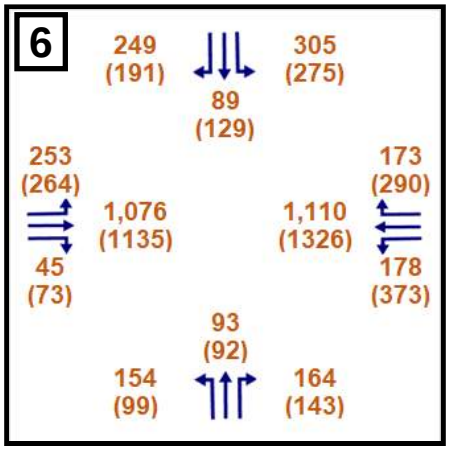

### High St/Princeton Ave/Spring Rd



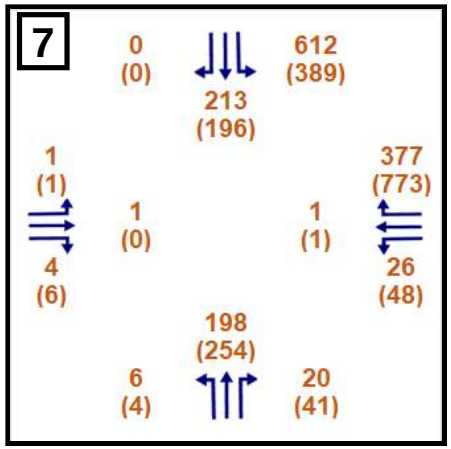

### Poindexter Ave/First St/Moorpark Ave



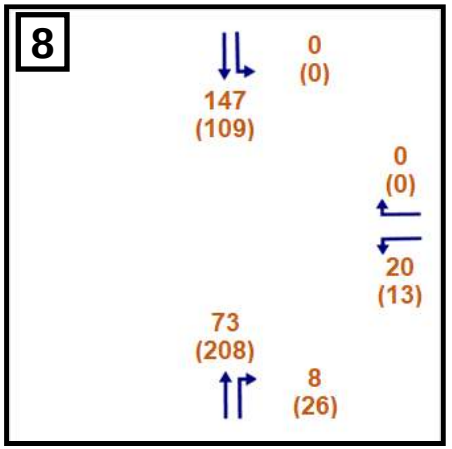

### Los Angeles Ave/Moorpark Ave




### Spring Rd/Walnut Canyon Rd




### Proposed High St/Gabbert Rd




Civic Center Master Plan Project
Traffic Impact Analysis

*Figure 9. 2037 Without Project Traffic Volumes*

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## 3.2. PROJECT TRAFFIC VOLUMES

### 3.2.1. Project Trip Generation

The proposed Project would consist of the phased removal of existing buildings and construction of new buildings. The new library is expected to be constructed and the existing city hall is expected to be repurposed to office spaces by 2025. By 2037, a commercial area with a public park, a residential area, a new city hall and mercado are expected to be completed and the existing city hall and community/active adult center buildings are expected to be removed. The trip generation for the project was estimated using the trip generation rates in the ITE *Trip Generation Manual*. The percentage of pass-by trips for the commercial area was estimated based on the ITE *Trip Generation Handbook, 3rd Edition*[8]. The internal trips were calculated based on the ITE *Trip Generation Handbook* and included in Appendix D. Table 6 shows the summary of the net trips generated by the project in 2025. As seen in the table, the project would generate 401 new external daily trips, including 63 trips in the PM peak hour. The AM peak hour traffic volumes would decrease by 42 trips based on the change in land use. Table 7 shows the summary of the net trips generated by the project in 2037. The project would generate 1,329 new external daily trips, including 42 trips in the AM peak hour and 120 trips in the PM peak hour.

***Table 6. Project Trip Generation (2025)***

| Development Type | Units | Number of Units | AM | | PM | | Daily |
|---|---|---|---|---|---|---|---|
| | | | In | Out | In | Out | |
| **PROPOSED LAND USES** | | | | | | | |
| **New Library (land use #590)** | 1,000 SF | 18.00 | 13 | 5 | 71 | 76 | 1,297 |
| **Offices (land use #712)** | 1,000 SF | 5.085 | 7 | 2 | 4 | 7 | 73 |
| Total Trips - New Land Uses | | | 20 | 7 | 74 | 84 | 1,370 |
| **EXISTING TRIPS TO BE REPLACED** | | | | | | | |
| **Existing Library (land use #590)** | 1,000 SF | 7.80 | -6 | -2 | -31 | -33 | -562 |
| **Existing City Hall (land use #730)** | 1,000 SF | 18.00 | -45 | -15 | -8 | -23 | -407 |
| Total Trips to be Replaced | | | -51 | -17 | -38 | -56 | -969 |
| **Total New Trips** | | | **-31** | **-11** | **36** | **27** | **401** |

*Table 7. Project Trip Generation (2037)*

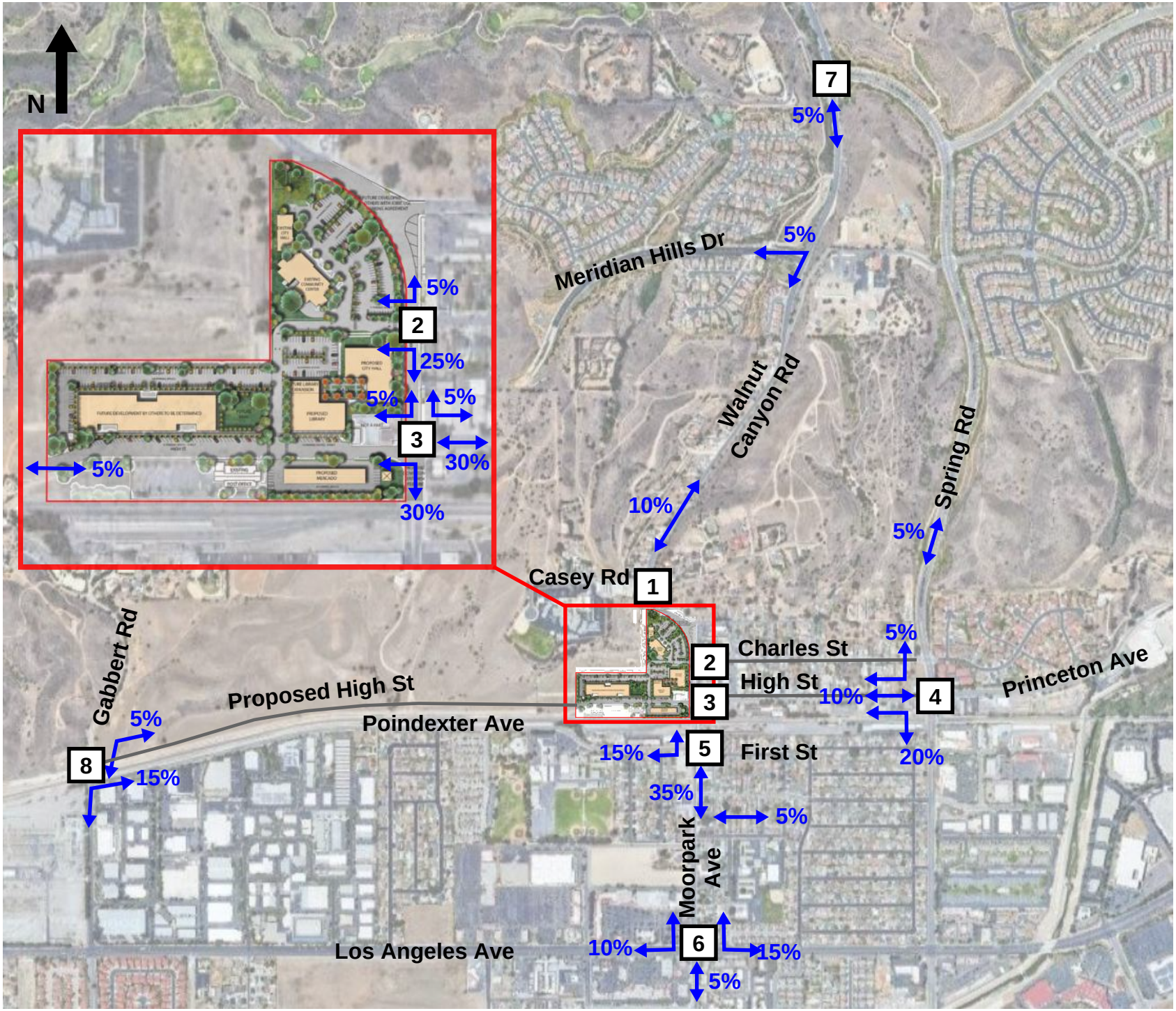
| Development Type | Units | Number of Units | AM | | PM | | Daily |
|---|---|---|---|---|---|---|---|
| | | | In | Out | In | Out | |
| **PROPOSED LAND USES** | | | | | | | |
| **New Library (land use #590)** | 1,000 SF | 18.00 | 13 | 5 | 71 | 76 | 1,297 |
| **Commercial Uses with Public Park (land use #822)** | 1,000 SF | 13.00 | 18 | 12 | 43 | 43 | 708 |
| *Internal Capture* | | | *-5* | *-2* | *-7* | *-12* | *-96* |
| *Pass-By Trips* | | | *-6* | *-4* | *-15* | *-15* | *-241* |
| **Residential Area (land use #220)** | Units | 75 | 7 | 23 | 24 | 14 | 506 |
| *Internal Capture* | | | *0* | *0* | *-12* | *-5* | *-76* |
| **New City Hall (land use #730)** | 1,000 SF | 22.00 | 55 | 18 | 9 | 28 | 497 |
| *Internal Capture* | | | *-2* | *-5* | *-2* | *-4* | *-30* |
| Total Trips - New Land Uses | | | 80 | 47 | 111 | 126 | 2,565 |
| **EXISTING TRIPS TO BE REPLACED** | | | | | | | |
| **Existing Library (land use #590)** | 1,000 SF | 7.80 | -6 | -2 | -31 | -33 | -562 |
| **Community/Active Adult Center (land use #495)** | 1,000 SF | 9.26 | -12 | -6 | -11 | -12 | -267 |
| **Existing City Hall (land use #730)** | 1,000 SF | 18.00 | -45 | -15 | -8 | -23 | -407 |
| Total Trips to be Replaced | | | -62 | -23 | -49 | -68 | -1,235 |
| **Total New Trips** | | | **18** | **24** | **62** | **58** | **1329** |

### 3.2.2. Project Trip Distribution

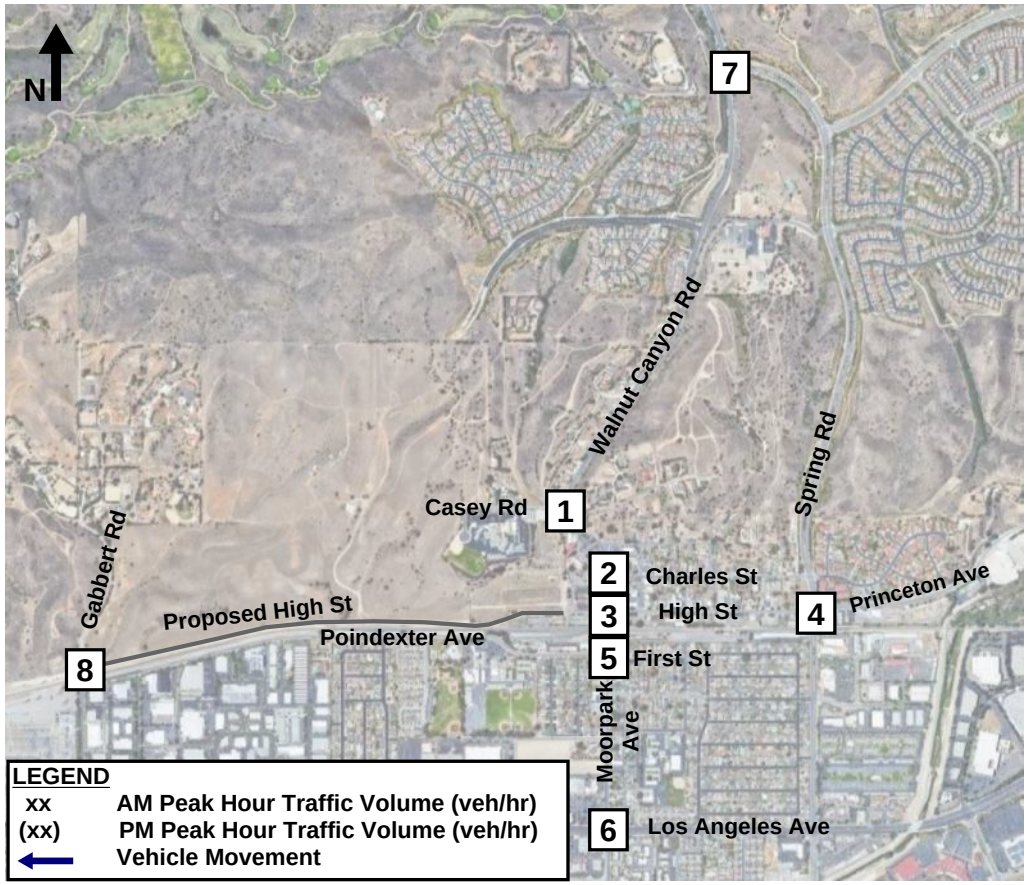
The project trip distribution was developed based on the location of the proposed project and potential users. As shown in Figure 10, it is estimated that approximately 65% of traffic would access the site via the intersection of High Street and Moorpark Avenue, 5% from/to the west via the proposed High Street extension, and 30% via the intersection of Charles Street and Moorpark Avenue. Out of the pass-by trips, 85% would be drawn from existing traffic on Moorpark Avenue and 15% from the existing westbound left turn traffic at the intersection of High Street and Moorpark Avenue.

### 3.2.3. Project Traffic Volumes

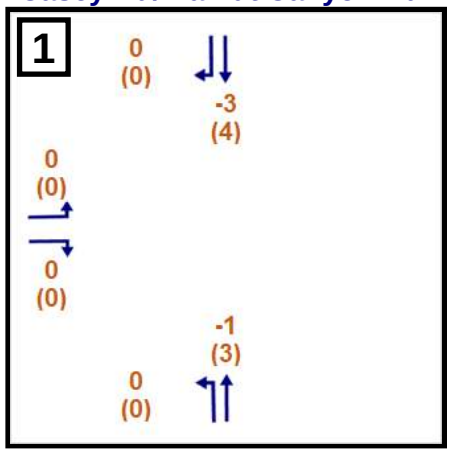
Using the project trip generation and trip distribution, the project traffic volumes in 2025 and 2037 were calculated and are shown in Figures 11 and 12, respectively.



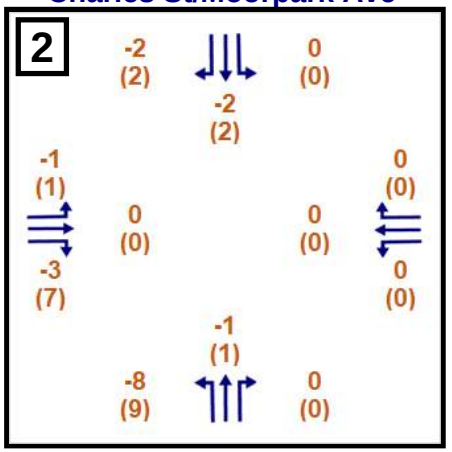

| | | |
|---|---|---|
| Civic Center Master Plan Project<br>Traffic Impact Analysis | *Figure 10. Project Trip Distribution* | PSOMAS<br>August 2022 |



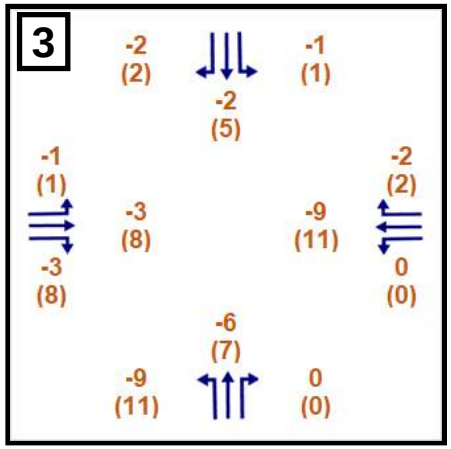

### Casey Rd/Walnut Canyon Rd



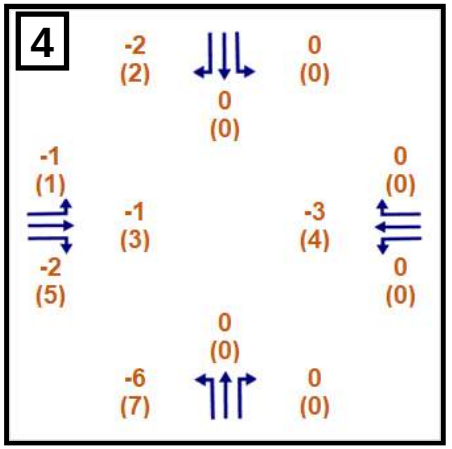

### Charles St/Moorpark Ave



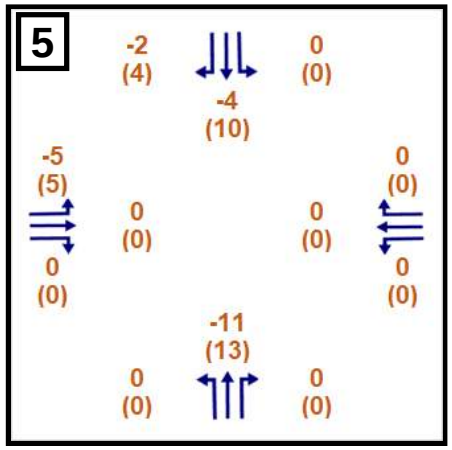

### High St/Moorpark Ave



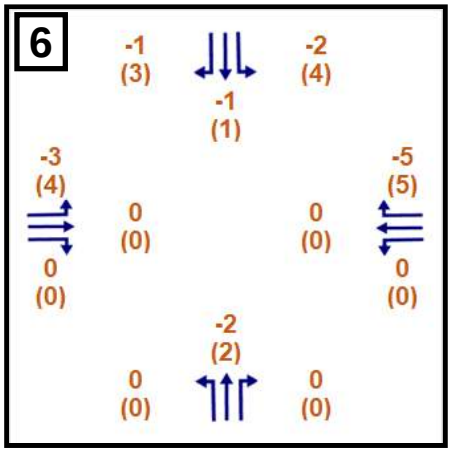

### High St/Princeton Ave/Spring Rd



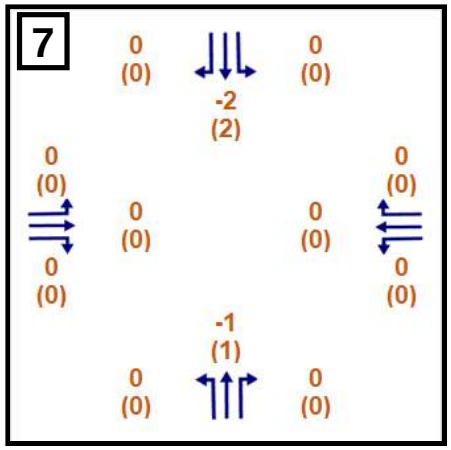

### Poindexter Ave/First St/Moorpark Ave




### Los Angeles Ave/Moorpark Ave




### Spring Rd/Walnut Canyon Rd




### Proposed High St/Gabbert Rd

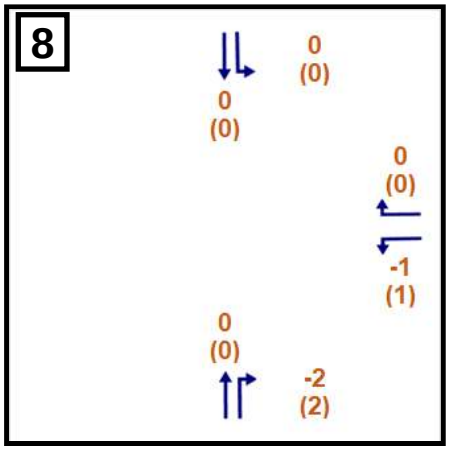



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*Figure 11. Project Traffic Volumes (2025)*

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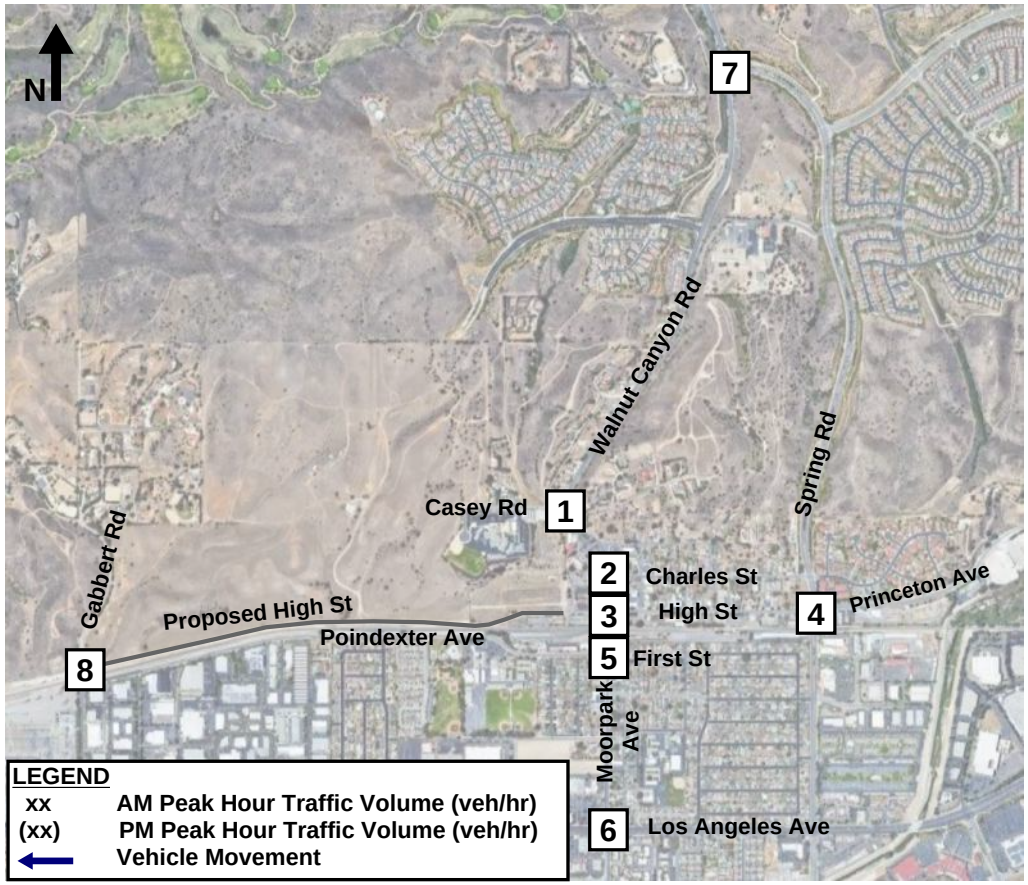
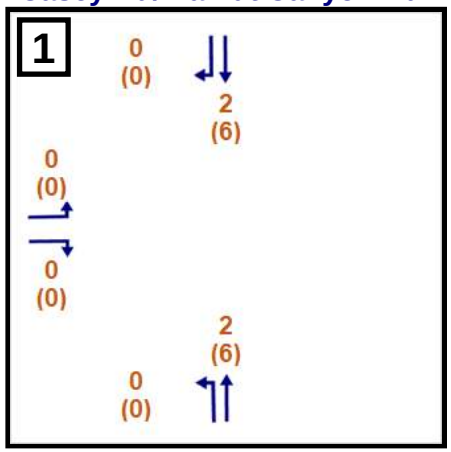
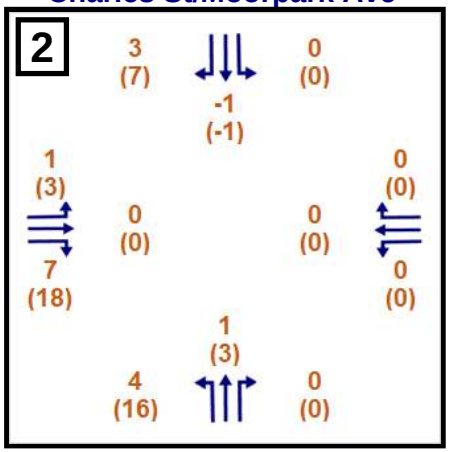


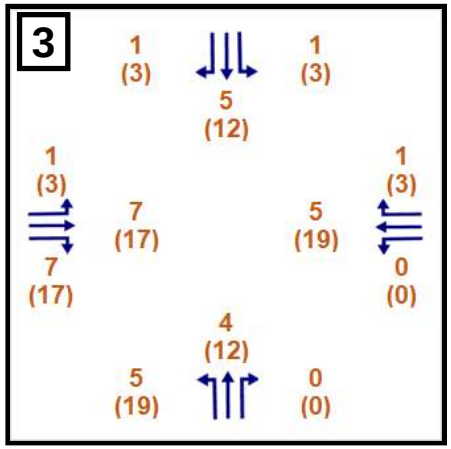

## Casey Rd/Walnut Canyon Rd



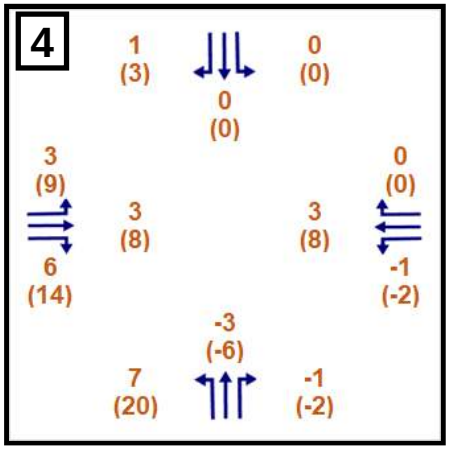

## Charles St/Moorpark Ave



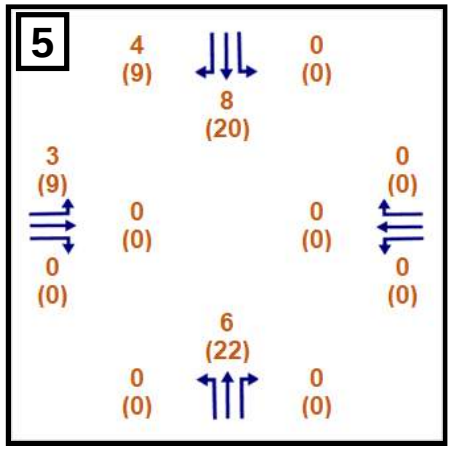

## High St/Moorpark Ave



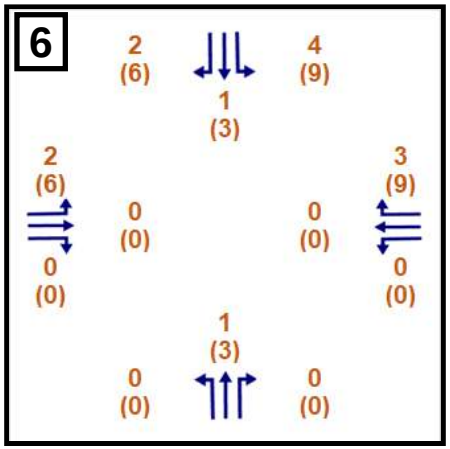

## High St/Princeton Ave/Spring Rd



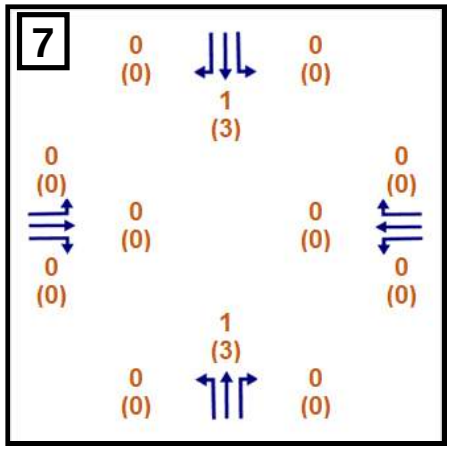

## Poindexter Ave/First St/Moorpark Ave




## Los Angeles Ave/Moorpark Ave




## Spring Rd/Walnut Canyon Rd




## Proposed High St/Gabbert Rd

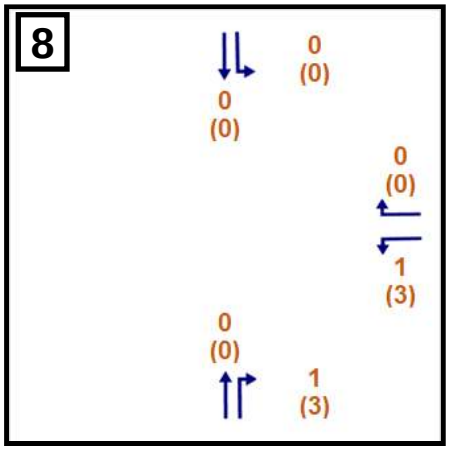



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*Figure 12. Project Traffic Volumes (2037)*

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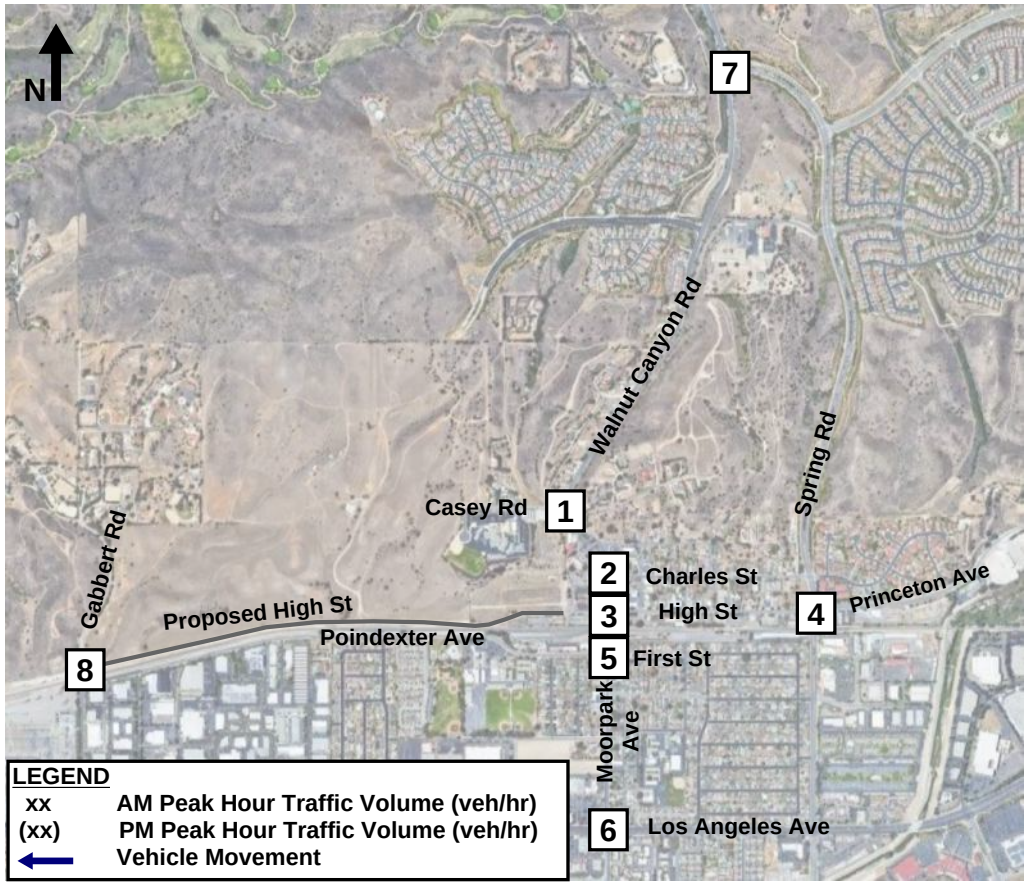
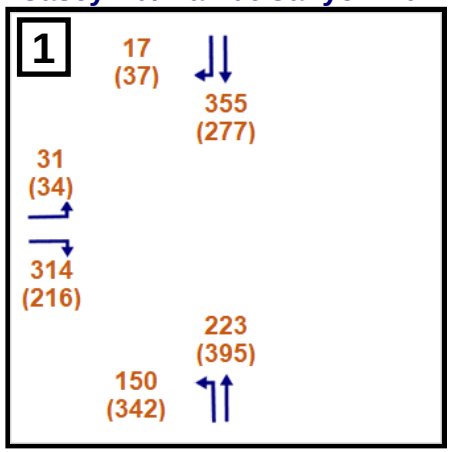
## 3.3. FUTURE TRAFFIC VOLUMES WITH PROJECT

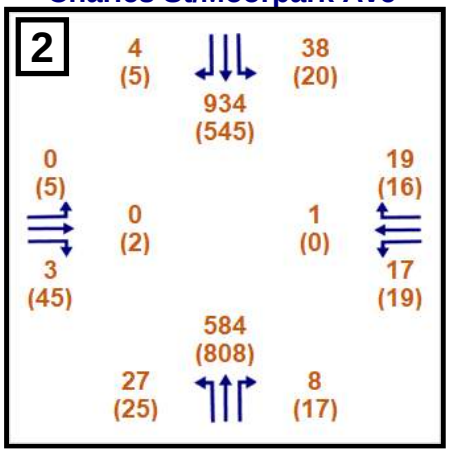
To estimate traffic volumes in a future year, traffic generated by cumulative growth and by the project must be considered. Future volumes with the project were calculated by adding the cumulative growth (including background growth and cumulative projects) and the net site trips. Figures 13 and 14 show the traffic volumes with the project in 2025 and 2037, respectively.



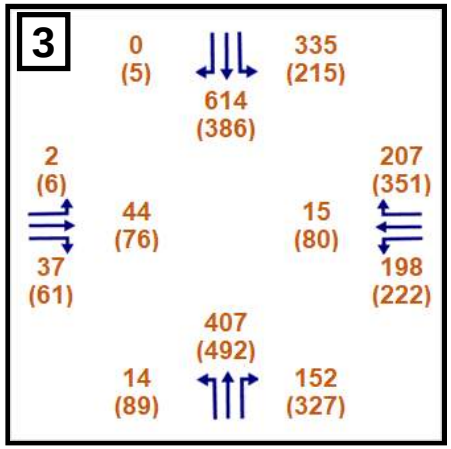

### Casey Rd/Walnut Canyon Rd



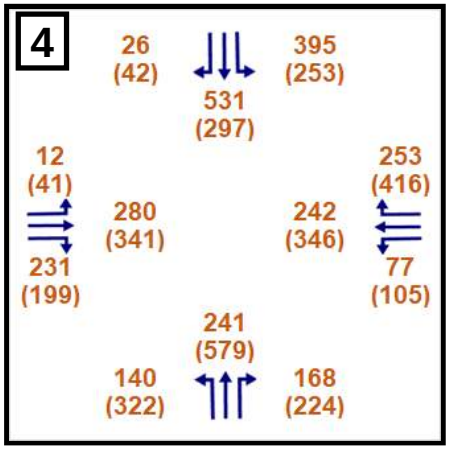

### Charles St/Moorpark Ave



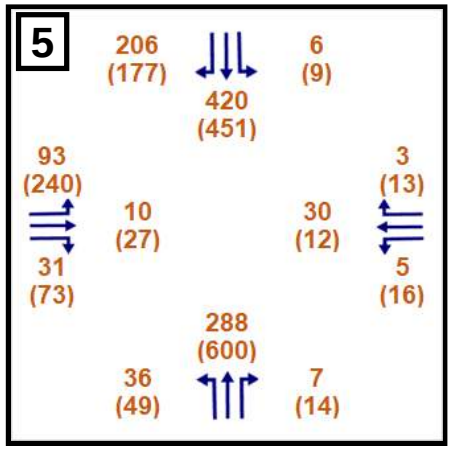

### High St/Moorpark Ave



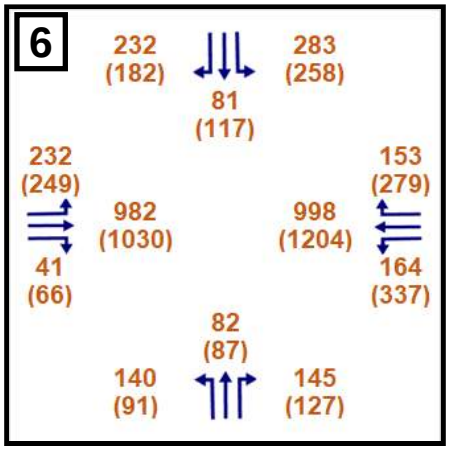

### High St/Princeton Ave/Spring Rd



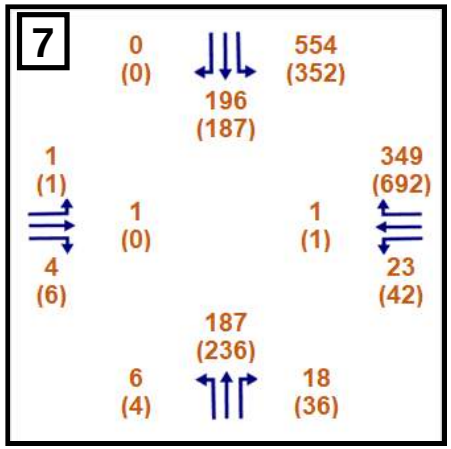

### Poindexter Ave/First St/Moorpark Ave



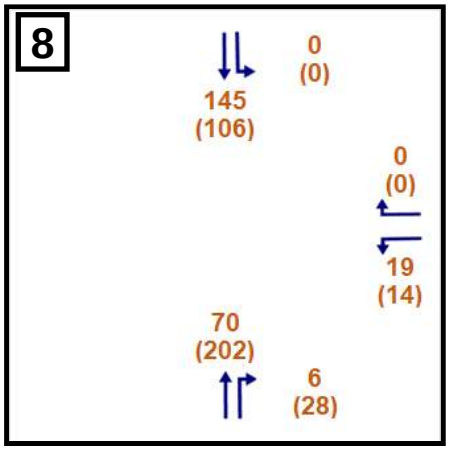

### Los Angeles Ave/Moorpark Ave




### Spring Rd/Walnut Canyon Rd




### Proposed High St/Gabbert Rd




Civic Center Master Plan Project
Traffic Impact Analysis

*Figure 13. 2025 with Project Traffic Volumes*

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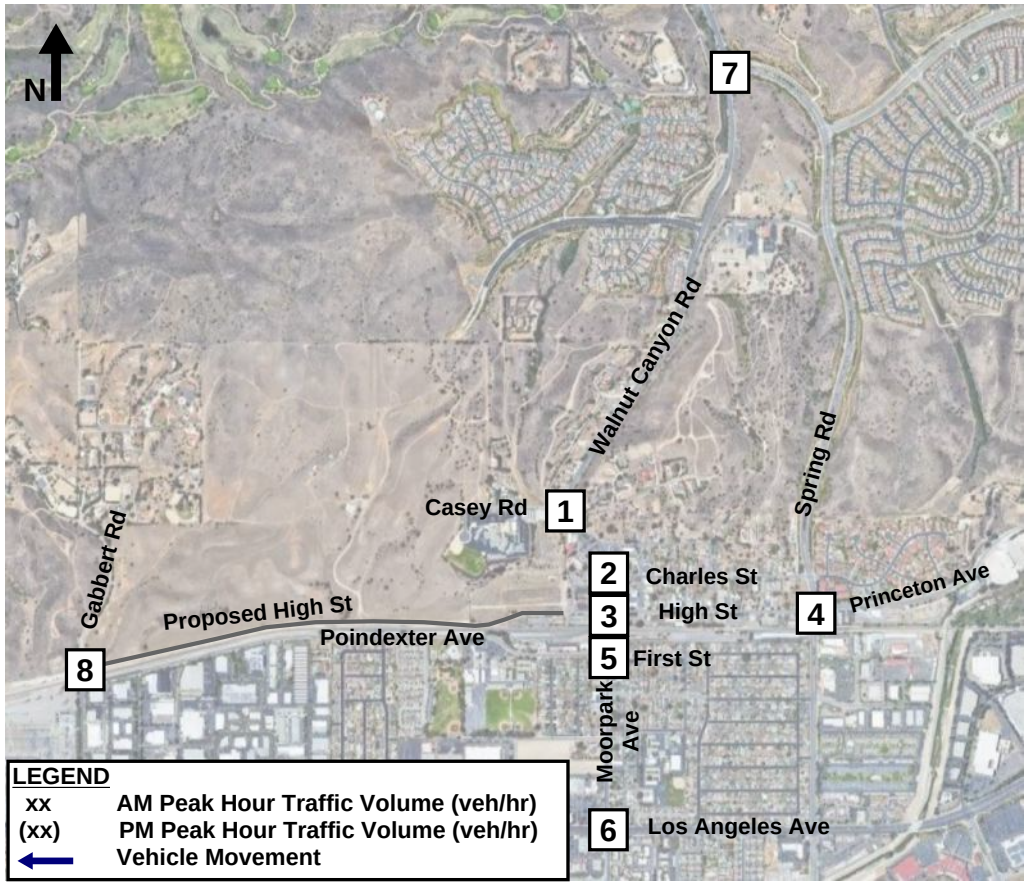
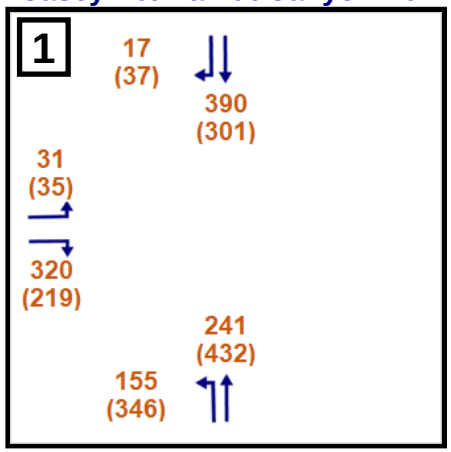
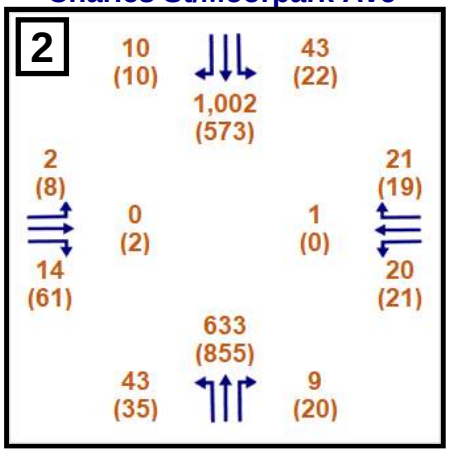
August 2022



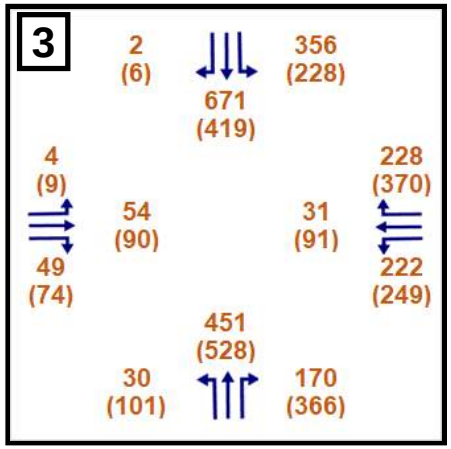

### Casey Rd/Walnut Canyon Rd



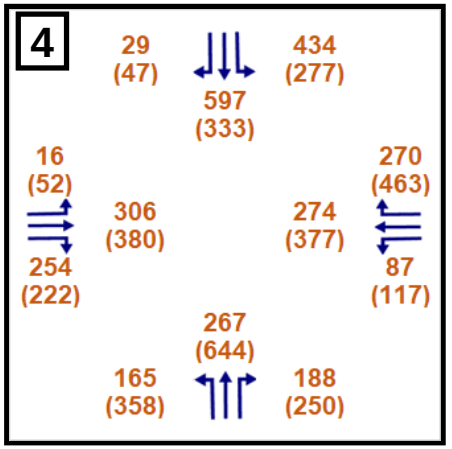

### Charles St/Moorpark Ave



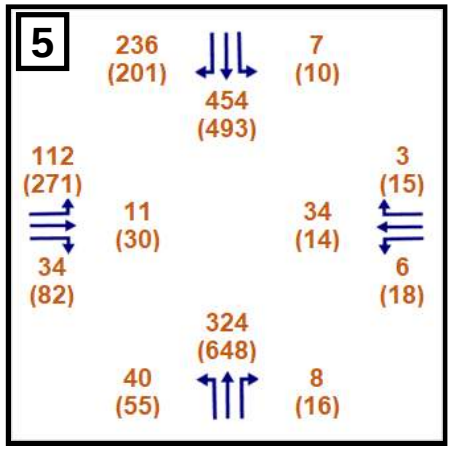

### High St/Moorpark Ave



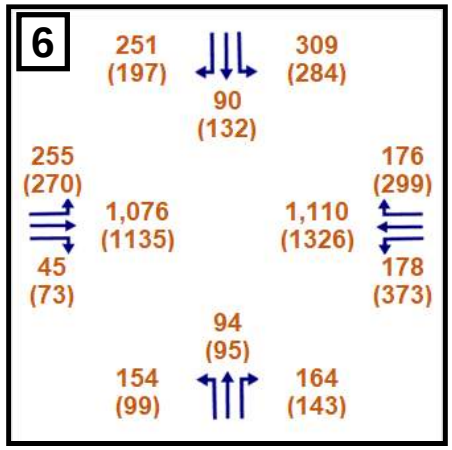

### High St/Princeton Ave/Spring Rd



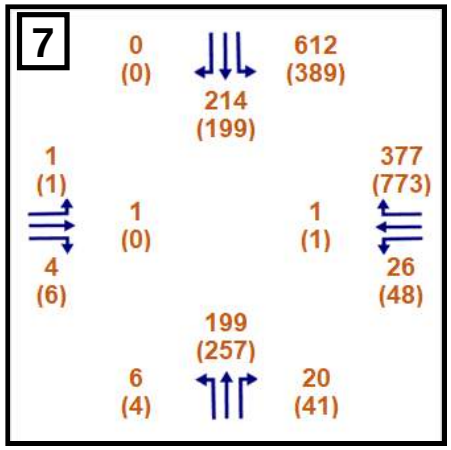

### Poindexter Ave/First St/Moorpark Ave



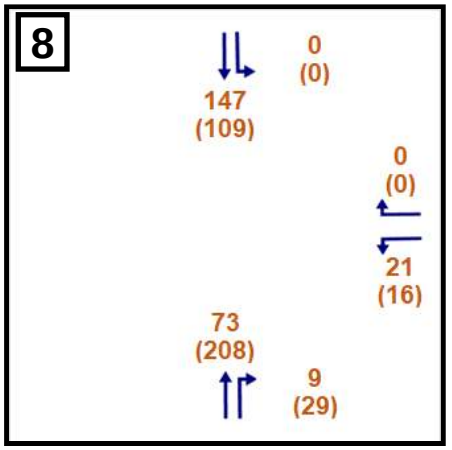

### Los Angeles Ave/Moorpark Ave




### Spring Rd/Walnut Canyon Rd




### Proposed High St/Gabbert Rd




Civic Center Master Plan Project
Traffic Impact Analysis

*Figure 14. 2037 with Project Traffic Volumes*

PSOMAS
August 2022

# 4. FUTURE OPERATION ANALYSIS

## 4.1. NETWORK IMPROVEMENTS

High Street would be extended westward from its current west end to Gabbert Road along with the construction of the *Hitch Ranch*[3] project. The proposed High Street extension would be constructed as a two-lane undivided roadway parallel to Poindexter Avenue and would intersect Gabbert Road at a three-leg stop-controlled intersection. The future roadway extension will provide direct access to the project. The proposed improvement plan is included in Appendix E.

## 4.2. OPENING YEAR OPERATIONS (2025)

The LOS is shown in Table 8 in Section 4.2.3 for conditions with and without the project in 2025. The ICU and Synchro reports are included in Appendix F.

### 4.2.1. OPENING YEAR WITHOUT PROJECT CONDITIONS

The signalized study intersections were evaluated using the ICU methodology and the unsignalized intersections were evaluated using delay Synchro methodology. As shown in Table 8, the intersections of Casey Road and Walnut Canyon Road/Moorpark Avenue, Princeton Avenue/High Street and Spring Road, Poindexter Avenue/First Avenue and Moorpark Avenue are expected to operate at LOS C or better in both AM and PM peak hours. The intersections of High Street and Moorpark Avenue, Los Angeles Avenue and Moorpark Avenue, and Spring Road and Walnut Canyon Road are expected to operate below LOS C in both peak hours. The worst minor-street (stop controlled) movement at the intersection of Charles Street and Moorpark Avenue is expected to operate below LOS C in both peak hours and the worst movement at the intersection of High Street and Gabbert Road is expected to operate above LOS C in both peak hours.

### 4.2.2. OPENING YEAR WITH PROJECT CONDITIONS

For opening year plus project conditions, the same approach was used to evaluate the study intersections. The LOS of all intersections evaluated is expected to stay the same with and without the project except for High Street and Moorpark Avenue, and Charles Street and Moorpark Avenue. In the project scenario High Street and Moorpark Avenue

will improve to LOS E from LOS F in the AM peak hour compared to the no project scenario. The unsignalized intersection of Charles Street and Moorpark Avenue will deteriorate to LOS F from LOS E in the PM peak hour with the project.

### 4.2.3. OPENING YEAR WITH PROJECT SIGNIFICANT IMPACT EVALUATION

Significant intersection impacts due to changes in vehicle traffic is shown in Table 8. A significant impact occurs when a proposed project degrades the LOS to an unacceptable LOS (LOS D and below), or increases traffic demand at a signalized intersection already operating at an unacceptable LOS by two percent or more of capacity (V/C $\geqslant$ 0.020) or increases the delay at an unsignalized intersection operating at an unacceptable LOS by five or more seconds. Therefore, the intersection of High Street and Moorpark Avenue is forecast to be significantly impacted by the project in the PM peak hour in 2025 as the V/C would increase by 0.029. The intersection of Charles Street and Moorpark Avenue experiences a degradation of LOS but does not exceed the five second significant impact threshold criteria for unsignalized intersections.

***Table 8. Opening Year (2025) Level of Service Analysis***

| Signalized Intersection | 2025 Without Project | | | | 2025 Plus Project | | | | Change in V/C | | Significant Impact? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | | AM | PM | |
| | V/C | LOS | V/C | LOS | V/C | LOS | V/C | LOS | | | |
| Casey Rd/Walnut Canyon Rd/Moorpark Ave | 0.659 | B | 0.679 | B | 0.657 | B | 0.681 | B | -0.002 | 0.003 | No |
| High St/Moorpark Ave | 1.010 | F | 1.048 | F | 0.962 | E | 1.077 | F | -0.048 | 0.029 | Yes |
| Princeton Ave/High St/Spring Rd | 0.702 | C | 0.754 | C | 0.702 | C | 0.755 | C | -0.001 | 0.001 | No |
| Poindexter Ave/First Ave/Moorpark Ave | 0.633 | B | 0.715 | C | 0.625 | B | 0.728 | C | -0.007 | 0.013 | No |
| Los Angeles Ave/Moorpark Ave | 1.065 | F | 1.090 | F | 1.061 | F | 1.098 | F | -0.005 | 0.008 | No |
| Spring Rd/Walnut Canyon Rd | 0.821 | D | 0.944 | E | 0.820 | D | 0.944 | E | -0.001 | 0.001 | No |
| **Unsignalized Intersection** | **2025 Without Project** | | | | **2025 Plus Project** | | | | **Change in Delay** | | **Significant Impact?** |
| | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | | AM | PM | |
| | Delay* | LOS | Delay* | LOS | Delay* | LOS | Delay* | LOS | | | |
| Charles St/Moorpark Ave | 75.7 | F | 48.6 | E | 59.1 | F | 52.2 | F | -16.6 | 3.6 | No |
| High St/Gabbert Rd | 9.9 | A | 10.6 | B | 9.9 | A | 10.6 | B | 0.0 | 0.0 | No |

*Delays are reported as the worst movement at unsignalized intersections.

## 4.3. BUILDOUT YEAR OPERATIONS (2037)

The study intersections were also evaluated for the full project buildout year in 2037 using ICU and Synchro delay methodology. The LOS is shown in Table 9, Section 4.3.3 for conditions with or without the project in 2037. The ICU and Synchro reports are included in Appendix G.

### 4.3.1. BUILDOUT YEAR WITHOUT PROJECT CONDITIONS

As shown in Table 9, the intersections of Casey Road and Walnut Canyon Road/Moorpark Avenue, Poindexter Avenue/First Avenue and Moorpark Avenue are expected to operate at LOS C or better. The intersections of High Street and Moorpark Avenue, Los Angeles Avenue and Moorpark Avenue, and Spring Road and Walnut Canyon Road are expected to operate below LOS C in both peak hours. In addition, the intersection of Princeton Avenue/High Street and Spring Road is expected to operate at LOS C in the AM peak hour but LOS D in the PM peak hour. The worst minor-street movement at the intersection of Charles Street and Moorpark Avenue is expected to operate below LOS C. The worse minor-street movement at the intersection of High Street and Gabbert Road is expected to operate above LOS C in both peak hours.

### 4.3.2. BUILDOUT YEAR WITH PROJECT CONDITIONS

All signalized intersections or the worst minor street movements at unsignalized intersections are expected to operate at the same LOS with or without the project in 2037 except for the intersection of Casey Rd and Walnut Canyon Road/Moorpark Avenue, which will decrease to LOS C from LOS B, as shown in Table 9.

### 4.3.3. BUILDOUT YEAR WITH PROJECT SIGNIFICANT IMPACT EVALUATION

Intersection significant impacts due to changes in ICU or delay is shown in Table 9. The intersection of High Street and Moorpark Avenue is expected to be significantly impacted since the V/C would increase by 0.023 and 0.057 in the AM and PM peak hours, respectively. This would exceed the 0.020 significant impact threshold for changes in V/C when operating at an unacceptable LOS. The intersection of Charles Street and Moorpark Avenue is also expected to be significantly impacted as the delay would increase by 12.6 and 11.7 seconds in the AM and PM peak hours, respectively, exceeding the significant

impact threshold of an increase of five seconds or more when operating at an unacceptable LOS.

***Table 9. Buildout Year (2037) Level of Service Analysis***

| Signalized Intersection | 2037 Without Project | | | | 2037 Plus Project | | | | Change in V/C | | Significant Impact? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | | AM | PM | |
| | V/C | LOS | V/C | LOS | V/C | LOS | V/C | LOS | | | |
| Casey Rd/Walnut Canyon Rd/Moorpark Ave | 0.687 | B | 0.698 | B | 0.688 | B | 0.702 | C | 0.001 | 0.004 | No |
| High St/Moorpark Ave | 1.086 | F | 1.107 | F | 1.109 | F | 1.165 | F | 0.023 | 0.057 | Yes |
| Princeton Ave/High St/Spring Rd | 0.763 | C | 0.827 | D | 0.764 | C | 0.831 | D | 0.001 | 0.004 | No |
| Poindexter Ave/First Ave/Moorpark Ave | 0.676 | B | 0.774 | C | 0.686 | B | 0.799 | C | 0.010 | 0.025 | No |
| Los Angeles Ave/Moorpark Ave | 1.154 | F | 1.182 | F | 1.160 | F | 1.198 | F | 0.006 | 0.016 | No |
| Spring Rd/Walnut Canyon Rd | 0.884 | D | 1.034 | F | 0.885 | D | 1.036 | F | 0.001 | 0.002 | No |
| **Unsignalized Intersection** | **2037 Without Project** | | | | **2037 Plus Project** | | | | **Change in Delay** | | **Significant Impact?** |
| | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | | AM | PM | |
| | Delay* | LOS | Delay* | LOS | Delay* | LOS | Delay* | LOS | | | |
| Charles St/Moorpark Ave | 102.3 | F | 63.4 | F | 114.9 | F | 75.1 | F | 12.6 | 11.7 | Yes |
| High St/Gabbert Rd | 10.0 | A | 10.6 | B | 10.0 | A | 10.7 | B | 0.0 | 0.1 | No |

*Delays are reported as the worst movement at unsignalized intersections.

## 5. MITIGATION MEASURES

As discussed previously, the intersection of High Street and Moorpark Avenue would be significantly impacted by the addition of the project traffic in the PM peak hour in 2025 and in both peak hours in 2037. The intersection of Charles Street and Moorpark Avenue would be significantly impacted in both peak hours in 2037. The recommended improvements to mitigate the significant impacts of the project are listed below:

- Add a left turn lane on the northbound approach at the intersection of High Street and Moorpark Avenue to address conditions in both 2025 and 2037, as shown in Figure 15 and in the *Hitch Ranch* project report[3].
- Change the existing full movement eastbound Charles Street approach to a right-in and right-out access in 2037 as shown in Figure 16, and re-route the impacted traffic to enter or exit the project via the signalized intersection of High Street and Moorpark Avenue to the south. The conversion to right-in and right-out access for the eastbound movement would simplify operations at the intersection. By limiting movements at this intersection and diverting those movements to the signalized intersection at High Street and Moorpark Avenue, it would make it easier for vehicles traveling westbound to find gaps in traffic and would improve the LOS at this intersection.

Tables 10 and 11 show the traffic conditions without the project and with the project plus implementation of the mitigation measures in 2025 and 2037, respectively. The ICU and Synchro reports are included in Appendix H. All significant traffic impacts by the proposed project are expected to be fully mitigated. As shown in Table 10, the LOS of the intersection of High Street and Moorpark Avenue is expected to increase from LOS F to LOS D in the PM peak hour with the implementation of the proposed mitigation measure.

As shown in Table 11, the LOS of the intersection of High Street and Moorpark Avenue is expected to increase from LOS F to LOS D and LOS E in the AM and PM peak hours, respectively. The proposed mitigation plan at the intersection of Charles Street and Moorpark Avenue would reduce the delay at the worst minor street movement by 20.3 and 2.6 seconds in the AM and PM peak hours in 2037.

***Table 10. Opening Year (2025) Traffic Conditions with Project and Mitigation***

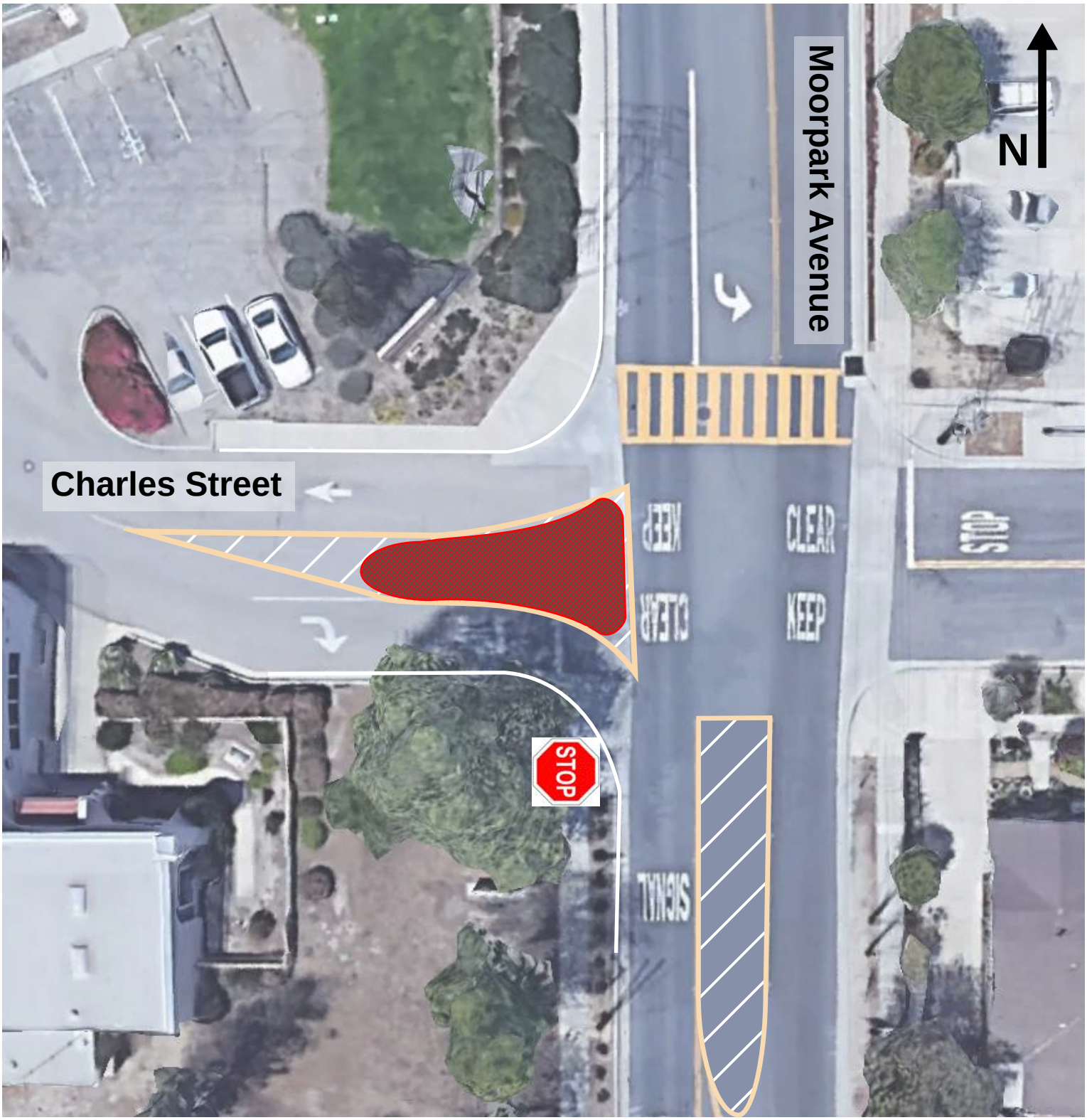
| Signalized Intersection | Intersection Type | Peak Hour | 2025 Without Project | | 2025 with Project & Mitigation | | Change in V/C | Significant Impact? |
|---|---|---|---|---|---|---|---|---|
| | | | V/C | LOS | V/C | LOS | | |
| High St/Moorpark Ave | Signalized | PM | 1.048 | F | 0.880 | D | -0.168 | No |

***Table 11. Buildout Year (2037) Traffic Conditions with Project and Mitigation***

| Signalized Intersection | Intersection Type | Peak Hour | 2037 Without Project | | 2037 with Project & Mitigation | | Change in V/C | Significant Impact? |
|---|---|---|---|---|---|---|---|---|
| | | | V/C or Delay* | LOS | V/C or Delay* | LOS | | |
| High St/Moorpark Ave | Signalized | AM | 1.086 | F | 0.862 | D | -0.224 | No |
| | | PM | 1.107 | F | 0.949 | E | -0.159 | No |
| Charles St/Moorpark Ave | Unsignalized | AM | 102.3 | F | 82.0 | F | -20.3 | No |
| | | PM | 63.4 | F | 60.8 | F | -2.6 | No |

*Delays are reported as the worst movement at unsignalized intersections.

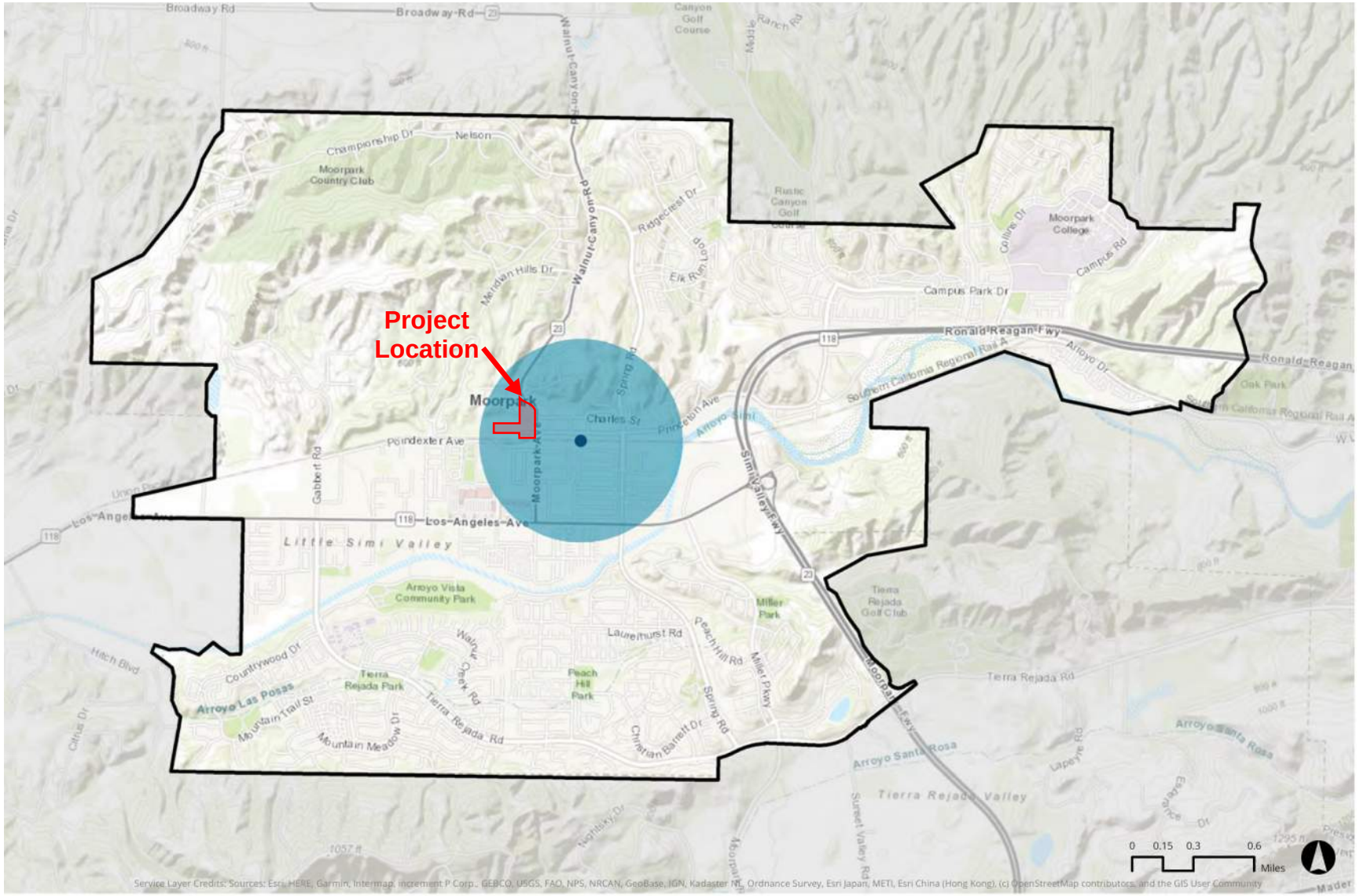
| | | |
|---|---|---|
| Civic Center Master Plan Project<br>Traffic Impact Anlyasis | *Figure 15. Proposed Exclusive Northbound Left Turn Lane* | PSOMAS<br>August 2022 |




| | | |
|---|---|---|
| Civic Center Master Plan Project<br>Traffic Impact Anlyasis | *Figure 16.*<br>*Proposed Right-in and Right-out Access* | PSOMAS<br>August 2022 |

## 6. VEHICLE MILES TRAVELED

According to the *SCAG Data/Map Book for the City of Moorpark*[9], the project is located in a Transit Priority Area, as shown in Figure 17. The project is therefore considered to have a less-than-significant impact per the CEQA guidelines and would be exempt from a Vehicle Miles Traveled (VMT) analysis.




● Major Transit Stops  Transit Priority Areas (Areas within One-Half Mile from Major Transit Stops)

Note: As defined in SB 743, "Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations. Major transit stops are extracted from 2045 plan year of the Draft Connect SoCal. Please note that this map may undergo changes as SCAG continues to update its transportation network as part of the Connect SoCal development process and SCAG shall not be responsible for local jurisdiction's use of this map. Updates to this information will be forthcoming as information becomes available.

Data Source: SCAG, County Transportation Commissions, 2019 | Map Created: 6/18/2019

Disclaimer: The information shown on this map reflect jurisdiction's input submitted during the Local Input and Envisioning Process for the Connect SoCal. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact RTPLocalInput@scag.ca.gov.

## 7. CONCLUSION

The Civic Center Master Plan Project is expected to replace the existing library, city hall and community center/active adult center buildings with a new 18,000 sf library with outdoor plaza, a 13,000 sf commercial area with a public park, a 75 unit (25 du/acre) residential area, a new 22,000 sf city hall and mercado. The proposed project would consist of a phased development. By 2025, the project will generate 401 new external daily trips, including 63 trips in the PM peak hour. However, the AM peak hour traffic will decrease by 42 trips. By 2037, the project will generate 1,329 new external daily trips, including 42 trips in the AM peak hour and 120 trips in the PM peak hour.

Based on the LOS analyses, the existing seven study intersections generally operate at an acceptable LOS under existing conditions except for the intersections of Charles Street and Moorpark Avenue, and Los Angeles Avenue and Moorpark Avenue, which operate at LOS D in the AM peak hour and PM peak hour, respectively. The eighth intersection included in the evaluation High Street and Gabbert Road is expected to be constructed by the project year 2025. In the opening year 2025, the project will create a significant impact at the intersection of High Street and Moorpark Avenue as V/C will increase by more than 0.020 while operating at an unacceptable LOS. The proposed mitigation would be to add a left-turn lane on the northbound intersection approach. This mitigation was evaluated and would effectively mitigate the significant impact.

In the buildout year 2037, the intersection of High Street and Moorpark Avenue is expected to be significantly impacted since the V/C would increase by 0.023 and 0.057 in the AM and PM peak hours, respectively. This significant impact would be successfully mitigated by installation of a new northbound left-turn lane from Moorpark Avenue towards High Street as noted in the 2025 mitigation measures earlier. The intersection of Charles Street and Moorpark Avenue is also expected to be significantly impacted by the project traffic as delay at this location would increase by 12.6 and 11.7 seconds for the worst movement in the AM and PM peak hours, respectively. This significant impact would be mitigated by installation of right-in and right-out access for the eastbound intersection approach. The diversion of traffic resulting from this intersection adjustment would not cause adverse or significant impacts to other intersections in the project area.

Lastly, per CEQA guidelines, the project is located in a TPA; therefore, the project is expected to have a less-than-significant impact on VMT and no detailed VMT analysis is required.

# 8. REFERENCES


[1] *City of Moorpark General Plan Circulation Element*. City of Moorpark, May 1992.

[2] *Guidelines for Preparing Traffic and Circulation Studies*. City of Moorpark, November 1993.

[3] *Traffic Impact Analysis for Proposed Hitch Ranch Specific Plan*. Impact Sciences, January 2021.

[4] *Highway Capacity Manual, 6th Edition*. Transportation Research Board, October 2016.

[5] *Moorpark Civic Center Campus Project Second Revised Screencheck Draft EIR (Section 3.2.2).* City of Moorpark, December 2009.

[6] *SCAG 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction.* https://scag.ca.gov/sites/main/files/file-attachments/2016_2040rtpscs_finalgrowthforecastbyjurisdiction.pdf?1605576071, accessed July 2022.

[7] *Trip Generation, 11th Edition*. Institute of Transportation Engineers, 2021.

[8] *Trip Generation Handbook, 3rd Edition.* Institute of Transportation Engineers, 2014.

[9] *SCAG Data/Map Book for the City of Moorpark.* Southern California Association of Governments (SCAG), November 2019.

# Appendix A – Traffic Volume Data (2022)

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Walnut Canyon Rd/US-23 & Casey Rd
**City:** Moorpark
**Control:** Signalized

**Project ID:** 22-050031-001
**Date:** 6/15/2022

## Data - Totals

| NS/EW Streets: | Walnut Canyon Rd/US-23 | | | | Walnut Canyon Rd/US-23 | | | | Casey Rd | | | | Casey Rd | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 3 | 23 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 81 |
| 7:15 AM | 8 | 20 | 0 | 0 | 0 | 60 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 92 |
| 7:30 AM | 9 | 23 | 0 | 0 | 0 | 63 | 2 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 108 |
| 7:45 AM | 10 | 31 | 0 | 0 | 0 | 63 | 0 | 0 | 1 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 117 |
| 8:00 AM | 9 | 27 | 0 | 0 | 0 | 56 | 1 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 102 |
| 8:15 AM | 10 | 36 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 105 |
| 8:30 AM | 6 | 29 | 0 | 0 | 0 | 55 | 2 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 98 |
| 8:45 AM | 3 | 29 | 0 | 0 | 0 | 50 | 2 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 92 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 58 | 218 | 0 | 0 | 0 | 445 | 8 | 0 | 2 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 795 |
| **APPROACH %'s :** | 21.01% | 78.99% | 0.00% | 0.00% | 0.00% | 98.23% | 1.77% | 0.00% | 3.03% | 0.00% | 96.97% | 0.00% | | | | | |
| **PEAK HR :** | 07:30 AM - 08:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 38 | 117 | 0 | 0 | 0 | 231 | 3 | 0 | 1 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 432 |
| **PEAK HR FACTOR :** | 0.950 | 0.813 | 0.000 | 0.000 | 0.000 | 0.917 | 0.375 | 0.000 | 0.250 | 0.000 | 0.875 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.923 |
| | 0.842 | | | | 0.900 | | | | 0.827 | | | | | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 5 | 49 | 0 | 0 | 0 | 45 | 2 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 108 |
| 4:15 PM | 7 | 55 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 105 |
| 4:30 PM | 7 | 63 | 0 | 0 | 0 | 37 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 113 |
| 4:45 PM | 9 | 70 | 0 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 128 |
| 5:00 PM | 7 | 68 | 0 | 0 | 0 | 42 | 0 | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 124 |
| 5:15 PM | 9 | 60 | 0 | 0 | 0 | 45 | 0 | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 122 |
| 5:30 PM | 15 | 53 | 0 | 0 | 0 | 41 | 0 | 0 | 1 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 128 |
| 5:45 PM | 16 | 52 | 0 | 0 | 0 | 33 | 1 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 111 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 75 | 470 | 0 | 0 | 0 | 324 | 3 | 0 | 8 | 0 | 59 | 0 | 0 | 0 | 0 | 0 | 939 |
| **APPROACH %'s :** | 13.76% | 86.24% | 0.00% | 0.00% | 0.00% | 99.08% | 0.92% | 0.00% | 11.94% | 0.00% | 88.06% | 0.00% | | | | | |
| **PEAK HR :** | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 40 | 251 | 0 | 0 | 0 | 171 | 0 | 0 | 5 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 502 |
| **PEAK HR FACTOR :** | 0.667 | 0.896 | 0.000 | 0.000 | 0.000 | 0.950 | 0.000 | 0.000 | 0.625 | 0.000 | 0.486 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.980 |
| | 0.921 | | | | 0.950 | | | | 0.526 | | | | | | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Moorpark Ave/US-23 & Charles St
**City:** Moorpark
**Control:** 2-Way Stop (EB/WB)

**Project ID:** 22-050031-002
**Date:** 6/8/2022

## Data - Totals

| NS/EW Streets: | Moorpark Ave/US-23 | | | | Moorpark Ave/US-23 | | | | Charles St | | | | Charles St | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 0 | 1 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 1 | 31 | 1 | 0 | 2 | 53 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 94 |
| 7:15 AM | 2 | 38 | 2 | 0 | 2 | 76 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 127 |
| 7:30 AM | 4 | 61 | 1 | 0 | 2 | 101 | 1 | 0 | 0 | 0 | 2 | 0 | 5 | 1 | 1 | 0 | 179 |
| 7:45 AM | 15 | 95 | 2 | 0 | 14 | 142 | 1 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 5 | 0 | 279 |
| 8:00 AM | 7 | 136 | 2 | 0 | 8 | 136 | 3 | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 6 | 1 | 306 |
| 8:15 AM | 8 | 67 | 3 | 0 | 13 | 134 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 235 |
| 8:30 AM | 2 | 47 | 3 | 0 | 12 | 80 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 3 | 0 | 152 |
| 8:45 AM | 3 | 52 | 1 | 0 | 3 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 121 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 42 | 527 | 15 | 0 | 56 | 780 | 8 | 0 | 1 | 0 | 8 | 0 | 28 | 2 | 25 | 1 | 1493 |
| **APPROACH %'s :** | 7.19% | 90.24% | 2.57% | 0.00% | 6.64% | 92.42% | 0.95% | 0.00% | 11.11% | 0.00% | 88.89% | 0.00% | 50.00% | 3.57% | 44.64% | 1.79% | |
| **PEAK HR :** | 07:30 AM - 08:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 34 | 359 | 8 | 0 | 37 | 513 | 6 | 0 | 1 | 0 | 6 | 0 | 15 | 1 | 18 | 1 | 999 |
| **PEAK HR FACTOR :** | 0.567 | 0.660 | 0.667 | 0.000 | 0.661 | 0.903 | 0.500 | 0.000 | 0.250 | 0.000 | 0.750 | 0.000 | 0.750 | 0.250 | 0.750 | 0.250 | 0.816 |
| | | 0.691 | | | | 0.885 | | | | 0.875 | | | | 0.729 | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 0 | 1 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 6 | 74 | 1 | 0 | 2 | 51 | 1 | 0 | 1 | 0 | 9 | 0 | 6 | 1 | 6 | 0 | 158 |
| 4:15 PM | 4 | 78 | 4 | 0 | 1 | 60 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 10 | 0 | 166 |
| 4:30 PM | 5 | 89 | 4 | 0 | 3 | 61 | 0 | 0 | 2 | 0 | 5 | 0 | 7 | 0 | 3 | 0 | 179 |
| 4:45 PM | 4 | 100 | 8 | 0 | 4 | 55 | 2 | 0 | 1 | 0 | 5 | 0 | 7 | 0 | 4 | 0 | 190 |
| 5:00 PM | 4 | 76 | 3 | 0 | 7 | 52 | 0 | 0 | 0 | 2 | 19 | 0 | 2 | 0 | 6 | 0 | 171 |
| 5:15 PM | 3 | 85 | 1 | 0 | 5 | 69 | 1 | 0 | 1 | 0 | 8 | 0 | 2 | 0 | 3 | 0 | 178 |
| 5:30 PM | 2 | 85 | 4 | 0 | 4 | 57 | 1 | 0 | 3 | 0 | 9 | 0 | 3 | 0 | 4 | 0 | 172 |
| 5:45 PM | 3 | 90 | 5 | 0 | 3 | 43 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 8 | 0 | 155 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 31 | 677 | 30 | 0 | 29 | 448 | 5 | 0 | 8 | 2 | 57 | 0 | 37 | 1 | 44 | 0 | 1369 |
| **APPROACH %'s :** | 4.20% | 91.73% | 4.07% | 0.00% | 6.02% | 92.95% | 1.04% | 0.00% | 11.94% | 2.99% | 85.07% | 0.00% | 45.12% | 1.22% | 53.66% | 0.00% | |
| **PEAK HR :** | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 16 | 350 | 16 | 0 | 19 | 237 | 3 | 0 | 4 | 2 | 37 | 0 | 18 | 0 | 16 | 0 | 718 |
| **PEAK HR FACTOR :** | 0.800 | 0.875 | 0.500 | 0.000 | 0.679 | 0.859 | 0.375 | 0.000 | 0.500 | 0.250 | 0.487 | 0.000 | 0.643 | 0.000 | 0.667 | 0.000 | 0.945 |
| | | 0.853 | | | | 0.863 | | | | 0.512 | | | | 0.773 | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Moorpark Ave/US-23 & High St
**City:** Moorpark
**Control:** Signalized

**Project ID:** 22-050031-003
**Date:** 6/8/2022

## Data - Totals

| NS/EW Streets: | Moorpark Ave/US-23 | | | | Moorpark Ave/US-23 | | | | High St | | | | High St | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 1 | 23 | 30 | 0 | 15 | 40 | 0 | 0 | 0 | 0 | 1 | 0 | 29 | 1 | 7 | 0 | 147 |
| 7:15 AM | 0 | 36 | 19 | 0 | 17 | 64 | 2 | 0 | 0 | 0 | 3 | 0 | 36 | 3 | 8 | 0 | 188 |
| 7:30 AM | 3 | 43 | 32 | 0 | 21 | 84 | 0 | 0 | 2 | 2 | 3 | 0 | 40 | 3 | 19 | 0 | 252 |
| 7:45 AM | 2 | 77 | 33 | 0 | 47 | 103 | 0 | 0 | 0 | 0 | 2 | 0 | 70 | 5 | 39 | 0 | 378 |
| 8:00 AM | 3 | 86 | 37 | 0 | 40 | 103 | 0 | 0 | 1 | 1 | 1 | 0 | 31 | 2 | 53 | 0 | 358 |
| 8:15 AM | 2 | 55 | 34 | 0 | 42 | 88 | 1 | 0 | 0 | 0 | 4 | 0 | 38 | 1 | 23 | 0 | 288 |
| 8:30 AM | 3 | 38 | 39 | 0 | 14 | 75 | 1 | 0 | 0 | 2 | 2 | 0 | 40 | 2 | 16 | 0 | 232 |
| 8:45 AM | 3 | 44 | 42 | 0 | 17 | 39 | 1 | 0 | 0 | 2 | 4 | 0 | 23 | 6 | 10 | 0 | 191 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 17 | 402 | 266 | 0 | 213 | 596 | 5 | 0 | 3 | 7 | 20 | 0 | 307 | 23 | 175 | 0 | 2034 |
| **APPROACH %'s :** | 2.48% | 58.69% | 38.83% | 0.00% | 26.17% | 73.22% | 0.61% | 0.00% | 10.00% | 23.33% | 66.67% | 0.00% | 60.79% | 4.55% | 34.65% | 0.00% | |
| **PEAK HR :** | 07:30 AM - 08:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 10 | 261 | 136 | 0 | 150 | 378 | 1 | 0 | 3 | 3 | 10 | 0 | 179 | 11 | 134 | 0 | 1276 |
| **PEAK HR FACTOR :** | 0.833 | 0.759 | 0.919 | 0.000 | 0.798 | 0.917 | 0.250 | 0.000 | 0.375 | 0.375 | 0.625 | 0.000 | 0.639 | 0.550 | 0.632 | 0.000 | 0.844 |
| | 0.808 | | | | 0.882 | | | | 0.571 | | | | 0.711 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 6 | 60 | 62 | 0 | 18 | 45 | 2 | 0 | 1 | 6 | 5 | 0 | 50 | 4 | 21 | 0 | 280 |
| 4:15 PM | 10 | 57 | 66 | 0 | 14 | 55 | 1 | 0 | 2 | 6 | 7 | 0 | 48 | 10 | 25 | 0 | 301 |
| 4:30 PM | 10 | 65 | 68 | 0 | 18 | 49 | 1 | 0 | 1 | 15 | 6 | 0 | 49 | 7 | 33 | 0 | 322 |
| 4:45 PM | 10 | 67 | 80 | 0 | 21 | 48 | 1 | 0 | 4 | 7 | 11 | 0 | 54 | 11 | 39 | 0 | 353 |
| 5:00 PM | 4 | 54 | 86 | 1 | 28 | 43 | 0 | 0 | 0 | 10 | 12 | 0 | 57 | 1 | 30 | 0 | 326 |
| 5:15 PM | 7 | 50 | 65 | 0 | 20 | 60 | 1 | 0 | 0 | 7 | 4 | 0 | 42 | 5 | 37 | 0 | 298 |
| 5:30 PM | 3 | 63 | 63 | 0 | 18 | 47 | 2 | 0 | 1 | 1 | 7 | 0 | 50 | 3 | 30 | 0 | 288 |
| 5:45 PM | 3 | 55 | 58 | 0 | 12 | 36 | 0 | 0 | 0 | 2 | 3 | 0 | 35 | 1 | 41 | 0 | 246 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 53 | 471 | 548 | 1 | 149 | 383 | 8 | 0 | 9 | 54 | 55 | 0 | 385 | 42 | 256 | 0 | 2414 |
| **APPROACH %'s :** | 4.94% | 43.90% | 51.07% | 0.09% | 27.59% | 70.93% | 1.48% | 0.00% | 7.63% | 45.76% | 46.61% | 0.00% | 56.37% | 6.15% | 37.48% | 0.00% | |
| **PEAK HR :** | 04:15 PM - 05:15 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 34 | 243 | 300 | 1 | 81 | 195 | 3 | 0 | 7 | 38 | 36 | 0 | 208 | 29 | 127 | 0 | 1302 |
| **PEAK HR FACTOR :** | 0.850 | 0.907 | 0.872 | 0.250 | 0.723 | 0.886 | 0.750 | 0.000 | 0.438 | 0.633 | 0.750 | 0.000 | 0.912 | 0.659 | 0.814 | 0.000 | 0.922 |
| | 0.920 | | | | 0.982 | | | | 0.920 | | | | 0.875 | | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Spring Rd & High St
**City:** Moorpark
**Control:** Signalized

**Project ID:** 22-050031-004
**Date:** 6/8/2022

## Data - Totals

| NS/EW Streets: | Spring Rd | | | | Spring Rd | | | | High St | | | | High St | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 2 | 1 | 0 | 1 | 1.5 | 0.5 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 10 | 39 | 19 | 0 | 62 | 96 | 5 | 0 | 2 | 24 | 13 | 0 | 6 | 24 | 28 | 0 | 328 |
| 7:15 AM | 9 | 35 | 28 | 0 | 59 | 124 | 5 | 0 | 1 | 23 | 12 | 0 | 10 | 23 | 41 | 0 | 370 |
| 7:30 AM | 22 | 44 | 28 | 0 | 71 | 146 | 8 | 0 | 1 | 43 | 20 | 0 | 20 | 49 | 34 | 1 | 487 |
| 7:45 AM | 33 | 55 | 52 | 0 | 92 | 130 | 7 | 0 | 2 | 49 | 25 | 0 | 20 | 73 | 25 | 0 | 563 |
| 8:00 AM | 23 | 63 | 47 | 0 | 87 | 149 | 2 | 0 | 5 | 35 | 30 | 0 | 18 | 40 | 38 | 0 | 537 |
| 8:15 AM | 18 | 60 | 36 | 0 | 47 | 76 | 7 | 0 | 2 | 38 | 35 | 0 | 19 | 36 | 35 | 0 | 409 |
| 8:30 AM | 25 | 76 | 41 | 0 | 70 | 149 | 6 | 0 | 4 | 24 | 21 | 0 | 13 | 23 | 32 | 1 | 485 |
| 8:45 AM | 17 | 64 | 20 | 0 | 51 | 90 | 8 | 0 | 8 | 31 | 26 | 0 | 12 | 19 | 29 | 0 | 375 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 157 | 436 | 271 | 0 | 539 | 960 | 48 | 0 | 25 | 267 | 182 | 0 | 118 | 287 | 262 | 2 | 3554 |
| **APPROACH %'s :** | 18.17% | 50.46% | 31.37% | 0.00% | 34.84% | 62.06% | 3.10% | 0.00% | 5.27% | 56.33% | 38.40% | 0.00% | 17.64% | 42.90% | 39.16% | 0.30% | |
| **PEAK HR :** | 07:30 AM - 08:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 96 | 222 | 163 | 0 | 297 | 501 | 24 | 0 | 10 | 165 | 110 | 0 | 77 | 198 | 132 | 1 | 1996 |
| **PEAK HR FACTOR :** | 0.727 | 0.881 | 0.784 | 0.000 | 0.807 | 0.841 | 0.750 | 0.000 | 0.500 | 0.842 | 0.786 | 0.000 | 0.963 | 0.678 | 0.868 | 0.250 | 0.886 |
| | 0.859 | | | | 0.863 | | | | 0.938 | | | | 0.864 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 0 | 1 | 1.5 | 0.5 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 34 | 149 | 32 | 0 | 39 | 74 | 5 | 0 | 8 | 51 | 21 | 0 | 26 | 40 | 77 | 0 | 556 |
| 4:15 PM | 44 | 134 | 45 | 0 | 49 | 58 | 11 | 0 | 7 | 55 | 24 | 0 | 18 | 58 | 84 | 0 | 587 |
| 4:30 PM | 37 | 139 | 60 | 0 | 50 | 62 | 9 | 0 | 12 | 63 | 23 | 0 | 29 | 58 | 82 | 0 | 624 |
| 4:45 PM | 47 | 136 | 51 | 0 | 40 | 70 | 15 | 0 | 10 | 65 | 28 | 0 | 27 | 47 | 84 | 0 | 620 |
| 5:00 PM | 49 | 140 | 49 | 0 | 61 | 86 | 9 | 0 | 10 | 74 | 32 | 0 | 20 | 52 | 102 | 0 | 684 |
| 5:15 PM | 43 | 132 | 51 | 0 | 34 | 58 | 5 | 0 | 6 | 57 | 25 | 0 | 29 | 51 | 95 | 0 | 586 |
| 5:30 PM | 36 | 139 | 34 | 0 | 40 | 69 | 7 | 0 | 8 | 64 | 22 | 0 | 22 | 49 | 90 | 0 | 580 |
| 5:45 PM | 39 | 124 | 35 | 0 | 45 | 83 | 6 | 0 | 6 | 53 | 13 | 0 | 21 | 48 | 84 | 0 | 557 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 329 | 1093 | 357 | 0 | 358 | 560 | 67 | 0 | 67 | 482 | 188 | 0 | 192 | 403 | 698 | 0 | 4794 |
| **APPROACH %'s :** | 18.49% | 61.44% | 20.07% | 0.00% | 36.35% | 56.85% | 6.80% | 0.00% | 9.09% | 65.40% | 25.51% | 0.00% | 14.85% | 31.17% | 53.98% | 0.00% | |
| **PEAK HR :** | 04:15 PM - 05:15 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 177 | 549 | 205 | 0 | 200 | 276 | 44 | 0 | 39 | 257 | 107 | 0 | 94 | 215 | 352 | 0 | 2515 |
| **PEAK HR FACTOR :** | 0.903 | 0.980 | 0.854 | 0.000 | 0.820 | 0.802 | 0.733 | 0.000 | 0.813 | 0.868 | 0.836 | 0.000 | 0.810 | 0.927 | 0.863 | 0.000 | 0.919 |
| | 0.978 | | | | 0.833 | | | | 0.869 | | | | 0.950 | | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Moorpark Ave/US-23 & Poindexter Ave/1st St
**City:** Moorpark
**Control:** Signalized

**Project ID:** 22-050031-005
**Date:** 6/15/2022

## Data - Totals

| NS/EW Streets: | Moorpark Ave/US-23 | | | | Moorpark Ave/US-23 | | | | Poindexter Ave/1st St | | | | Poindexter Ave/1st St | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0.5 | 0.5 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 6 | 29 | 0 | 0 | 0 | 40 | 22 | 0 | 18 | 0 | 4 | 0 | 2 | 4 | 1 | 0 | 126 |
| 7:15 AM | 7 | 30 | 1 | 0 | 0 | 54 | 50 | 0 | 10 | 0 | 8 | 0 | 0 | 3 | 0 | 0 | 163 |
| 7:30 AM | 6 | 30 | 0 | 0 | 2 | 49 | 42 | 0 | 12 | 1 | 3 | 0 | 2 | 4 | 1 | 0 | 152 |
| 7:45 AM | 15 | 35 | 1 | 0 | 1 | 39 | 64 | 0 | 25 | 5 | 9 | 0 | 2 | 10 | 1 | 0 | 207 |
| 8:00 AM | 6 | 34 | 3 | 0 | 2 | 49 | 41 | 0 | 22 | 1 | 4 | 0 | 0 | 7 | 1 | 0 | 170 |
| 8:15 AM | 7 | 43 | 3 | 0 | 1 | 31 | 34 | 0 | 22 | 2 | 10 | 0 | 0 | 7 | 0 | 0 | 160 |
| 8:30 AM | 4 | 43 | 0 | 0 | 3 | 39 | 25 | 0 | 19 | 2 | 8 | 0 | 1 | 2 | 4 | 0 | 150 |
| 8:45 AM | 8 | 36 | 2 | 0 | 0 | 53 | 19 | 0 | 23 | 3 | 5 | 0 | 0 | 3 | 0 | 0 | 152 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 59 | 280 | 10 | 0 | 9 | 354 | 297 | 0 | 151 | 14 | 51 | 0 | 7 | 40 | 8 | 0 | 1280 |
| **APPROACH %'s :** | 16.91% | 80.23% | 2.87% | 0.00% | 1.36% | 53.64% | 45.00% | 0.00% | 69.91% | 6.48% | 23.61% | 0.00% | 12.73% | 72.73% | 14.55% | 0.00% | |
| **PEAK HR :** | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 34 | 129 | 5 | 0 | 5 | 191 | 197 | 0 | 69 | 7 | 24 | 0 | 4 | 24 | 3 | 0 | 692 |
| **PEAK HR FACTOR :** | 0.567 | 0.921 | 0.417 | 0.000 | 0.625 | 0.884 | 0.770 | 0.000 | 0.690 | 0.350 | 0.667 | 0.000 | 0.500 | 0.600 | 0.750 | 0.000 | 0.836 |
| | 0.824 | | | | 0.945 | | | | 0.641 | | | | 0.596 | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0.5 | 0.5 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 12 | 74 | 0 | 0 | 2 | 68 | 32 | 0 | 44 | 7 | 16 | 0 | 5 | 7 | 3 | 0 | 270 |
| 4:15 PM | 7 | 68 | 1 | 0 | 1 | 68 | 26 | 0 | 37 | 5 | 8 | 0 | 1 | 5 | 2 | 0 | 229 |
| 4:30 PM | 8 | 84 | 4 | 0 | 6 | 57 | 31 | 0 | 51 | 9 | 13 | 0 | 5 | 1 | 2 | 0 | 271 |
| 4:45 PM | 14 | 80 | 1 | 0 | 1 | 72 | 35 | 0 | 40 | 2 | 10 | 0 | 4 | 3 | 2 | 0 | 264 |
| 5:00 PM | 13 | 80 | 3 | 0 | 1 | 55 | 42 | 0 | 61 | 11 | 30 | 0 | 3 | 4 | 4 | 0 | 307 |
| 5:15 PM | 8 | 57 | 5 | 0 | 1 | 65 | 37 | 0 | 53 | 3 | 15 | 0 | 3 | 3 | 5 | 0 | 255 |
| 5:30 PM | 8 | 62 | 2 | 0 | 2 | 50 | 35 | 0 | 51 | 4 | 14 | 0 | 5 | 5 | 2 | 0 | 240 |
| 5:45 PM | 5 | 57 | 1 | 0 | 3 | 50 | 26 | 0 | 38 | 3 | 9 | 0 | 0 | 1 | 1 | 0 | 194 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 75 | 562 | 17 | 0 | 17 | 485 | 264 | 0 | 375 | 44 | 115 | 0 | 26 | 29 | 21 | 0 | 2030 |
| **APPROACH %'s :** | 11.47% | 85.93% | 2.60% | 0.00% | 2.22% | 63.32% | 34.46% | 0.00% | 70.22% | 8.24% | 21.54% | 0.00% | 34.21% | 38.16% | 27.63% | 0.00% | |
| **PEAK HR :** | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 43 | 301 | 13 | 0 | 9 | 249 | 145 | 0 | 205 | 25 | 68 | 0 | 15 | 11 | 13 | 0 | 1097 |
| **PEAK HR FACTOR :** | 0.768 | 0.896 | 0.650 | 0.000 | 0.375 | 0.865 | 0.863 | 0.000 | 0.840 | 0.568 | 0.567 | 0.000 | 0.750 | 0.688 | 0.650 | 0.000 | 0.893 |
| | 0.930 | | | | 0.933 | | | | 0.730 | | | | 0.886 | | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Moorpark Ave/US-23 & Los Angeles Ave/CA-118
**City:** Moorpark
**Control:** Signalized

**Project ID:** 22-050031-006
**Date:** 6/8/2022

## Data - Totals

| NS/EW Streets: | Moorpark Ave/US-23 | | | | Moorpark Ave/US-23 | | | | Los Angeles Ave/CA-118 | | | | Los Angeles Ave/CA-118 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1.5 | 0.5 | 1 | 0 | 1.3 | 0.3 | 1.3 | 0 | 1 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 14 | 10 | 26 | 0 | 19 | 5 | 15 | 0 | 12 | 144 | 4 | 0 | 9 | 148 | 17 | 0 | 423 |
| 7:15 AM | 21 | 9 | 27 | 0 | 27 | 3 | 24 | 0 | 16 | 117 | 2 | 0 | 9 | 220 | 21 | 0 | 496 |
| 7:30 AM | 40 | 14 | 52 | 0 | 37 | 9 | 35 | 0 | 23 | 152 | 2 | 0 | 14 | 240 | 31 | 0 | 649 |
| 7:45 AM | 35 | 20 | 26 | 0 | 38 | 11 | 34 | 0 | 49 | 239 | 13 | 0 | 22 | 211 | 28 | 0 | 726 |
| 8:00 AM | 13 | 14 | 35 | 0 | 38 | 18 | 30 | 0 | 42 | 183 | 12 | 0 | 39 | 192 | 26 | 0 | 642 |
| 8:15 AM | 20 | 22 | 28 | 0 | 41 | 18 | 26 | 0 | 23 | 148 | 7 | 0 | 33 | 212 | 24 | 0 | 602 |
| 8:30 AM | 7 | 12 | 32 | 0 | 38 | 14 | 36 | 0 | 18 | 181 | 3 | 0 | 33 | 207 | 34 | 0 | 615 |
| 8:45 AM | 12 | 5 | 24 | 0 | 39 | 10 | 24 | 0 | 20 | 142 | 4 | 0 | 24 | 179 | 23 | 0 | 506 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 162 | 106 | 250 | 0 | 277 | 88 | 224 | 0 | 203 | 1306 | 47 | 0 | 183 | 1609 | 204 | 0 | 4659 |
| **APPROACH %'s :** | 31.27% | 20.46% | 48.26% | 0.00% | 47.03% | 14.94% | 38.03% | 0.00% | 13.05% | 83.93% | 3.02% | 0.00% | 9.17% | 80.61% | 10.22% | 0.00% | |
| **PEAK HR :** | 07:30 AM - 08:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 108 | 70 | 141 | 0 | 154 | 56 | 125 | 0 | 137 | 722 | 34 | 0 | 108 | 855 | 109 | 0 | 2619 |
| **PEAK HR FACTOR :** | 0.675 | 0.795 | 0.678 | 0.000 | 0.939 | 0.778 | 0.893 | 0.000 | 0.699 | 0.755 | 0.654 | 0.000 | 0.692 | 0.891 | 0.879 | 0.000 | 0.902 |
| | 0.752 | | | | 0.974 | | | | 0.742 | | | | 0.940 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.5 | 0.5 | 1 | 0 | 1.3 | 0.3 | 1.3 | 0 | 1 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 9 | 14 | 31 | 0 | 49 | 25 | 17 | 0 | 25 | 187 | 14 | 0 | 52 | 260 | 32 | 0 | 715 |
| 4:15 PM | 27 | 19 | 31 | 0 | 47 | 18 | 23 | 0 | 31 | 212 | 12 | 0 | 48 | 252 | 34 | 0 | 754 |
| 4:30 PM | 15 | 14 | 26 | 0 | 44 | 30 | 24 | 0 | 47 | 223 | 14 | 0 | 66 | 234 | 34 | 0 | 771 |
| 4:45 PM | 18 | 10 | 33 | 0 | 31 | 22 | 20 | 0 | 28 | 190 | 11 | 0 | 63 | 210 | 25 | 0 | 661 |
| 5:00 PM | 15 | 14 | 35 | 1 | 59 | 21 | 28 | 0 | 35 | 202 | 15 | 0 | 69 | 244 | 34 | 0 | 772 |
| 5:15 PM | 13 | 15 | 29 | 0 | 30 | 25 | 19 | 0 | 30 | 195 | 13 | 0 | 76 | 246 | 33 | 0 | 724 |
| 5:30 PM | 13 | 16 | 34 | 0 | 40 | 21 | 19 | 0 | 23 | 208 | 14 | 0 | 73 | 223 | 23 | 0 | 707 |
| 5:45 PM | 14 | 13 | 33 | 0 | 39 | 27 | 17 | 0 | 24 | 167 | 11 | 0 | 57 | 212 | 34 | 0 | 648 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 124 | 115 | 252 | 1 | 339 | 189 | 167 | 0 | 243 | 1584 | 104 | 0 | 504 | 1881 | 249 | 0 | 5752 |
| **APPROACH %'s :** | 25.20% | 23.37% | 51.22% | 0.20% | 48.78% | 27.19% | 24.03% | 0.00% | 12.58% | 82.03% | 5.39% | 0.00% | 19.13% | 71.41% | 9.45% | 0.00% | |
| **PEAK HR :** | 04:15 PM - 05:15 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 75 | 57 | 125 | 1 | 181 | 91 | 95 | 0 | 141 | 827 | 52 | 0 | 246 | 940 | 127 | 0 | 2958 |
| **PEAK HR FACTOR :** | 0.694 | 0.750 | 0.893 | 0.250 | 0.767 | 0.758 | 0.848 | 0.000 | 0.750 | 0.927 | 0.867 | 0.000 | 0.891 | 0.933 | 0.934 | 0.000 | 0.958 |
| | 0.838 | | | | 0.850 | | | | 0.898 | | | | 0.946 | | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Walnut Canyon Rd & Spring Rd/Bike Trail
**City:** Moorpark
**Control:** Signalized

**Project ID:** 22-050031-007
**Date:** 6/15/2022

## Data - Totals

| NS/EW Streets: | Walnut Canyon Rd | | | | Walnut Canyon Rd | | | | Spring Rd/Bike Trail | | | | Spring Rd/Bike Trail | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 1 | 26 | 5 | 0 | 93 | 33 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 51 | 0 | 213 |
| 7:15 AM | 2 | 12 | 4 | 0 | 117 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 50 | 0 | 223 |
| 7:30 AM | 2 | 16 | 6 | 0 | 142 | 38 | 0 | 0 | 1 | 0 | 2 | 0 | 5 | 0 | 65 | 0 | 277 |
| 7:45 AM | 0 | 17 | 5 | 0 | 105 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 58 | 0 | 215 |
| 8:00 AM | 0 | 20 | 3 | 0 | 103 | 30 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 1 | 49 | 0 | 212 |
| 8:15 AM | 1 | 19 | 3 | 0 | 94 | 27 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 45 | 0 | 198 |
| 8:30 AM | 0 | 22 | 4 | 0 | 104 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 45 | 0 | 208 |
| 8:45 AM | 0 | 22 | 5 | 0 | 67 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 48 | 0 | 177 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 6 | 154 | 35 | 0 | 825 | 253 | 0 | 0 | 1 | 1 | 4 | 0 | 31 | 2 | 411 | 0 | 1723 |
| **APPROACH %'s :** | 3.08% | 78.97% | 17.95% | 0.00% | 76.53% | 23.47% | 0.00% | 0.00% | 16.67% | 16.67% | 66.67% | 0.00% | 6.98% | 0.45% | 92.57% | 0.00% | |
| **PEAK HR :** | 07:00 AM - 08:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 5 | 71 | 20 | 0 | 457 | 133 | 0 | 0 | 1 | 0 | 3 | 0 | 13 | 1 | 224 | 0 | 928 |
| **PEAK HR FACTOR :** | 0.625 | 0.683 | 0.833 | 0.000 | 0.805 | 0.875 | 0.000 | 0.000 | 0.250 | 0.000 | 0.375 | 0.000 | 0.650 | 0.250 | 0.862 | 0.000 | 0.838 |
| | 0.750 | | | | 0.819 | | | | 0.333 | | | | 0.850 | | | | |

| NS/EW Streets: | Walnut Canyon Rd | | | | Walnut Canyon Rd | | | | Spring Rd/Bike Trail | | | | Spring Rd/Bike Trail | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 0 | 30 | 8 | 0 | 48 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 150 | 0 | 269 |
| 4:15 PM | 0 | 33 | 9 | 0 | 64 | 21 | 1 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 117 | 0 | 253 |
| 4:30 PM | 1 | 41 | 8 | 0 | 70 | 22 | 0 | 0 | 1 | 0 | 0 | 0 | 15 | 0 | 150 | 0 | 308 |
| 4:45 PM | 0 | 38 | 7 | 0 | 71 | 21 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 1 | 162 | 0 | 307 |
| 5:00 PM | 0 | 40 | 9 | 0 | 68 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 153 | 0 | 301 |
| 5:15 PM | 0 | 33 | 11 | 0 | 70 | 23 | 0 | 0 | 0 | 0 | 1 | 0 | 12 | 0 | 156 | 0 | 306 |
| 5:30 PM | 0 | 35 | 3 | 0 | 64 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 105 | 0 | 233 |
| 5:45 PM | 0 | 25 | 2 | 0 | 52 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 118 | 1 | 218 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 1 | 275 | 57 | 0 | 507 | 175 | 1 | 0 | 1 | 0 | 3 | 0 | 62 | 1 | 1111 | 1 | 2195 |
| **APPROACH %'s :** | 0.30% | 82.58% | 17.12% | 0.00% | 74.23% | 25.62% | 0.15% | 0.00% | 25.00% | 0.00% | 75.00% | 0.00% | 5.28% | 0.09% | 94.55% | 0.09% | |
| **PEAK HR :** | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 1 | 152 | 35 | 0 | 279 | 89 | 0 | 0 | 1 | 0 | 2 | 0 | 41 | 1 | 621 | 0 | 1222 |
| **PEAK HR FACTOR :** | 0.250 | 0.927 | 0.795 | 0.000 | 0.982 | 0.967 | 0.000 | 0.000 | 0.250 | 0.000 | 0.500 | 0.000 | 0.683 | 0.250 | 0.958 | 0.000 | 0.992 |
| | 0.940 | | | | 0.989 | | | | 0.750 | | | | 0.981 | | | | |

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Gabbert Rd & Poindexter Ave
**City:** Moorpark
**Control:** 3-Way Stop (NB/SB/WB)

**Project ID:** 22-050031-008
**Date:** 6/8/2022

## Data - Totals

| NS/EW Streets: | Gabbert Rd | | | | Gabbert Rd | | | | Poindexter Ave | | | | Poindexter Ave | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 0 | 27 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 1 | 0 | 50 |
| 7:15 AM | 0 | 3 | 22 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 69 |
| 7:30 AM | 0 | 2 | 30 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 0 | 0 | 106 |
| 7:45 AM | 0 | 3 | 68 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 0 | 2 | 0 | 170 |
| 8:00 AM | 0 | 6 | 61 | 0 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 0 | 4 | 0 | 124 |
| 8:15 AM | 0 | 3 | 39 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 3 | 0 | 96 |
| 8:30 AM | 0 | 3 | 67 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 3 | 0 | 112 |
| 8:45 AM | 0 | 4 | 31 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 1 | 0 | 71 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 24 | 345 | 0 | 19 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 364 | 0 | 14 | 0 | 798 |
| **APPROACH %'s :** | 0.00% | 6.50% | 93.50% | 0.00% | 37.25% | 62.75% | 0.00% | 0.00% | | | | | 96.30% | 0.00% | 3.70% | 0.00% | |
| **PEAK HR :** | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 15 | 235 | 0 | 13 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 207 | 0 | 12 | 0 | 502 |
| **PEAK HR FACTOR :** | 0.000 | 0.625 | 0.864 | 0.000 | 0.542 | 0.714 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.581 | 0.000 | 0.750 | 0.000 | 0.738 |
| | | | 0.880 | | | | 0.917 | | | | | | | | 0.602 | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 0 | 7 | 31 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 3 | 0 | 88 |
| 4:15 PM | 0 | 2 | 33 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 2 | 0 | 82 |
| 4:30 PM | 0 | 7 | 36 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 7 | 0 | 85 |
| 4:45 PM | 0 | 9 | 26 | 0 | 5 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 41 | 0 | 1 | 0 | 90 |
| 5:00 PM | 0 | 9 | 30 | 0 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 5 | 0 | 107 |
| 5:15 PM | 0 | 8 | 22 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 4 | 0 | 68 |
| 5:30 PM | 0 | 12 | 23 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 2 | 0 | 81 |
| 5:45 PM | 0 | 14 | 21 | 0 | 3 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 23 | 0 | 3 | 0 | 73 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 68 | 222 | 0 | 21 | 44 | 0 | 2 | 0 | 0 | 0 | 0 | 290 | 0 | 27 | 0 | 674 |
| **APPROACH %'s :** | 0.00% | 23.45% | 76.55% | 0.00% | 31.34% | 65.67% | 0.00% | 2.99% | | | | | 91.48% | 0.00% | 8.52% | 0.00% | |
| **PEAK HR :** | 04:15 PM - 05:15 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 27 | 125 | 0 | 14 | 22 | 0 | 1 | 0 | 0 | 0 | 0 | 160 | 0 | 15 | 0 | 364 |
| **PEAK HR FACTOR :** | 0.000 | 0.750 | 0.868 | 0.000 | 0.700 | 0.688 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.784 | 0.000 | 0.536 | 0.000 | 0.850 |
| | | | 0.884 | | | | 0.712 | | | | | | | | 0.781 | | |

## Appendix B – ICU/Synchro Reports – Existing Conditions

# Intersection #1

E-W Street: Casey Rd
N-S Street: Walnut Canyon Rc
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM Existing | | | | PM Existing | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 1 | 1 | 1.00 | 0.00 | 5 | 1 | 1.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | |
| EB Thru | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | |
| EB Right | 42 | 1 | 1.00 | 0.03 | 22 | 1 | 1.00 | 0.01 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| WB Left | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | |
| WB Thru | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | |
| WB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 38 | 1 | 1.00 | 0.03 | 32 | 1 | 1.00 | 0.02 |
| Comb. L-T | | 0 | | | | 0 | | |
| NB Thru | 117 | 1 | 1.00 | 0.07 | 161 | 1 | 1.00 | 0.10 |
| Comb. T-R | | 0 | | | | 0 | | |
| NB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 231 | 0 | 0.99 | 0.15 | 167 | 0 | 1.00 | 0.10 |
| Comb. T-R | | 1 | | | | 1 | | |
| SB Right | 3 | 0 | 0.01 | 0.16 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.03 | E-W: | 0.01 |
| | N-S: | 0.18 | N-S: | 0.13 |
| | Total: | 0.21 | Total: | 0.14 |
| Lost Time | | 0.10 | | 0.10 |
| V/C | | 0.309 | | 0.240 |
| Level of Service | | A | | A |

# Intersection #3

E-W Street: High St
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM Existing | | | | PM Existing | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 3 | 0 | 0.19 | 0.01 | 5 | 0 | 0.06 | 0.05 |
| Comb. L-T | | 0 | | | | 0 | | |
| EB Thru | 3 | 0 | 0.19 | 0.01 | 39 | 0 | 0.51 | 0.05 |
| Comb. T-R | | 0 | | | | 0 | | |
| EB Right | 10 | 0 | 0.63 | 0.01 | 33 | 0 | 0.43 | 0.05 |
| Comb. L-T-R | | 1 | | | | 1 | | |
| | | | | | | | | |
| WB Left | 179 | 0 | 0.94 | 0.13 | 202 | 0 | 0.89 | 0.15 |
| Comb. L-T | | 1 | | | | 1 | | |
| WB Thru | 11 | 0 | 0.06 | 0.12 | 24 | 0 | 0.11 | 0.14 |
| Comb. T-R | | 0 | | | | 0 | | |
| WB Right | 134 | 1 | 1.00 | 0.09 | 139 | 1 | 1.00 | 0.09 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 10 | 0 | 0.04 | 0.18 | 32 | 0 | 0.12 | 0.18 |
| Comb. L-T | | 1 | | | | 1 | | |
| NB Thru | 261 | 0 | 0.96 | 0.17 | 236 | 0 | 0.88 | 0.17 |
| Comb. T-R | | 0 | | | | 0 | | |
| NB Right | 136 | 1 | 1.00 | 0.09 | 299 | 1 | 1.00 | 0.20 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 150 | 1 | 1.00 | 0.10 | 87 | 1 | 1.00 | 0.06 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 378 | 0 | 1.00 | 0.24 | 200 | 0 | 0.99 | 0.13 |
| Comb. T-R | | 1 | | | | 1 | | |
| SB Right | 1 | 0 | 0.00 | 0.25 | 3 | 0 | 0.01 | 0.14 |
| Comb. L-T-R | | 0 | | | | 0 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.14 | E-W: | 0.20 |
| | N-S: | 0.43 | N-S: | 0.31 |
| | Total: | 0.57 | Total: | 0.52 |

| | | |
|---|---|---|
| Lost Time | 0.10 | 0.10 |

| | | |
|---|---|---|
| V/C | 0.671 | 0.616 |
| Level of Service | B | B |

# Intersection #4

E-W Street: Princeton Ave
N-S Street: Spring Rd
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM Existing | | | | PM Existing | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 10 | 1 | 1.00 | 0.01 | 38 | 1 | 1.00 | 0.03 |
| Comb. L-T | | 0 | | | | 0 | | |
| EB Thru | 165 | 1 | 1.00 | 0.10 | 259 | 1 | 1.00 | 0.16 |
| Comb. T-R | | 0 | | | | 0 | | |
| EB Right | 110 | 1 | 1.00 | 0.07 | 108 | 1 | 1.00 | 0.07 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| WB Left | 78 | 1 | 1.00 | 0.05 | 105 | 1 | 1.00 | 0.07 |
| Comb. L-T | | 0 | | | | 0 | | |
| WB Thru | 198 | 1 | 1.00 | 0.12 | 208 | 1 | 1.00 | 0.13 |
| Comb. T-R | | 0 | | | | 0 | | |
| WB Right | 132 | 1 | 1.00 | 0.09 | 363 | 1 | 1.00 | 0.24 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 96 | 1 | 1.00 | 0.06 | 176 | 1 | 1.00 | 0.12 |
| Comb. L-T | | 0 | | | | 0 | | |
| NB Thru | 222 | 2 | 2.00 | 0.07 | 547 | 2 | 2.00 | 0.17 |
| Comb. T-R | | 0 | | | | 0 | | |
| NB Right | 163 | 1 | 1.00 | 0.11 | 211 | 1 | 1.00 | 0.14 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 297 | 1 | 1.00 | 0.20 | 185 | 1 | 1.00 | 0.12 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 501 | 1 | 1.91 | 0.16 | 276 | 1 | 1.76 | 0.10 |
| Comb. T-R | | 1 | | | | 1 | | |
| SB Right | 24 | 0 | 0.09 | 0.18 | 38 | 0 | 0.24 | 0.10 |
| Comb. L-T-R | | 0 | | | | 0 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.16 | E-W: | 0.27 |
| | N-S: | 0.31 | N-S: | 0.29 |
| | Total: | 0.46 | Total: | 0.56 |

| | | |
|---|---|---|
| Lost Time | 0.10 | 0.10 |

| | | |
|---|---|---|
| V/C | 0.562 | 0.662 |
| Level of Service | A | B |

# Intersection #5

E-W Street: Poindexter Ave/Fir
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM Existing | | | | PM Existing | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 81 | 1 | 1.00 | 0.05 | 205 | 1 | 1.00 | 0.14 |
| Comb. L-T | | 0 | | | | 0 | | |
| EB Thru | 9 | 0 | 0.26 | 0.02 | 25 | 0 | 0.27 | 0.06 |
| Comb. T-R | | 1 | | | | 1 | | |
| EB Right | 26 | 0 | 0.74 | 0.02 | 68 | 0 | 0.73 | 0.06 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| WB Left | 4 | 1 | 1.00 | 0.00 | 15 | 1 | 1.00 | 0.01 |
| Comb. L-T | | 0 | | | | 0 | | |
| WB Thru | 28 | 0 | 0.90 | 0.02 | 11 | 0 | 0.46 | 0.02 |
| Comb. T-R | | 1 | | | | 1 | | |
| WB Right | 3 | 0 | 0.10 | 0.02 | 13 | 0 | 0.54 | 0.02 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 34 | 1 | 1.00 | 0.02 | 43 | 1 | 1.00 | 0.03 |
| Comb. L-T | | 0 | | | | 0 | | |
| NB Thru | 142 | 0 | 0.95 | 0.09 | 301 | 0 | 0.96 | 0.20 |
| Comb. T-R | | 1 | | | | 1 | | |
| NB Right | 7 | 0 | 0.05 | 0.10 | 13 | 0 | 0.04 | 0.21 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 6 | 1 | 1.00 | 0.00 | 9 | 1 | 1.00 | 0.01 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 168 | 0 | 0.48 | 0.22 | 249 | 0 | 0.63 | 0.25 |
| Comb. T-R | | 1 | | | | 1 | | |
| SB Right | 181 | 0 | 0.52 | 0.23 | 145 | 0 | 0.37 | 0.26 |
| Comb. L-T-R | | 0 | | | | 0 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.07 | E-W: | 0.15 |
| | N-S: | 0.26 | N-S: | 0.29 |
| | Total: | 0.33 | Total: | 0.44 |

| | | |
|---|---|---|
| Lost Time | 0.10 | 0.10 |

| | | |
|---|---|---|
| V/C | 0.430 | 0.544 |
| Level of Service | A | A |

# Intersection #6

E-W Street: Los Angeles Ave
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM Existing | | | | PM Existing | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 137 | 1 | 1.00 | 0.09 | 140 | 1 | 1.00 | 0.09 |
| Comb. L-T | | 0 | | | | 0 | | |
| EB Thru | 722 | 2 | 2.87 | 0.16 | 810 | 2 | 2.82 | 0.18 |
| Comb. T-R | | 1 | | | | 1 | | |
| EB Right | 34 | 0 | 0.13 | 0.17 | 53 | 0 | 0.18 | 0.19 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| WB Left | 108 | 1 | 1.00 | 0.07 | 274 | 1 | 1.00 | 0.18 |
| Comb. L-T | | 0 | | | | 0 | | |
| WB Thru | 855 | 2 | 2.00 | 0.27 | 934 | 2 | 2.00 | 0.29 |
| Comb. T-R | | 0 | | | | 0 | | |
| WB Right | 109 | 1 | 1.00 | 0.07 | 126 | 1 | 1.00 | 0.08 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 108 | 1 | 1.21 | 0.06 | 62 | 1 | 1.08 | 0.04 |
| Comb. L-T | | 1 | | | | 1 | | |
| NB Thru | 70 | 0 | 0.79 | 0.06 | 53 | 0 | 0.92 | 0.04 |
| Comb. T-R | | 0 | | | | 0 | | |
| NB Right | 141 | 1 | 1.00 | 0.09 | 123 | 1 | 1.00 | 0.08 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 154 | 1 | 0.46 | 0.22 | 164 | 1 | 0.46 | 0.24 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 56 | 0 | 0.17 | 0.21 | 98 | 0 | 0.28 | 0.22 |
| Comb. T-R | | 0 | | | | 0 | | |
| SB Right | 125 | 1 | 0.37 | 0.22 | 91 | 1 | 0.26 | 0.24 |
| Comb. L-T-R | | 1 | | | | 1 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.36 | E-W: | 0.39 |
| | N-S: | 0.32 | N-S: | 0.32 |
| | Total: | 0.68 | Total: | 0.70 |

| | | |
|---|---|---|
| Lost Time | 0.10 | 0.10 |

| | | |
|---|---|---|
| V/C | 0.776 | 0.803 |
| Level of Service | C | D |

# Intersection #7

E-W Street: Spring Rd
N-S Street: Walnut Canyon Rc
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM Existing | | | | PM Existing | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 1.00 | 0.00 |
| Comb. L-T | | 1 | | | | 1 | | |
| EB Thru | 1 | 0 | 0.50 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | |
| EB Right | 3 | 1 | 1.00 | 0.00 | 2 | 1 | 1.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| WB Left | 22 | 0 | 0.96 | 0.02 | 41 | 0 | 0.98 | 0.03 |
| Comb. L-T | | 1 | | | | 1 | | |
| WB Thru | 1 | 0 | 0.04 | 0.01 | 1 | 0 | 0.02 | 0.03 |
| Comb. T-R | | 0 | | | | 0 | | |
| WB Right | 217 | 1 | 1.00 | 0.14 | 621 | 1 | 1.00 | 0.41 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 3 | 1 | 1.00 | 0.00 | 1 | 1 | 1.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | |
| NB Thru | 72 | 1 | 1.00 | 0.05 | 152 | 1 | 1.00 | 0.10 |
| Comb. T-R | | 0 | | | | 0 | | |
| NB Right | 17 | 1 | 1.00 | 0.01 | 35 | 1 | 1.00 | 0.02 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 444 | 1 | 1.00 | 0.30 | 279 | 1 | 1.00 | 0.19 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 121 | 0 | 1.00 | 0.08 | 89 | 0 | 1.00 | 0.06 |
| Comb. T-R | | 1 | | | | 1 | | |
| SB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.15 | E-W: | 0.41 |
| | N-S: | 0.34 | N-S: | 0.28 |
| | Total: | 0.49 | Total: | 0.70 |
| Lost Time | | 0.10 | | 0.10 |
| V/C | | 0.587 | | 0.796 |
| Level of Service | | A | | C |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 6 | 16 | 1 | 18 | 34 | 359 | 8 | 37 | 513 | 6 |
| Future Vol, veh/h | 1 | 0 | 6 | 16 | 1 | 18 | 34 | 359 | 8 | 37 | 513 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 7 | 17 | 1 | 20 | 37 | 390 | 9 | 40 | 558 | 7 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1121 | 1115 | 562 | 1114 | 1114 | 395 | 565 | 0 | 0 | 399 | 0 | 0 |
| Stage 1 | 642 | 642 | - | 469 | 469 | - | - | - | - | - | - | - |
| Stage 2 | 479 | 473 | - | 645 | 645 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 183 | 208 | 526 | 185 | 208 | 654 | 1007 | - | - | 1160 | - | - |
| Stage 1 | 463 | 469 | - | 575 | 561 | - | - | - | - | - | - | - |
| Stage 2 | 568 | 558 | - | 461 | 467 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 167 | 193 | 526 | 173 | 193 | 654 | 1007 | - | - | 1160 | - | - |
| Mov Cap-2 Maneuver | 167 | 193 | - | 173 | 193 | - | - | - | - | - | - | - |
| Stage 1 | 446 | 453 | - | 554 | 540 | - | - | - | - | - | - | - |
| Stage 2 | 530 | 537 | - | 440 | 451 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 14 | 19.9 | 0.7 | 0.5 |
| HCM LOS | B | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1007 | - | - | 167 | 526 | 280 | 1160 | - | - |
| HCM Lane V/C Ratio | 0.037 | - | - | 0.007 | 0.012 | 0.136 | 0.035 | - | - |
| HCM Control Delay (s) | 8.7 | - | - | 26.7 | 11.9 | 19.9 | 8.2 | - | - |
| HCM Lane LOS | A | - | - | D | B | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | 0 | 0.5 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 2 | 37 | 18 | 0 | 16 | 16 | 350 | 16 | 19 | 237 | 3 |
| Future Vol, veh/h | 4 | 2 | 37 | 18 | 0 | 16 | 16 | 350 | 16 | 19 | 237 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 2 | 40 | 20 | 0 | 17 | 17 | 380 | 17 | 21 | 258 | 3 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 733 | 733 | 260 | 746 | 726 | 389 | 261 | 0 | 0 | 397 | 0 | 0 |
| Stage 1 | 302 | 302 | - | 423 | 423 | - | - | - | - | - | - | - |
| Stage 2 | 431 | 431 | - | 323 | 303 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 336 | 348 | 779 | 330 | 351 | 659 | 1303 | - | - | 1162 | - | - |
| Stage 1 | 707 | 664 | - | 609 | 588 | - | - | - | - | - | - | - |
| Stage 2 | 603 | 583 | - | 689 | 664 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 320 | 337 | 779 | 304 | 340 | 659 | 1303 | - | - | 1162 | - | - |
| Mov Cap-2 Maneuver | 320 | 337 | - | 304 | 340 | - | - | - | - | - | - | - |
| Stage 1 | 698 | 652 | - | 601 | 580 | - | - | - | - | - | - | - |
| Stage 2 | 579 | 575 | - | 639 | 652 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.8 | 14.7 | 0.3 | 0.6 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1303 | - | - | 325 | 779 | 407 | 1162 | - | - |
| HCM Lane V/C Ratio | 0.013 | - | - | 0.02 | 0.052 | 0.091 | 0.018 | - | - |
| HCM Control Delay (s) | 7.8 | - | - | 16.3 | 9.9 | 14.7 | 8.2 | - | - |
| HCM Lane LOS | A | - | - | C | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.2 | 0.3 | 0.1 | - | - |

# Appendix C – Cumulative Project List

**Cumulative Development Projects Trip Generation (As of July 21, 2022)**

| Project | Land Use | Size | ADT | A.M. Peak Hour | P.M. Peak Hour | Note |
|---|---|---|---|---|---|---|
| Triliad Development[1] | Movie Studio | 37 Acres | 3,108 | 174 | 168 | Approved |
| Pacific Communities[2] | Single Family Residential | 157 Single Units/300 Condo Units | 3,245 | 250 | 315 | Approved |
| Essex Moorpark, LLC[3] | Multi-Family Residential | 200 Units | 1,330 | 102 | 124 | Approved |
| Spring Road, LLC[4] | Condominiums | 95 Units | 552 | 42 | 49 | Approved |
| City Ventures | Single Family Residential | 110 Units | 1,047 | 83 | 110 | Approved |
| Oakmont Senior Living[5] | Senior Residential | 84 units/beds | 219 | 16 | 22 | Approved/Under Construction |
| Birdsall Group, LLC | Single Family Residential | 21 Units | 200 | 16 | 12 | Approved |
| Aldersgate Senior Housing[6] | Senior Residential | 390 Units | 1,468 | 90 | 125 | Approved |
| High Street Depot/Daly Group[7] | Downtown Mixed-Use | 13,656 sf retail and 95 apartments | 1,703 | 79 | 144 | Approved |
| Green Island Villas/Kozar[8] | Condominiums | 69 Units | 505 | 32 | 39 | Approved |
| Everett Street Terraces/ Chiu[9] | Condominiums | 60 Units | 292 | 21 | 25 | Proposed |
| Beltramo Ranch[10] | Single Family Res | 47 units | 378 | 31 | 43 | Proposed |
| AHA Scattered Sites | Multi-family | 107,196 sf | 410 | 26 | 31 | Proposed |
| Hitch Ranch[11] | Single and Multi-Family | 755 units | 6,436 | 467 | 608 | Proposed |
| Moorpark 67/Rasmussen[12] | Single Family Residential | 139 Units | 1,359 | 107 | 143 | Proposed |
| *Amazon Distribution Center[13] | Industrial | Reuse of 189,364 sf industrial | 994 | -17 | 12 | Under Construction |
| **National Ready Mix | Batch Plant | 10 acres | 600 | 20 | 20 | Unknown |
| ***CEMEX | Quarry | N/A | 980 | 276 | 148 | Unknown |
| ***Wayne J. Sand & Gravel | Quarry | N/A | 504 | 92 | 34 | Unknown |
| ***Grimes Rock | Quarry | N/A | 480 | 35 | 14 | Unknown |
| **Total Trips** | | | | | | |

*Trip calculations include baseline of existing industrial use (site is developed). ADT is a gross figure and A.M./P.M. are net figures based on previous use.

**No proposal to change or expand operations. Existing use creates significant truck traffic through Moorpark.

***Operations under County jurisdiction but bring significant truck traffic through Moorpark. Please contact Ventura County to determine whether any active permits for expansion are being reviewed or processed.

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[1] *Moorpark West Studio Mitigated Negative Declaration (Page B-60).* Impact Sciences, June 2010.

[2] *Traffic Impact Analysis for the Pacific Communities (Pacific Arroyo) Residential Project (Page 22).* KOA Corporation, November 2010.

[3] *Traffic Impact Analysis – Essex Apartments, Moorpark (Page 10).* KOA Corporation, June 2013.

[4] *Moorpark Development Traffic Study (Page 18).* STC Traffic Inc, November 2015.

[5] *Traffic Analysis for the Oakmont Senior Living Project – City of Moorpark (Page 2).* Associated Transportation Engineers, July 2019.

[6] *Aldersgate Senior Living Project City of Moorpark, California (Page 9).* Associated Transportation Engineers, February 2016.

[7] *Traffic and Parking Study for the Moorpark Railroad Depot Project (Page 8).* Associated Transportation Engineers, November 2018.

[8] *Site Access Evaluation for the 635 W. Los Angeles Avenue Residential Project (Page 5).* Gibson Transportation Consulting, Inc., August 2019.

[9] *Traffic Impact Study Everett Street Terraces Project (Page 17).* Linscott, Law & Greenspan, Engineers, February 2016.

[10] *Traffic and Circulation Study for the Beltramo Ranch Residential Project, City of Moorpark (Page 7).* Associated Transportation Engineers, May 2021.

[11] *Traffic Impact Analysis for the Proposed Hitch Ranch Specific Plan (Page 28).* Impact Sciences, January 2021.

[12] *Traffic Impact Analysis – North Ranch Residential Development (Page 13).* K2 Traffic Engineering, Inc., December 2021.

[13] *Traffic Impact Study for 6000 Condor Drive Warehousing/Distribution Facility (Page 13).* NV5 Engineers and Consultants, Inc., December 2020.

# Appendix D – Internal Capture Trip Calculations

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Civic Center Master Plan Project | **Organization:** | Psomas |
| **Project Location:** | Moorpark, CA | **Performed By:** | QS |
| **Scenario Description:** | | **Date:** | Jul-22 |
| **Analysis Year:** | 2022 | **Checked By:** | |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 8 | 7 | 2 |
| Retail | | | | 31 | 18 | 12 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 0 | | |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 39 | 25 | 14 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 1 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 39 | 25 | 14 |
| Internal Capture Percentage | 5% | 4% | 7% |
| | | | |
| External Vehicle-Trips[3] | 37 | 24 | 13 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 0% | 50% |
| Retail | 6% | 0% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | N/A | N/A |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Civic Center Master Plan Project |
| **Analysis Period:** | **AM Street Peak Hour** |

**Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 7 | 7 | 1.00 | 2 | 2 |
| Retail | 1.00 | 18 | 18 | 1.00 | 12 | 12 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 0 | 0 | 1.00 | 0 | 0 |

**Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 1 | 1 | 0 | 0 | 0 |
| Retail | 3 | | 2 | 0 | 2 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 6 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 0 | 0 |
| Restaurant | 1 | 1 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 3 | 0 | 0 | | 0 |
| Hotel | 0 | 1 | 0 | 0 | 0 | |

**Table 9-A (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 7 | 7 | 7 | 0 | 0 |
| Retail | 1 | 17 | 18 | 17 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-A (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 1 | 1 | 2 | 1 | 0 | 0 |
| Retail | 0 | 12 | 12 | 12 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Civic Center Master Plan Project | **Organization:** | Psomas |
| **Project Location:** | Moorpark, CA | **Performed By:** | QS |
| **Scenario Description:** | | **Date:** | Jul-22 |
| **Analysis Year:** | 2022 | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 11 | 4 | 7 |
| Retail | | | | 86 | 43 | 43 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 0 | | |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 97 | 47 | 50 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 1 | 0 | 0 | 0 | 0 |
| Retail | 1 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 97 | 47 | 50 |
| Internal Capture Percentage | 4% | 4% | 4% |
| | | | |
| External Vehicle-Trips[3] | 93 | 45 | 48 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 25% | 14% |
| Retail | 2% | 2% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | N/A | N/A |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Civic Center Master Plan Project |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 4 | 4 | 1.00 | 7 | 7 |
| Retail | 1.00 | 43 | 43 | 1.00 | 43 | 43 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 0 | 0 | 1.00 | 0 | 0 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 1 | 0 | 0 | 0 | 0 |
| Retail | 1 | | 12 | 2 | 11 | 2 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 3 | 0 | 0 | 0 | 0 |
| Retail | 1 | | 0 | 0 | 0 | 0 |
| Restaurant | 1 | 22 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 2 | 0 | | 0 | 0 |
| Residential | 2 | 4 | 0 | 0 | | 0 |
| Hotel | 0 | 1 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 1 | 3 | 4 | 3 | 0 | 0 |
| Retail | 1 | 42 | 43 | 42 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 1 | 6 | 7 | 6 | 0 | 0 |
| Retail | 1 | 42 | 43 | 42 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Civic Center Master Plan Project | **Organization:** | Psomas |
| **Project Location:** | Moorpark, CA | **Performed By:** | QS |
| **Scenario Description:** | | **Date:** | Jul-22 |
| **Analysis Year:** | 2022 | **Checked By:** | |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 0 | | |
| Retail | | | | 31 | 18 | 12 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 30 | 7 | 23 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 61 | 25 | 35 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 60 | 25 | 35 |
| Internal Capture Percentage | 0% | 0% | 0% |
| | | | |
| External Vehicle-Trips[3] | 60 | 25 | 35 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | N/A | N/A |
| Retail | 0% | 0% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 0% | 0% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Civic Center Master Plan Project |
| **Analysis Period:** | **AM Street Peak Hour** |

**Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 18 | 18 | 1.00 | 12 | 12 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 7 | 7 | 1.00 | 23 | 23 |
| Hotel | 1.00 | 0 | 0 | 1.00 | 0 | 0 |

**Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 3 | | 2 | 0 | 2 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 5 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 6 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 1 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 3 | 0 | 0 | | 0 |
| Hotel | 0 | 1 | 0 | 0 | 0 | |

**Table 9-A (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | 18 | 18 | 18 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 7 | 7 | 7 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-A (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | 12 | 12 | 12 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 23 | 23 | 23 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Civic Center Master Plan Project | **Organization:** | Psomas |
| **Project Location:** | Moorpark, CA | **Performed By:** | QS |
| **Scenario Description:** | | **Date:** | Jul-22 |
| **Analysis Year:** | 2022 | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 0 | | |
| Retail | | | | 86 | 43 | 43 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 38 | 24 | 14 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 124 | 67 | 57 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 11 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 4 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 124 | 67 | 57 |
| Internal Capture Percentage | 24% | 22% | 26% |
| | | | |
| External Vehicle-Trips[3] | 94 | 52 | 42 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | N/A | N/A |
| Retail | 9% | 26% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 46% | 29% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Civic Center Master Plan Project |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 43 | 43 | 1.00 | 43 | 43 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 24 | 24 | 1.00 | 14 | 14 |
| Hotel | 1.00 | 0 | 0 | 1.00 | 0 | 0 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 1 | | 12 | 2 | 11 | 2 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 1 | 6 | 3 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 3 | 0 | 0 | 1 | 0 |
| Retail | 0 | | 0 | 0 | 11 | 0 |
| Restaurant | 0 | 22 | | 0 | 4 | 0 |
| Cinema/Entertainment | 0 | 2 | 0 | | 1 | 0 |
| Residential | 0 | 4 | 0 | 0 | | 0 |
| Hotel | 0 | 1 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 4 | 39 | 43 | 39 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 11 | 13 | 24 | 13 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 11 | 32 | 43 | 32 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 4 | 10 | 14 | 10 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Civic Center Master Plan Project | **Organization:** | Psomas |
| **Project Location:** | Moorpark, CA | **Performed By:** | QS |
| **Scenario Description:** | | **Date:** | Jul-22 |
| **Analysis Year:** | 2022 | **Checked By:** | |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 73 | 55 | 18 |
| Retail | | | | 31 | 18 | 12 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 30 | 7 | 23 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 134 | 80 | 53 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 5 | 0 | 0 | 0 | 0 |
| Retail | 2 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 133 | 80 | 53 |
| Internal Capture Percentage | 11% | 9% | 13% |
| | | | |
| External Vehicle-Trips[3] | 119 | 73 | 46 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 4% | 28% |
| Retail | 28% | 17% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 0% | 0% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Civic Center Master Plan Project |
| **Analysis Period:** | **AM Street Peak Hour** |

**Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 55 | 55 | 1.00 | 18 | 18 |
| Retail | 1.00 | 18 | 18 | 1.00 | 12 | 12 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 7 | 7 | 1.00 | 23 | 23 |
| Hotel | 1.00 | 0 | 0 | 1.00 | 0 | 0 |

**Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 5 | 11 | 0 | 0 | 0 |
| Retail | 3 | | 2 | 0 | 2 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 5 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 6 | 0 | 0 | 0 | 0 |
| Retail | 2 | | 0 | 0 | 0 | 0 |
| Restaurant | 8 | 1 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 2 | 3 | 0 | 0 | | 0 |
| Hotel | 2 | 1 | 0 | 0 | 0 | |

**Table 9-A (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 2 | 53 | 55 | 53 | 0 | 0 |
| Retail | 5 | 13 | 18 | 13 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 7 | 7 | 7 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-A (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 5 | 13 | 18 | 13 | 0 | 0 |
| Retail | 2 | 10 | 12 | 10 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 23 | 23 | 23 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 8-51 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Civic Center Master Plan Project | **Organization:** | Psomas |
| **Project Location:** | Moorpark, CA | **Performed By:** | QS |
| **Scenario Description:** | | **Date:** | Jul-22 |
| **Analysis Year:** | 2022 | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 38 | 9 | 28 |
| Retail | | | | 86 | 43 | 43 |
| Restaurant | | | | 0 | | |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 38 | 24 | 14 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | | | | 0 | | |
| Total | | | | 162 | 76 | 85 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | % Transit | % Non-Motorized | Veh. Occ. | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses[2] | | | | | | |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 3 | 0 | 0 | 1 | 0 |
| Retail | 1 | | 0 | 0 | 11 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 1 | 4 | 0 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 161 | 76 | 85 |
| Internal Capture Percentage | 26% | 28% | 25% |
| | | | |
| External Vehicle-Trips[3] | 119 | 55 | 64 |
| External Transit-Trips[4] | 0 | 0 | 0 |
| External Non-Motorized Trips[4] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 22% | 14% |
| Retail | 16% | 28% |
| Restaurant | N/A | N/A |
| Cinema/Entertainment | N/A | N/A |
| Residential | 50% | 36% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

| | |
|---|---|
| **Project Name:** | Civic Center Master Plan Project |
| **Analysis Period:** | **PM Street Peak Hour** |

**Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends**

| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 9 | 9 | 1.00 | 28 | 28 |
| Retail | 1.00 | 43 | 43 | 1.00 | 43 | 43 |
| Restaurant | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 24 | 24 | 1.00 | 14 | 14 |
| Hotel | 1.00 | 0 | 0 | 1.00 | 0 | 0 |

**Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 6 | 1 | 0 | 1 | 0 |
| Retail | 1 | | 12 | 2 | 11 | 2 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 1 | 6 | 3 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 3 | 0 | 0 | 1 | 0 |
| Retail | 3 | | 0 | 0 | 11 | 0 |
| Restaurant | 3 | 22 | | 0 | 4 | 0 |
| Cinema/Entertainment | 1 | 2 | 0 | | 1 | 0 |
| Residential | 5 | 4 | 0 | 0 | | 0 |
| Hotel | 0 | 1 | 0 | 0 | 0 | |

**Table 9-P (D): Internal and External Trips Summary (Entering Trips)**

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 2 | 7 | 9 | 7 | 0 | 0 |
| Retail | 7 | 36 | 43 | 36 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 12 | 12 | 24 | 12 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 9-P (O): Internal and External Trips Summary (Exiting Trips)**

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|---|---|---|---|---|---|---|
| | Internal | External | Total | Vehicles[1] | Transit[2] | Non-Motorized[2] |
| Office | 4 | 24 | 28 | 24 | 0 | 0 |
| Retail | 12 | 31 | 43 | 31 | 0 | 0 |
| Restaurant | 0 | 0 | 0 | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 5 | 9 | 14 | 9 | 0 | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | 0 |
| All Other Land Uses[3] | 0 | 0 | 0 | 0 | 0 | 0 |

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

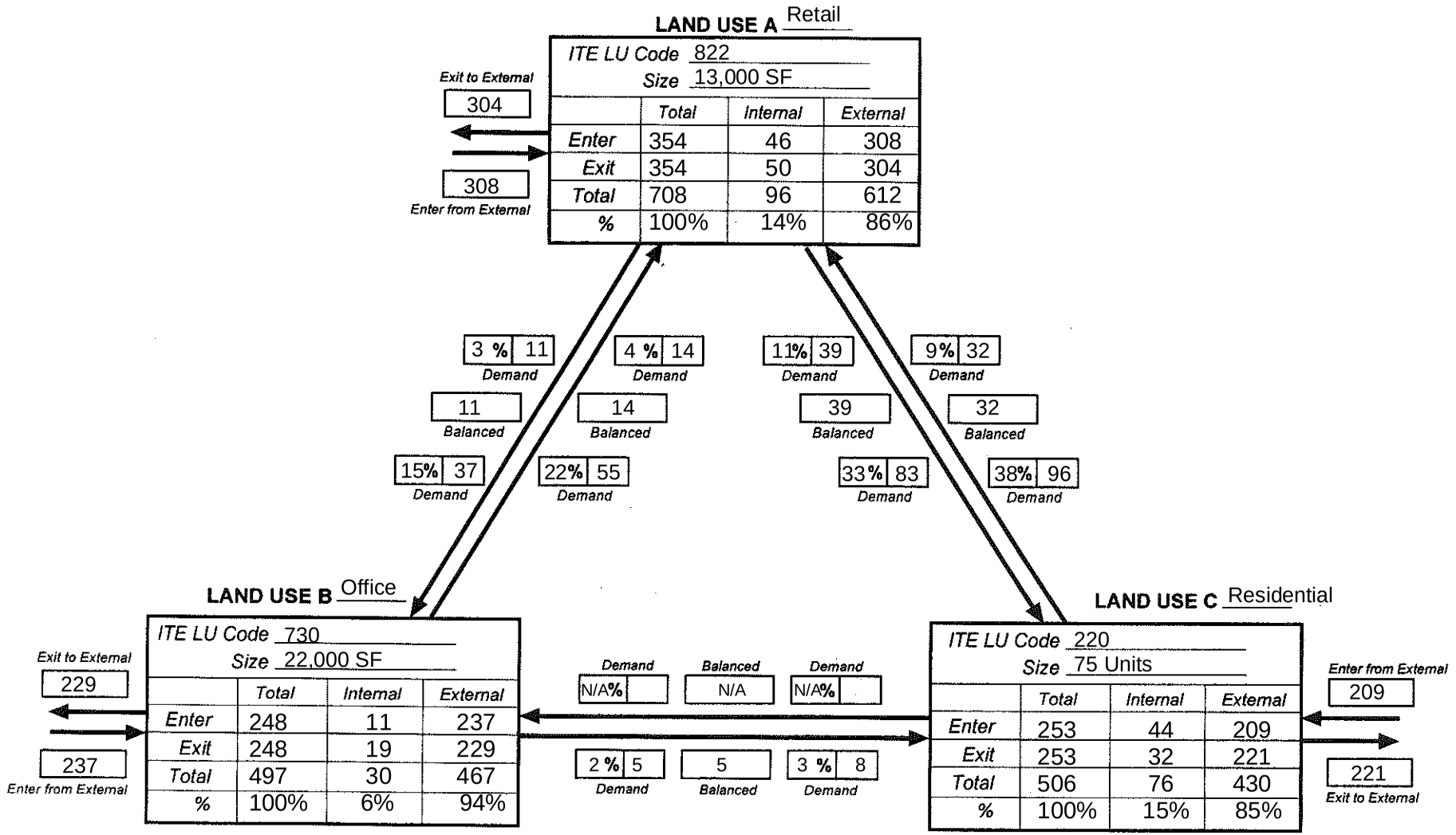
| Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development | | | |
|---|---|---|---|
| Land Use Pairs | | Weekday | |
| | | AM Peak Hour | PM Peak Hour |
| From OFFICE | To Office | 0.0% | 0.0% |
| | To Retail | 28.0% | 20.0% |
| | To Restaurant | 63.0% | 4.0% |
| | To Cinema/Entertainment | 0.0% | 0.0% |
| | To Residential | 1.0% | 2.0% |
| | To Hotel | 0.0% | 0.0% |
| From RETAIL | To Office | 29.0% | 2.0% |
| | To Retail | 0.0% | 0.0% |
| | To Restaurant | 13.0% | 29.0% |
| | To Cinema/Entertainment | 0.0% | 4.0% |
| | To Residential | 14.0% | 26.0% |
| | To Hotel | 0.0% | 5.0% |
| From RESTAURANT | To Office | 31.0% | 3.0% |
| | To Retail | 14.0% | 41.0% |
| | To Restaurant | 0.0% | 0.0% |
| | To Cinema/Entertainment | 0.0% | 8.0% |
| | To Residential | 4.0% | 18.0% |
| | To Hotel | 3.0% | 7.0% |
| From CINEMA/ENTERTAINMENT | To Office | 0.0% | 2.0% |
| | To Retail | 0.0% | 21.0% |
| | To Restaurant | 0.0% | 31.0% |
| | To Cinema/Entertainment | 0.0% | 0.0% |
| | To Residential | 0.0% | 8.0% |
| | To Hotel | 0.0% | 2.0% |
| From RESIDENTIAL | To Office | 2.0% | 4.0% |
| | To Retail | 1.0% | 42.0% |
| | To Restaurant | 20.0% | 21.0% |
| | To Cinema/Entertainment | 0.0% | 0.0% |
| | To Residential | 0.0% | 0.0% |
| | To Hotel | 0.0% | 3.0% |
| From HOTEL | To Office | 75.0% | 0.0% |
| | To Retail | 14.0% | 16.0% |
| | To Restaurant | 9.0% | 68.0% |
| | To Cinema/Entertainment | 0.0% | 0.0% |
| | To Residential | 0.0% | 2.0% |
| | To Hotel | 0.0% | 0.0% |

| Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development | | | |
|---|---|---|---|
| Land Use Pairs | | Weekday | |
| | | AM Peak Hour | PM Peak Hour |
| To OFFICE | From Office | 0.0% | 0.0% |
| | From Retail | 4.0% | 31.0% |
| | From Restaurant | 14.0% | 30.0% |
| | From Cinema/Entertainment | 0.0% | 6.0% |
| | From Residential | 3.0% | 57.0% |
| | From Hotel | 3.0% | 0.0% |
| To RETAIL | From Office | 32.0% | 8.0% |
| | From Retail | 0.0% | 0.0% |
| | From Restaurant | 8.0% | 50.0% |
| | From Cinema/Entertainment | 0.0% | 4.0% |
| | From Residential | 17.0% | 10.0% |
| | From Hotel | 4.0% | 2.0% |
| To RESTAURANT | From Office | 23.0% | 2.0% |
| | From Retail | 50.0% | 29.0% |
| | From Restaurant | 0.0% | 0.0% |
| | From Cinema/Entertainment | 0.0% | 3.0% |
| | From Residential | 20.0% | 14.0% |
| | From Hotel | 6.0% | 5.0% |
| To CINEMA/ENTERTAINMENT | From Office | 0.0% | 1.0% |
| | From Retail | 0.0% | 26.0% |
| | From Restaurant | 0.0% | 32.0% |
| | From Cinema/Entertainment | 0.0% | 0.0% |
| | From Residential | 0.0% | 0.0% |
| | From Hotel | 0.0% | 0.0% |
| To RESIDENTIAL | From Office | 0.0% | 4.0% |
| | From Retail | 2.0% | 46.0% |
| | From Restaurant | 5.0% | 16.0% |
| | From Cinema/Entertainment | 0.0% | 4.0% |
| | From Residential | 0.0% | 0.0% |
| | From Hotel | 0.0% | 0.0% |
| To HOTEL | From Office | 0.0% | 0.0% |
| | From Retail | 0.0% | 17.0% |
| | From Restaurant | 4.0% | 71.0% |
| | From Cinema/Entertainment | 0.0% | 1.0% |
| | From Residential | 0.0% | 12.0% |
| | From Hotel | 0.0% | 0.0% |

Analyst QS
Date July-2022

# MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Name of Dvlpt Civic Center Master Plan Project
Time Period Daily




## Net External Trips for Multi-Use Development

| | LAND USE A | LAND USE B | LAND USE C | TOTAL |
|---|---|---|---|---|
| Enter | 308 | 237 | 209 | 754 |
| Exit | 304 | 229 | 221 | 754 |
| Total | 612 | 467 | 430 | 1509 |
| Single-Use Trip Gen. Est. | 708 | 497 | 506 | 1711 |

Source: Kaku Associates, Inc.

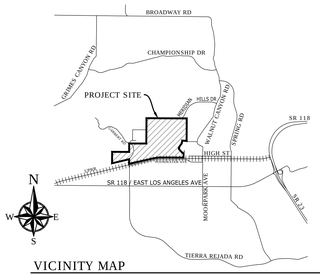
INTERNAL CAPTURE 12%

# Appendix E – Proposed High Street Improvement Plans

# TENTATIVE TRACT NO. 5708
# HITCH RANCH

IN THE CITY OF MOORPARK

378 NUMBERED LOTS AND 64 LETTERED LOTS (LOTS A-AJ & S1-S28)




## VICINITY MAP

N.T.S.

## LAND USE / ZONING INFORMATION

| | | | |
|---|---|---|---|
| LAND USE | EXISTING: | VACANT | |
| | PROPOSED: | RESIDENTIAL, PUBLIC | |
| ZONING | EXISTING: | AE-40 & RPD20U-N-D | |
| | PROPOSED: | HITCH RANCH SPECIFIC PLAN | |
| AREA | GROSS AREA: | 277.30 ACRES ± | |
| FLOOD ZONE | NO SCREEN: | AREAS OF MINIMAL FLOOD HAZARD (ZONE X) | |
| LOTS | 442 LOT DEVELOPMENT | | 277.30 ACRES ± |
| | - 372 CONVENTIONAL SINGLE FAMILY DWELLING LOTS | | 47.63 ACRES ± |
| | - 2 SINGLE FAMILY MOTOR-COURT LOTS | | 5.51 ACRES ± |
| | - 2 MULTI-FAMILY DWELLING LOT (MED. DENSITY) | | 7.24 ACRES ± |
| | - 1 MULTI-FAMILY DWELLING LOT (HIGH DENSITY) | | 11.75 ACRES ± |
| | - 28 OPEN SPACE LOTS | | 96.24 ACRES ± |
| | - 4 BASIN / WATER QUALITY LOTS | | 18.24 ACRES ± |
| | - 2 RECREATION SPACE LOTS | | 4.05 ACRES ± |
| | - 2 PARK / PASSIVE REC LOTS | | 8.32 ACRES ± |
| | - 28 PRIVATE STREET/DRIVE LOTS | | 23.30 ACRES ± |
| | - 1 LOT (NOT A PART - FUTURE) | | 23.36 ACRES ± |
| | - PUBLIC STREETS | | 31.66 ACRES ± |

## CONTACT INFO

| | |
|---|---|
| OWNER/DEVELOPER | RWC HITCH RANCH, LLC<br>2301 ROSECRANS AVE., SUITE 1150<br>EL SEGUNDO, CA 90245<br>ATTN: HARRIET RAPISTA<br>(310) 546-5781 |
| CIVIL ENGINEER | ENCOMPASS CONSULTANT GROUP, INC.<br>333 N. LANTANA ST., SUITE 287<br>CAMARILLO, CA 93010<br>ATTN: GREG MUSSER, RCE 77627<br>(805) 416-8716 |
| GEOTECHNICAL ENGINEER | ALBUS-KEEFE & ASSOCIATES, INC.<br>1011 N. ARMANDO ST.<br>ANAHEIM, CA 92806<br>ATTN: DAVIS ALBUS, RCE 45443, CEG 2455<br>(714) 666-8702 |
| LAND PLANNING | DEVELOPMENT PLANNING SERVICES, INC.<br>211 VILLAGE COMMONS BLVD., SUITE 15<br>CAMARILLO, CA 93012<br>ATTN: DENNIS HARDGRAVE<br>(805) 484-8303 |

## PREPARER'S STATEMENT

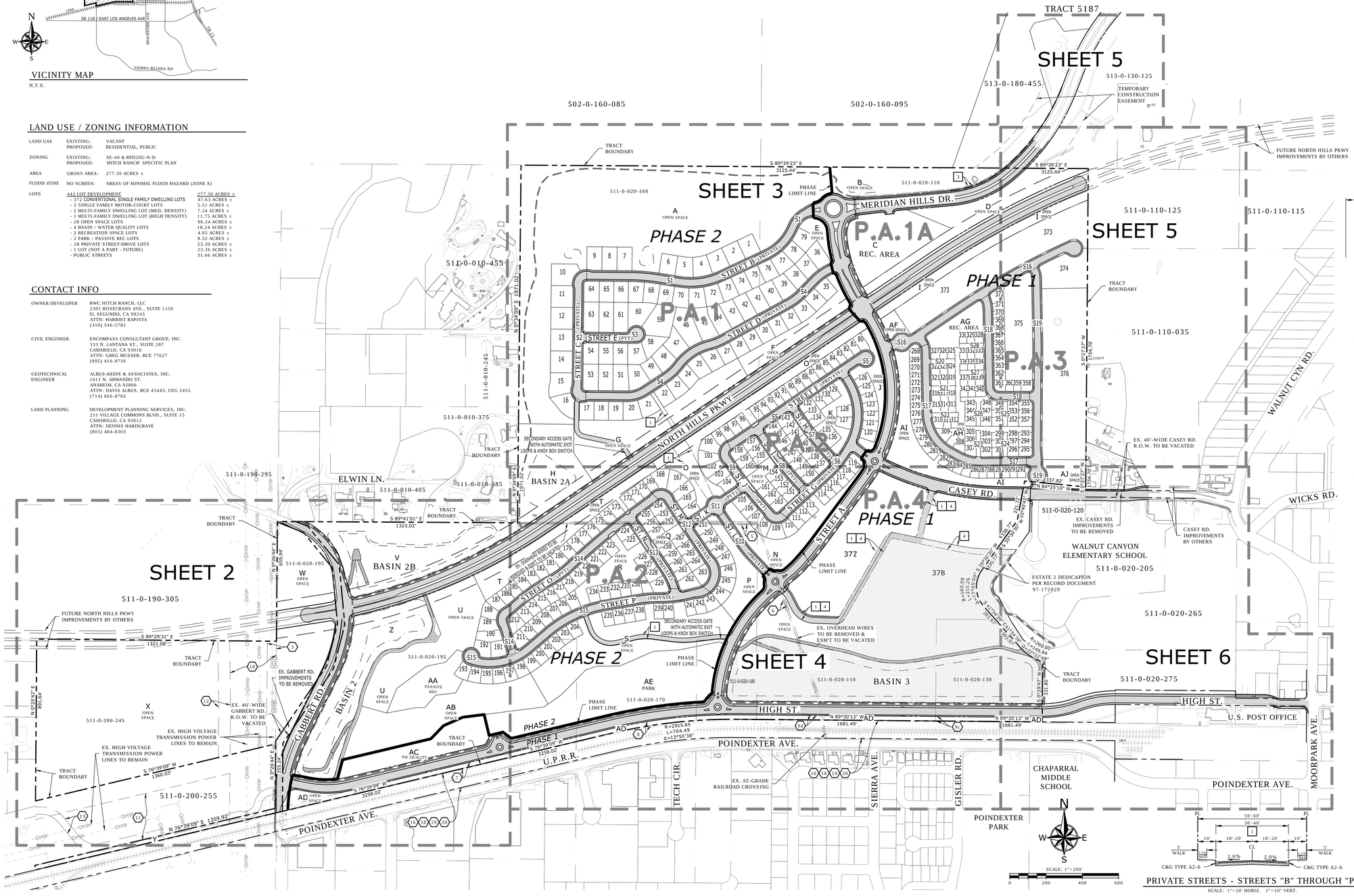
THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ENGINEER: GREG MUSSER, RCE 77627 DATE: 4/6/2022

REGISTERED PROFESSIONAL ENGINEER — GREGORY J. MUSSER — NO 77627 — CIVIL — STATE OF CALIFORNIA

## SITE SUMMARY

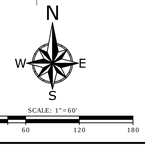
| | LAND USE | ACRES | DU/AC | DU | % |
|---|---|---|---|---|---|
| PLANNING AREA 1 [LOTS 1-79, A, B E-G, S1-S4] | SFD UNITS (& PRIVATE ST) | 25.21 | | 79 | 46 |
| | OPEN SPACE | 17.33 | | | 31 |
| | MANUFACTURED SLOPES | 12.87 | | | 23 |
| | SUBTOTAL | 55.41 ± | 1.43 | 79 | 100 |
| PLANNING AREA 1A [LOTS C, D] | RECREATION LOT | 3.12 | | | 51 |
| | MANUFACTURED SLOPES | 2.96 | | | 49 |
| | SUBTOTAL | 6.08 ± | | | 100 |
| PLANNING AREA 2 [LOTS 80-267, J-U, AA-AC, S5-S15] | SFD UNITS (& PRIVATE ST) | 32.27 | | 188 | 52 |
| | OPEN SPACE | 7.40 | | | 12 |
| | MANUFACTURED SLOPES | 18.55 | | | 30 |
| | PASSIVE REC LOT | 1.55 | | | 2 |
| | WATER QUALITY | 2.33 | | | 4 |
| | SUBTOTAL | 62.10 ± | 3.03 | 188 | 100 |
| PLANNING AREA 3 [LOTS 268-376, I, AF-AI, S16-S28] | SFD UNITS (& PRIVATE ST) | 17.28 | | 160 | 53 |
| | MFD UNITS (& PRIVATE ST) | 8.93 | | 93 | 27 |
| | OPEN SPACE | 1.60 | | | 5 |
| | MANUFACTURED SLOPES | 4.06 | | | 12 |
| | RECREATION LOT | 0.93 | | | 3 |
| | SUBTOTAL | 32.80 ± | 7.71 | 253 | 100 |
| PLANNING AREA 4 [LOT 377] | MFD UNITS | 8.28 | | 235 | 71 |
| | MANUFACTURED SLOPES | 3.39 | | | 29 |
| | SUBTOTAL | 11.67 ± | 20.14 | 235 | 100 |
| [LOTS W-Y] | OPEN SPACE | 28.78 ± | | | 100 |
| PUBLIC FACILITIES | PUBLIC STREETS | 31.66 | | | 56 |
| | VCWPD EASEMENT [LOT AD] | 2.68 | | | 5 |
| | DET. BASIN 2 [LOT Z] | 5.94 | | | 10 |
| | DET. BASIN 2A [LOT H] | 3.67 | | | 6 |
| | DET. BASIN 2B [LOT V] | 6.30 | | | 11 |
| | PARK [LOT AE] | 6.77 | | | 12 |
| | SUBTOTAL | 57.02 ± | | | 100 |
| | TOTAL | 253.86 ± | 2.97 | 755 | |
| LOT 378 | CITY DONATION PARCEL (NOT A PART) | 23.44 ± | | | 100 |
| | GRAND TOTAL | 277.30 ± | | | |


SHEET 5
SHEET 3
SHEET 2
SHEET 4
SHEET 6
TRACT 5187
513-0-130-125
513-0-180-455
TEMPORARY CONSTRUCTION EASEMENT
502-0-160-085
502-0-160-095
511-0-020-160
511-0-020-110
511-0-110-125
511-0-110-115
511-0-110-035
511-0-010-455
511-0-010-245
511-0-010-375
511-0-010-385
511-0-010-405
511-0-190-295
511-0-190-305
511-0-020-195
511-0-020-245
511-0-200-255
511-0-020-120
511-0-020-205
511-0-020-265
511-0-020-275
511-0-020-180
511-0-020-130
511-0-020-170
PHASE 1
PHASE 2
PHASE LIMIT LINE
TRACT BOUNDARY
FUTURE NORTH HILLS PKWY IMPROVEMENTS BY OTHERS
MERIDIAN HILLS DR.
NORTH HILLS PKWY
CASEY RD.
HIGH ST.
POINDEXTER AVE.
ELWIN LN.
WICKS RD.
WALNUT CYN RD.
MOORPARK AVE.
GISLER RD.
SIERRA AVE.
TECH CIR.
GABBERT RD.
P.A.1
P.A.1A
P.A.2
P.A.3
P.A.4
BASIN 2A
BASIN 2B
BASIN 3
STREET A
STREET B (PRIVATE)
STREET C (PRIVATE)
STREET D (PRIVATE)
STREET E (PVT)
STREET F (PRIVATE)
STREET O (PRIVATE)
STREET P (PRIVATE)
EX. CASEY RD. IMPROVEMENTS TO BE REMOVED
CASEY RD. IMPROVEMENTS BY OTHERS
EX. 40'-WIDE CASEY RD. R.O.W. TO BE VACATED
WALNUT CANYON ELEMENTARY SCHOOL
ESTATE 2 DEDICATION PER RECORD DOCUMENT 97-172929
EX. GABBERT RD. IMPROVEMENTS TO BE REMOVED
EX. 40'-WIDE GABBERT RD. R.O.W. TO BE VACATED
EX. HIGH VOLTAGE TRANSMISSION POWER LINES TO REMAIN
EX. OVERHEAD WIRES TO BE REMOVED & ESMT TO BE VACATED
EX. AT-GRADE RAILROAD CROSSING
U.P.R.R.
CHAPARRAL MIDDLE SCHOOL
U.S. POST OFFICE
POINDEXTER PARK
SECONDARY ACCESS GATE WITH AUTOMATIC EXIT LOOPS & KNOX BOX SWITCH
PHASE LIMIT LINE
PHASE LINE
S 89°39'23" E 3125.44'
S 89°41'01" E 1323.02'
S 89°29'31" E 1321.08'
N 0°25'44" E 1971.02'
N 0°25'44" E 1359.92'
N 0°25'44" E 891.64'
S 76°39'09" W 1359.92'
S 76°39'09" W 1360.03'
S 76°39'09" W 3258.02'
N 89°30'13" W 1681.49'
R=2915.65' L=704.49' Δ=13°50'38"
R=360.00' L=16.94' Δ=2°41'48"
R=360.00' L=245.26' Δ=39°02'47"
N 84°25'10" W 337.82'
S 0°27'27" W 134.70'
S 0°29'47" W 331.85'
N 0°24'44" E 1971.02'
N 0°24'44" E 1359.92'
N 0°24'44" E 1355.04'
S 0°24'44" W 1355.04'
S 0°24'44" W 1359.92'
S 0°24'44" W 1359.92'
S 0°24'44" W 1355.04'
S 0°24'44" W 1359.92'
N 0°24'44" E 1359.92'
N 0°24'44" E 1355.04'
N 0°24'44" E 1359.92'
N 0°24'44" E 1359.92'
N 0°24'44" E 1355.04'
S 0°24'44" W 1359.92

# HITCH RANCH
## TENTATIVE TRACT MAP NO. 5708
## PRELIMINARY GRADING, DRAINAGE, & UTILITIES
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

SHEET 4

BASIN 2B
BASIN 2
NORTH HILLS PARKWAY
HIGH STREET
"ST. "O" (PVT)
"ST. "P" (PVT)
GABBERT ROAD
POINDEXTER AVENUE
N. COMMERCE AVENUE
U.P.R.R.
WALNUT CYN CHANNEL
PHASE 1
PHASE 2
511-0-190-305
511-0-210-105
511-0-210-115
511-0-210-175
511-0-200-255
511-0-010-235
511-0-010-305
511-0-010-295
511-0-010-165
511-0-010-185
511-0-010-405
511-0-010-385
TRACT BOUNDARY
PROPOSED RIGHT-OF-WAY
FUTURE NORTH HILLS PARKWAY EXTENSION (BY OTHERS)
OFFSITE TRAIL CONNECTION
CONNECT TO EX. WATERLINE
TRANSITION TO EX. IMPROVEMENTS
REMOVE AND REPLACE EX. WATERLINE
VEHICLE TURNAROUND
DISCHARGE DOWN DRAIN TO STREET GUTTER VIA PKWY DRAIN
EX. HIGH VOLTAGE TRANSMISSION POWER LINES TO REMAIN
REMOVE AND REPLACE EX. WATERLINES TO LIMITS SHOWN
REMOVE EX. GABBERT RD. PAVING
EX. GABBERT RD. R.O.W. TO BE VACATED
JOIN EX. IMPROVEMENTS
CONNECT TO EX. SEWER STUB
REMOVE & REPLACE EX. SEWER TO LOS ANGELES AVE. & MIRA SOL DR. INTERSECTION (REPLACE EX. 8" & 12" WITH NEW 15")
DIVERSION PIPE FOR STORM WATER TREATMENT
INLET PIPE FOR STORM WATER TREATMENT DISCHARGE
EX. VCWPD ACCESS RD TO REMAIN
V DETENTION BASIN
W OPEN SPACE
X OPEN SPACE
Y OPEN SPACE
Z DETENTION BASIN
AA PASSIVE REC AREA
AB OPEN SPACE
AC WATER QUALITY
AD OPEN SPACE
AE PARK
T OPEN SPACE
U OPEN SPACE
S 89°29'31" E 1321.08'
N 0°25'42" E 891.48'
N 0°26'44" E 655.94'
S 76°39'09" W 1360.03'
N 76°39'09" E 1359.92'
S 89°41'01" E 1323.07'
S 76°39'09" W 3258.07'





ECG
Encompass Consultant Group
333 N. LANTANA ST., SUITE 287, CAMARILLO, CA 93010
PHONE: 805.322.4443 WEBSITE: WWW.ECGCIVIL.COM
GREGORY J. MUSSER
PROJECT ENGINEER
R.C.E. 77627


DATE: 04/06/2022

SCALE: HORIZ. AS NOTED VERT. N/A

WORK ORDER 0047
DRAWN BY: GJM
CHECKED BY: GHP

SHEET NO. 2 OF 7

DRAWING: s:\projects\0047\02 birch ranch - comstock engineering\acad\tentative map\0047-02_tm.dwg

502-0-160-085

502-0-160-095

513-0-180-455

511-0-010-455

511-0-010-475

511-0-010-245

511-0-010-375

S 89°39'23" E
3125.44'

N 0°24'09" E 1971.02'

OFFSITE TRAIL CONNECTION

TRACT BOUNDARY

PHASE 2

PHASE 1

MERIDIAN HILLS DRIVE

PROPOSED RIGHT-OF-WAY

DEBRIS BASIN

A OPEN SPACE

B OPEN SPACE

C REC. AREA

D OPEN SPACE

E OPEN SPACE

F OPEN SPACE

G OPEN SPACE

J OPEN SPACE

K OPEN SPACE

O OPEN SPACE

AF OPEN SPACE

AI OPEN SPACE

AH OPEN SPACE

AG REC. AREA

STREET "B" (PRIVATE)

STREET "C" (PRIVATE)

STREET "D" (PRIVATE)

STREET "E" (PRIVATE)

STREET "F" (PRIVATE)

STREET "G" (PRIVATE)

STREET "H" (PVT)

STREET "A"

PRIVATE DRIVE

NORTH HILLS PARKWAY

SECONDARY ACCESS

SECONDARY ACCESS GATE WITH AUTOMATIC EXIT LOOPS & KNOX BOX SWITCH

BASIN 2A

SHEET 4

SHEET 5

N

W E

S

SCALE: 1" = 60'

0 60 120 180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GREGORY J. MUSSER
PROJECT ENGINEER
R.C.E. 77627
DATE: 04/06/2022


# HITCH RANCH
## TENTATIVE TRACT MAP NO. 5708
## PRELIMINARY GRADING, DRAINAGE, & UTILITIES
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

SCALE: HORIZ. AS NOTED VERT. N/A

WORK ORDER 0047
DRAWN BY: GJM
CHECKED BY: GHP

SHEET NO. 3 OF 7

DRAWING: w:\projects\0047\02 hitch ranch - comstock\engineering\cad\tentative map\0047-02_tsm.dwg

SHEET 3

SHEET 2

SHEET 6

BASIN 2A

BASIN 3

NORTH HILLS PARKWAY

CASEY ROAD

STREET "O" (PRIVATE)

STREET "N" (PRIVATE)

STREET "M" (PRIVATE)

STREET "P" (PRIVATE)

ST. "K" (PVT)

STREET "L" (PVT)

ST. "J" (PVT)

ST. "I" (PVT)

STREET "G" (PRIVATE)

STREET "A"

SECONDARY ACCESS

PHASE 1

PHASE 2

PHASE 2

PHASE 4

TRACT BOUNDARY

PROPOSED RIGHT-OF-WAY

PROPOSED RIGHT OF WAY

180'-LONG 2'-HIGH SLOUGH WALL

SHUT-OFF VALVE

UTILITY STUB FOR FUTURE USE

UTILITY STUBS FOR FUTURE USE

FUTURE AFFORDABLE APARTMENTS

ESTATE 2 DEDICATION PER RECORD DOCUMENT 97-172929

EX. OVERHEAD WIRES TO BE REMOVED & ESM'T TO BE VACATED

SECONDARY ACCESS GATE WITH AUTOMATIC EXIT LOOPS & KNOX BOX SWITCH

DIVERSION PIPE FOR STORM WATER TREATMENT- WATER QUALITY FLOWS SHALL BE ROUTED THROUGH LOT AE TO LOT AC FOR TREATMENT

INLET PIPE FOR PARK STORM WATER DISCHARGE

CONNECT TO EX. WATERLINE

EX. VCWPD ACCESS RD TO REMAIN

WALNUT CYN CHANNEL

U.P.R.R.

EX. AT-GRADE RAILROAD CROSSING

HIGH STREET

POINDEXTER AVENUE

TECH CIRCLE

ENDEAVOUR COURT

SIERRA AVENUE

GISLER ROAD

POINDEXTER PARK

AB OPEN SPACE

AD OPEN SPACE

AE PARK

R OPEN SPACE

S OPEN SPACE

T OPEN SPACE

N OPEN SPACE

P OPEN SPACE

O OPEN SPACE

M OPEN SPACE

H OPEN SPACE / BASIN WATER QUALITY

377

378 DETENTION BASIN

N

W E

S

SCALE: 1" = 60'

0 60 120 180

Encompass Consultant Group

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GREGORY J. MUSSER
PROJECT ENGINEER
R.C.E. 77627
DATE: 04/06/2022

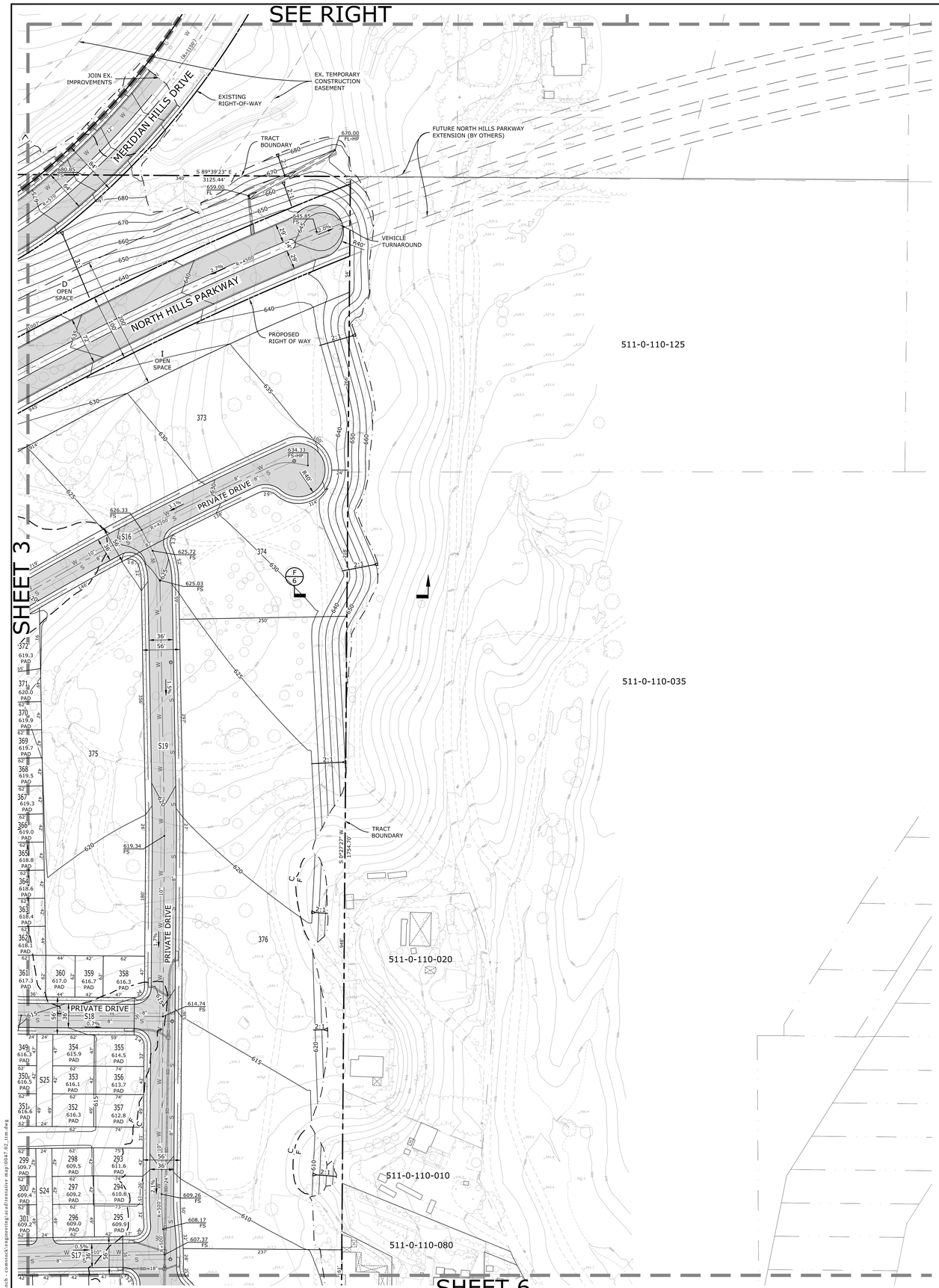
HITCH RANCH
TENTATIVE TRACT MAP NO. 5708
PRELIMINARY GRADING, DRAINAGE, & UTILITIES
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

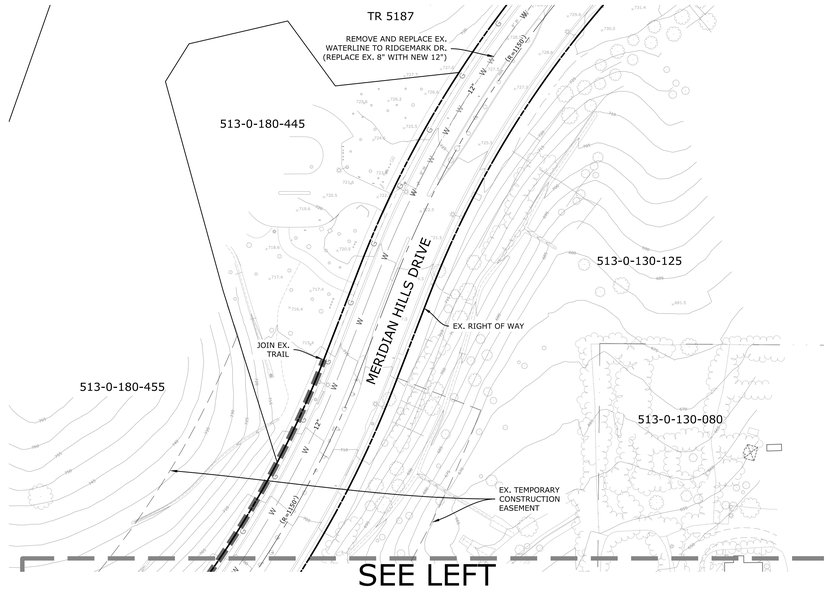
SCALE: HORIZ. AS NOTED VERT. N/A

WORK ORDER 0047
DRAWN BY: GJM
CHECKED BY: GHP

SHEET NO. 4 OF 7

DRAWING: g:\projects\0047\02 hitch ranch - comstock\engineering\exhibits\exhibit map\0047-02_tm.dwg




## LOT SUMMARY

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 1 | 10,120 | SFD |
| 2 | 10,450 | SFD |
| 3 | 10,801 | SFD |
| 4 | 10,170 | SFD |
| 5 | 10,080 | SFD |
| 6 | 9,804 | SFD |
| 7 | 10,790 | SFD |
| 8 | 10,790 | SFD |
| 9 | 10,695 | SFD |
| 10 | 16,014 | SFD |
| 11 | 14,357 | SFD |
| 12 | 14,400 | SFD |
| 13 | 14,400 | SFD |
| 14 | 14,400 | SFD |
| 15 | 14,941 | SFD |
| 16 | 11,606 | SFD |
| 17 | 7,959 | SFD |
| 18 | 8,240 | SFD |
| 19 | 8,271 | SFD |
| 20 | 9,759 | SFD |
| 21 | 9,888 | SFD |
| 22 | 8,240 | SFD |
| 23 | 8,941 | SFD |
| 24 | 8,337 | SFD |
| 25 | 9,880 | SFD |
| 26 | 9,743 | SFD |
| 27 | 7,719 | SFD |
| 28 | 7,840 | SFD |
| 29 | 7,840 | SFD |
| 30 | 7,840 | SFD |
| 31 | 7,840 | SFD |
| 32 | 7,958 | SFD |
| 33 | 9,004 | SFD |
| 34 | 8,079 | SFD |
| 35 | 8,406 | SFD |
| 36 | 11,323 | SFD |
| 37 | 9,259 | SFD |
| 38 | 9,303 | SFD |
| 39 | 11,100 | SFD |
| 40 | 10,582 | SFD |
| 41 | 10,893 | SFD |
| 42 | 11,203 | SFD |
| 43 | 11,731 | SFD |
| 44 | 12,741 | SFD |
| 45 | 16,815 | SFD |
| 46 | 21,056 | SFD |
| 47 | 12,471 | SFD |
| 48 | 11,235 | SFD |
| 49 | 8,404 | SFD |
| 50 | 12,397 | SFD |
| 51 | 12,385 | SFD |
| 52 | 11,631 | SFD |
| 53 | 12,307 | SFD |
| 54 | 9,843 | SFD |
| 55 | 9,310 | SFD |
| 56 | 9,310 | SFD |
| 57 | 10,698 | SFD |
| 58 | 10,880 | SFD |
| 59 | 24,152 | SFD |
| 60 | 15,705 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 61 | 13,211 | SFD |
| 62 | 13,237 | SFD |
| 63 | 14,016 | SFD |
| 64 | 9,727 | SFD |
| 65 | 9,200 | SFD |
| 66 | 9,200 | SFD |
| 67 | 9,633 | SFD |
| 68 | 9,266 | SFD |
| 69 | 8,800 | SFD |
| 70 | 9,621 | SFD |
| 71 | 9,926 | SFD |
| 72 | 9,926 | SFD |
| 73 | 9,418 | SFD |
| 74 | 8,684 | SFD |
| 75 | 8,574 | SFD |
| 76 | 8,819 | SFD |
| 77 | 9,343 | SFD |
| 78 | 8,335 | SFD |
| 79 | 10,068 | SFD |
| 80 | 4,805 | SFD |
| 81 | 3,910 | SFD |
| 82 | 3,910 | SFD |
| 83 | 3,910 | SFD |
| 84 | 3,910 | SFD |
| 85 | 3,910 | SFD |
| 86 | 3,910 | SFD |
| 87 | 3,910 | SFD |
| 88 | 3,910 | SFD |
| 89 | 3,910 | SFD |
| 90 | 3,910 | SFD |
| 91 | 3,910 | SFD |
| 92 | 3,910 | SFD |
| 93 | 3,910 | SFD |
| 94 | 3,910 | SFD |
| 95 | 3,910 | SFD |
| 96 | 4,420 | SFD |
| 97 | 4,420 | SFD |
| 98 | 4,379 | SFD |
| 99 | 4,222 | SFD |
| 100 | 8,015 | SFD |
| 101 | 7,832 | SFD |
| 102 | 6,935 | SFD |
| 103 | 6,239 | SFD |
| 104 | 5,625 | SFD |
| 105 | 5,941 | SFD |
| 106 | 4,511 | SFD |
| 107 | 5,360 | SFD |
| 108 | 5,420 | SFD |
| 109 | 7,219 | SFD |
| 110 | 5,496 | SFD |
| 111 | 4,457 | SFD |
| 112 | 4,420 | SFD |
| 113 | 4,420 | SFD |
| 114 | 3,910 | SFD |
| 115 | 3,910 | SFD |
| 116 | 3,959 | SFD |
| 117 | 4,166 | SFD |
| 118 | 4,166 | SFD |
| 119 | 4,618 | SFD |
| 120 | 4,820 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 121 | 4,347 | SFD |
| 122 | 4,347 | SFD |
| 123 | 4,347 | SFD |
| 124 | 4,347 | SFD |
| 125 | 4,347 | SFD |
| 126 | 4,347 | SFD |
| 127 | 5,119 | SFD |
| 128 | 5,119 | SFD |
| 129 | 4,335 | SFD |
| 130 | 3,910 | SFD |
| 131 | 3,912 | SFD |
| 132 | 4,286 | SFD |
| 133 | 3,950 | SFD |
| 134 | 4,025 | SFD |
| 135 | 4,462 | SFD |
| 136 | 4,462 | SFD |
| 137 | 4,426 | SFD |
| 138 | 4,022 | SFD |
| 139 | 4,014 | SFD |
| 140 | 4,014 | SFD |
| 141 | 4,014 | SFD |
| 142 | 3,958 | SFD |
| 143 | 4,287 | SFD |
| 144 | 4,287 | SFD |
| 145 | 4,053 | SFD |
| 146 | 4,222 | SFD |
| 147 | 4,222 | SFD |
| 148 | 4,222 | SFD |
| 149 | 4,247 | SFD |
| 150 | 4,449 | SFD |
| 151 | 4,290 | SFD |
| 152 | 4,001 | SFD |
| 153 | 4,001 | SFD |
| 154 | 4,001 | SFD |
| 155 | 4,001 | SFD |
| 156 | 3,952 | SFD |
| 157 | 4,287 | SFD |
| 158 | 4,797 | SFD |
| 159 | 4,483 | SFD |
| 160 | 4,518 | SFD |
| 161 | 4,518 | SFD |
| 162 | 4,519 | SFD |
| 163 | 4,811 | SFD |
| 164 | 4,946 | SFD |
| 165 | 5,645 | SFD |
| 166 | 6,635 | SFD |
| 167 | 9,429 | SFD |
| 168 | 8,148 | SFD |
| 169 | 4,393 | SFD |
| 170 | 4,461 | SFD |
| 171 | 4,420 | SFD |
| 172 | 4,460 | SFD |
| 173 | 4,982 | SFD |
| 174 | 4,981 | SFD |
| 175 | 4,981 | SFD |
| 176 | 4,981 | SFD |
| 177 | 4,981 | SFD |
| 178 | 4,981 | SFD |
| 179 | 4,981 | SFD |
| 180 | 5,257 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 181 | 5,435 | SFD |
| 182 | 4,981 | SFD |
| 183 | 5,153 | SFD |
| 184 | 5,153 | SFD |
| 185 | 5,097 | SFD |
| 186 | 5,048 | SFD |
| 187 | 5,615 | SFD |
| 188 | 6,267 | SFD |
| 189 | 7,014 | SFD |
| 190 | 7,868 | SFD |
| 191 | 6,881 | SFD |
| 192 | 6,994 | SFD |
| 193 | 5,995 | SFD |
| 194 | 5,509 | SFD |
| 195 | 5,509 | SFD |
| 196 | 5,509 | SFD |
| 197 | 5,509 | SFD |
| 198 | 5,509 | SFD |
| 199 | 5,509 | SFD |
| 200 | 5,005 | SFD |
| 201 | 4,930 | SFD |
| 202 | 5,132 | SFD |
| 203 | 5,301 | SFD |
| 204 | 5,301 | SFD |
| 205 | 5,564 | SFD |
| 206 | 5,055 | SFD |
| 207 | 5,073 | SFD |
| 208 | 5,061 | SFD |
| 209 | 5,119 | SFD |
| 210 | 4,930 | SFD |
| 211 | 5,517 | SFD |
| 212 | 6,545 | SFD |
| 213 | 4,932 | SFD |
| 214 | 5,195 | SFD |
| 215 | 5,195 | SFD |
| 216 | 5,018 | SFD |
| 217 | 4,863 | SFD |
| 218 | 5,188 | SFD |
| 219 | 5,677 | SFD |
| 220 | 4,983 | SFD |
| 221 | 4,979 | SFD |
| 222 | 4,984 | SFD |
| 223 | 4,984 | SFD |
| 224 | 5,076 | SFD |
| 225 | 4,845 | SFD |
| 226 | 4,420 | SFD |
| 227 | 4,420 | SFD |
| 228 | 4,671 | SFD |
| 229 | 6,610 | SFD |
| 230 | 5,280 | SFD |
| 231 | 4,930 | SFD |
| 232 | 4,930 | SFD |
| 233 | 5,072 | SFD |
| 234 | 5,227 | SFD |
| 235 | 5,123 | SFD |
| 236 | 4,930 | SFD |
| 237 | 4,930 | SFD |
| 238 | 5,091 | SFD |
| 239 | 4,532 | SFD |
| 240 | 4,709 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 241 | 4,484 | SFD |
| 242 | 4,809 | SFD |
| 243 | 5,975 | SFD |
| 244 | 5,975 | SFD |
| 245 | 5,975 | SFD |
| 246 | 5,672 | SFD |
| 247 | 5,600 | SFD |
| 248 | 4,453 | SFD |
| 249 | 4,420 | SFD |
| 250 | 4,420 | SFD |
| 251 | 4,772 | SFD |
| 252 | 4,420 | SFD |
| 253 | 4,420 | SFD |
| 254 | 4,940 | SFD |
| 255 | 4,649 | SFD |
| 256 | 4,420 | SFD |
| 257 | 4,420 | SFD |
| 258 | 4,420 | SFD |
| 259 | 4,420 | SFD |
| 260 | 4,469 | SFD |
| 261 | 4,764 | SFD |
| 262 | 7,584 | SFD |
| 263 | 6,580 | SFD |
| 264 | 4,420 | SFD |
| 265 | 4,420 | SFD |
| 266 | 4,420 | SFD |
| 267 | 4,420 | SFD |
| 268 | 3,272 | SFD |
| 269 | 2,604 | SFD |
| 270 | 2,604 | SFD |
| 271 | 2,604 | SFD |
| 272 | 2,604 | SFD |
| 273 | 2,604 | SFD |
| 274 | 2,604 | SFD |
| 275 | 2,604 | SFD |
| 276 | 2,856 | SFD |
| 277 | 2,897 | SFD |
| 278 | 2,897 | SFD |
| 279 | 2,897 | SFD |
| 280 | 2,897 | SFD |
| 281 | 2,874 | SFD |
| 282 | 2,803 | SFD |
| 283 | 2,624 | SFD |
| 284 | 2,897 | SFD |
| 285 | 2,897 | SFD |
| 286 | 2,897 | SFD |
| 287 | 2,686 | SFD |
| 288 | 2,604 | SFD |
| 289 | 2,604 | SFD |
| 290 | 2,604 | SFD |
| 291 | 2,604 | SFD |
| 292 | 2,914 | SFD |
| 293 | 3,114 | SFD |
| 294 | 3,078 | SFD |
| 295 | 3,530 | SFD |
| 296 | 3,057 | SFD |
| 297 | 2,604 | SFD |
| 298 | 2,604 | SFD |
| 299 | 2,604 | SFD |
| 300 | 2,604 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 301 | 3,057 | SFD |
| 302 | 3,057 | SFD |
| 303 | 2,604 | SFD |
| 304 | 2,604 | SFD |
| 305 | 2,604 | SFD |
| 306 | 2,604 | SFD |
| 307 | 3,341 | SFD |
| 308 | 3,683 | SFD |
| 309 | 4,312 | SFD |
| 310 | 3,381 | SFD |
| 311 | 2,604 | SFD |
| 312 | 2,604 | SFD |
| 313 | 2,604 | SFD |
| 314 | 2,604 | SFD |
| 315 | 3,038 | SFD |
| 316 | 3,038 | SFD |
| 317 | 2,604 | SFD |
| 318 | 2,604 | SFD |
| 319 | 2,604 | SFD |
| 320 | 2,604 | SFD |
| 321 | 3,038 | SFD |
| 322 | 3,038 | SFD |
| 323 | 2,604 | SFD |
| 324 | 2,604 | SFD |
| 325 | 2,604 | SFD |
| 326 | 2,604 | SFD |
| 327 | 3,047 | SFD |
| 328 | 3,038 | SFD |
| 329 | 2,604 | SFD |
| 330 | 2,604 | SFD |
| 331 | 2,604 | SFD |
| 332 | 2,604 | SFD |
| 333 | 3,038 | SFD |
| 334 | 3,038 | SFD |
| 335 | 2,604 | SFD |
| 336 | 2,604 | SFD |
| 337 | 2,604 | SFD |
| 338 | 2,604 | SFD |
| 339 | 3,038 | SFD |
| 340 | 3,296 | SFD |
| 341 | 2,604 | SFD |
| 342 | 2,604 | SFD |
| 343 | 2,809 | SFD |
| 344 | 2,604 | SFD |
| 345 | 3,028 | SFD |
| 346 | 3,028 | SFD |
| 347 | 2,604 | SFD |
| 348 | 3,260 | SFD |
| 349 | 3,034 | SFD |
| 350 | 2,604 | SFD |
| 351 | 3,028 | SFD |
| 352 | 3,028 | SFD |
| 353 | 2,604 | SFD |
| 354 | 2,914 | SFD |
| 355 | 3,447 | SFD |
| 356 | 3,124 | SFD |
| 357 | 3,632 | SFD |
| 358 | 3,796 | SFD |
| 359 | 2,604 | SFD |
| 360 | 2,726 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | AREA (FT²) | PLANNED USE |
| 361 | 3,669 | SFD |
| 362 | 2,655 | SFD |
| 363 | 2,604 | SFD |
| 364 | 2,604 | SFD |
| 365 | 2,604 | SFD |
| 366 | 2,604 | SFD |
| 367 | 2,604 | SFD |
| 368 | 2,604 | SFD |
| 369 | 2,604 | SFD |
| 370 | 2,604 | SFD |
| 371 | 2,858 | SFD |
| 372 | 5,340 | SFD |

| LOT TABLE | | |
|---|---|---|
| LOT | ACRES | PLANNED USE |
| 373 | 4.49 ± | RESIDENTIAL |
| 374 | 1.02 ± | RESIDENTIAL |
| 375 | 1.96 ± | RESIDENTIAL |
| 376 | 5.28 ± | RESIDENTIAL |
| 377 | 11.67 ± | RESIDENTIAL |
| 378 | 23.44 ± | NOT A PART* |

*LOT 378 SHALL BE DEEDED TO THE CITY OF MOORPARK

| LOT TABLE | | |
|---|---|---|
| LOT | ACRES | PLANNED USE |
| A | 21.35 ± | OPEN SPACE |
| B | 2.83 ± | OPEN SPACE |
| C | 3.12 ± | REC. SPACE |
| D | 2.96 ± | OPEN SPACE |
| E | 0.39 ± | OPEN SPACE |
| F | 1.56 ± | OPEN SPACE |
| G | 4.07 ± | OPEN SPACE |
| H | 3.67 ± | O.S. / BASIN |
| I | 1.53 ± | OPEN SPACE |
| J | 0.83 ± | OPEN SPACE |
| K | 0.63 ± | OPEN SPACE |
| L | 0.12 ± | OPEN SPACE |
| M | 0.31 ± | OPEN SPACE |
| N | 2.05 ± | OPEN SPACE |
| O | 2.63 ± | OPEN SPACE |
| P | 1.31 ± | OPEN SPACE |
| Q | 0.21 ± | OPEN SPACE |
| R | 1.28 ± | OPEN SPACE |
| S | 5.45 ± | OPEN SPACE |
| T | 2.54 ± | OPEN SPACE |
| U | 3.99 ± | OPEN SPACE |
| V | 6.30 ± | DET. BASIN |
| W | 2.70 ± | OPEN SPACE |
| X | 25.31 ± | OPEN SPACE |
| Y | 0.78 ± | OPEN SPACE |
| Z | 5.94 ± | DET. BASIN |

| LOT TABLE | | |
|---|---|---|
| LOT | ACRES | PLANNED USE |
| AA | 1.55 ± | PASSIVE REC |
| AB | 4.61 ± | OPEN SPACE |
| AC | 2.33 ± | WATER QUALITY |
| AD | 2.68 ± | OPEN SPACE |
| AE | 6.77 ± | PARK |
| AF | 0.29 ± | OPEN SPACE |
| AG | 0.93 ± | REC. SPACE |
| AH | 0.72 ± | OPEN SPACE |
| AI | 2.32 ± | OPEN SPACE |
| AJ | 0.81 ± | OPEN SPACE |

| LOT TABLE | | |
|---|---|---|
| LOT | ACRES | PLANNED USE |
| S1 | 1.93 ± | PRIVATE STREETS |
| S2 | 1.06 ± | PRIVATE STREETS |
| S3 | 0.51 ± | PRIVATE STREETS |
| S4 | 2.17 ± | PRIVATE STREETS |
| S5 | 1.42 ± | PRIVATE STREETS |
| S6 | 1.42 ± | PRIVATE STREETS |
| S7 | 0.44 ± | PRIVATE STREETS |
| S8 | 0.50 ± | PRIVATE STREETS |
| S9 | 0.82 ± | PRIVATE STREETS |
| S10 | 0.52 ± | PRIVATE STREETS |
| S11 | 0.50 ± | PRIVATE STREETS |
| S12 | 0.99 ± | PRIVATE STREETS |
| S13 | 0.59 ± | PRIVATE STREETS |
| S14 | 1.77 ± | PRIVATE STREETS |
| S15 | 2.12 ± | PRIVATE STREETS |
| S16 | 1.74 ± | PRIVATE STREETS |
| S17 | 1.37 ± | PRIVATE STREETS |
| S18 | 0.96 ± | PRIVATE STREETS |
| S19 | 1.69 ± | PRIVATE STREETS |
| S20 | 0.07 ± | PRIVATE STREETS |
| S21 | 0.07 ± | PRIVATE STREETS |
| S22 | 0.08 ± | PRIVATE STREETS |
| S23 | 0.08 ± | PRIVATE STREETS |
| S24 | 0.07 ± | PRIVATE STREETS |
| S25 | 0.08 ± | PRIVATE STREETS |
| S26 | 0.16 ± | PRIVATE STREETS |
| S27 | 0.07 ± | PRIVATE STREETS |
| S28 | 0.07 ± | PRIVATE STREETS |

N
W E
S
SCALE: 1" = 60'
0 60 120 180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GREGORY J. MUSSER
PROJECT ENGINEER
R.C.E. 77627
DATE: 04/06/2022


# HITCH RANCH
## TENTATIVE TRACT MAP NO. 5708
## PRELIMINARY GRADING, DRAINAGE, & UTILITIES
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

SCALE: HORIZ. AS NOTED VERT. N/A
WORK ORDER 0047
DRAWN BY: GJM
CHECKED BY: GHP
SHEET NO. 5 OF 7

DRAWING: z:\projects\0047\02 hitch ranch - comstock\engineering\ca\tentative map\0047_02_tm.dwg

SHEET 5

SHEET 4

WALNUT CANYON ROAD

CASEY ROAD

WALNUT CANYON ELEMENTARY SCHOOL

MOORPARK AVENUE

HIGH STREET

U.S. POST OFFICE

POINDEXTER AVENUE

POINDEXTER PARK

CHAPARRAL MIDDLE SCHOOL

U.P.R.R.

WALNUT CYN CHANNEL

511-0-110-035

511-0-110-060

511-0-110-070

511-0-110-080

511-0-110-090

511-0-020-120

511-0-020-205

511-0-020-235

511-0-020-265

511-0-020-275

511-0-050-175

511-0-050-140

511-0-050-270

511-0-050-090

511-0-050-080

511-0-090-420

511-0-090-430

512-0-090-050

CASEY ROAD WIDENING (BY OTHERS)

CONNECT TO EX. WATERLINE

PROPOSED RIGHT-OF-WAY

EX. 40'-WIDE CASEY RD. R.O.W. TO BE VACATED

REMOVE EX. CASEY RD. PAVING

JOIN EX. IMPROVEMENTS

FUTURE R.O.W. (BY OTHERS)

TRACT BOUNDARY

ESTATE 2 DEDICATION PER RECORD DOCUMENT 97-172929

EX. VCWPD ACCESS RD TO REMAIN

377

378 DETENTION BASIN

AJ OPEN SPACE

AD OPEN SPACE

289 609.0 PAD

290 608.8 PAD

291 608.6 PAD

292 608.4 PAD

S19

RIGHT OF WAY 164'

337.82' N 84°25'10" W 111'

N 89°30'13" W 1681.49'

S 0°27'47" W 1754.70'

S 0°27'47" W 1321.87'

R=360.00' L=146.94' Δ=23°23'34"

R=360.00' L=30.51' Δ=4°51'40"

534.00 C.I.P.

604.05 FS-HIP

602.23 FS

587.20 FS

574.81 FS

568.99 FS

564.55 FS

502.79 FS

505.50 FS

508.39 FS

514.14 FS

515.01 FS-HIP

511.82 FS-HIP

484.7 FG

10.1%

3.4%

1.4%

0.5%

2.4%

0.6%

2:1

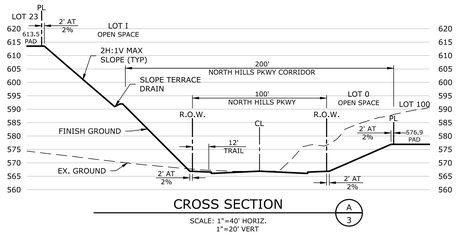
SCALE: 1"=60'

0 60 120 180

N

W E

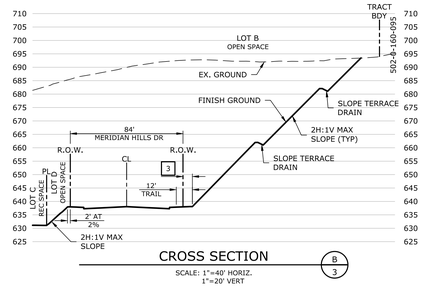
S




CROSS SECTION

SCALE: 1"=40' HORIZ. 1"=20' VERT

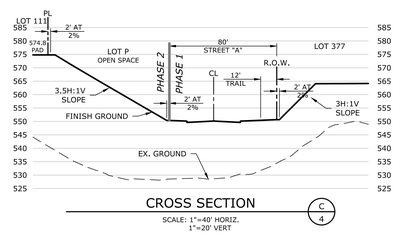
A 3




CROSS SECTION

SCALE: 1"=40' HORIZ. 1"=20' VERT

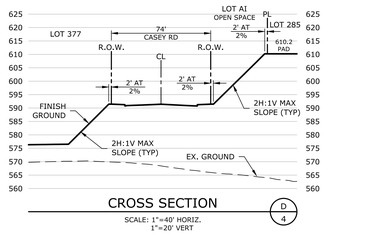
B 3




CROSS SECTION

SCALE: 1"=40' HORIZ. 1"=20' VERT

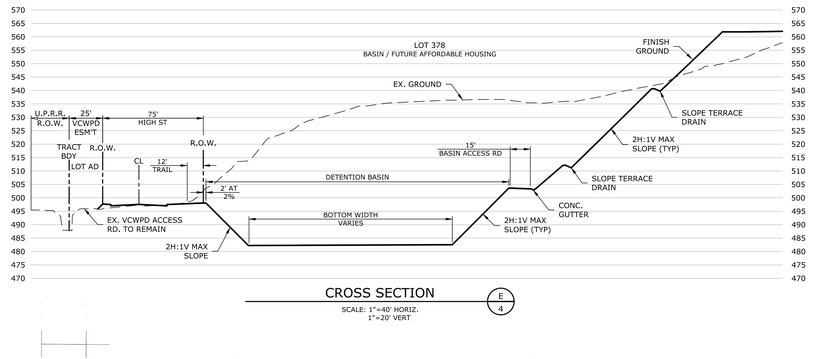
C 4




CROSS SECTION

SCALE: 1"=40' HORIZ. 1"=20' VERT

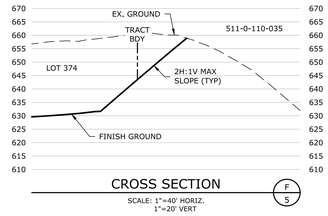
D 4




CROSS SECTION

SCALE: 1"=40' HORIZ. 1"=20' VERT

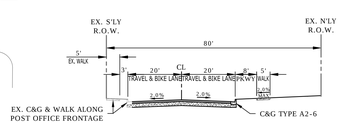
E 4




CROSS SECTION

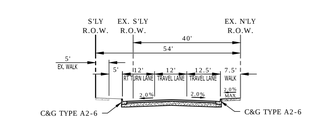
SCALE: 1"=40' HORIZ. 1"=20' VERT

F 5



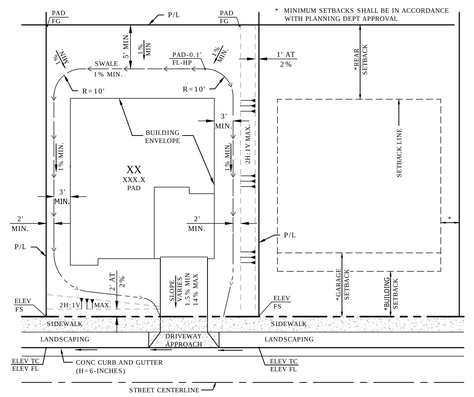

HIGH STREET EAST OF TRACT BOUNDARY

SCALE: 1"=20' HORIZ. 1"=10' VERT.




HIGH STREET AT MOORPARK AVE INTERSECTION

SCALE: 1"=20' HORIZ. 1"=10' VERT.




TYPICAL SFD LOT DRAINAGE

SCALE: N.T.S.

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GREGORY J. MUSSER
PROJECT ENGINEER
R.C.E. 77627
DATE: 04/06/2022

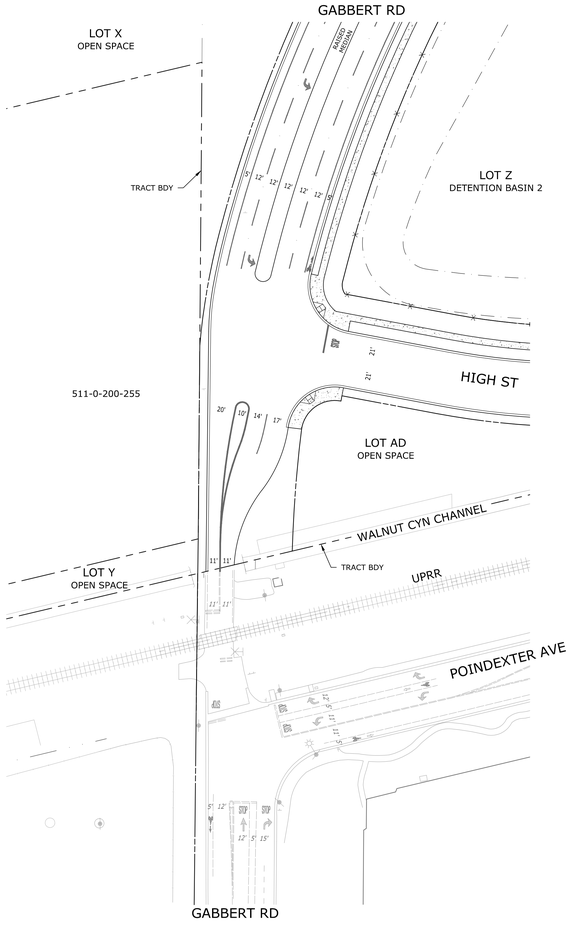
HITCH RANCH
TENTATIVE TRACT MAP NO. 5708
PRELIMINARY GRADING, DRAINAGE, & UTILITIES
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

SCALE: HORIZ. AS NOTED VERT. N/A

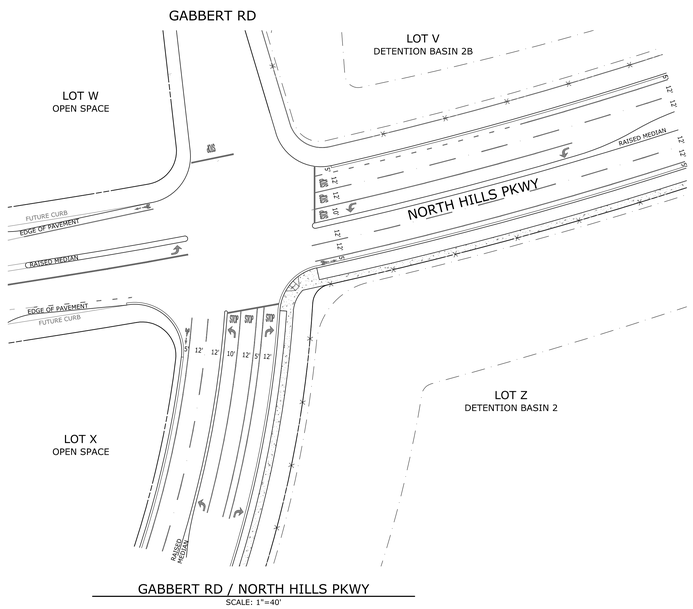
WORK ORDER 0047
DRAWN BY: GJM
CHECKED BY: GHP

SHEET NO. 6 OF 7

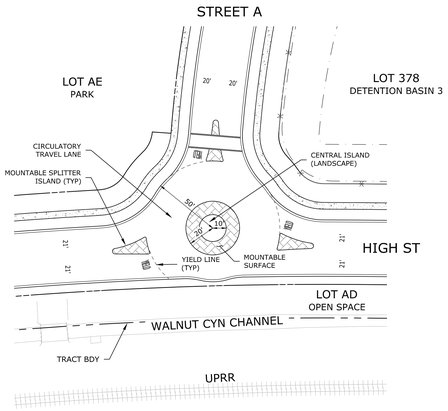
DRAWING: R:\projects\0047\02 hitch ranch - comstock engineering\ar\tentative map\0047-02_tm.dwg



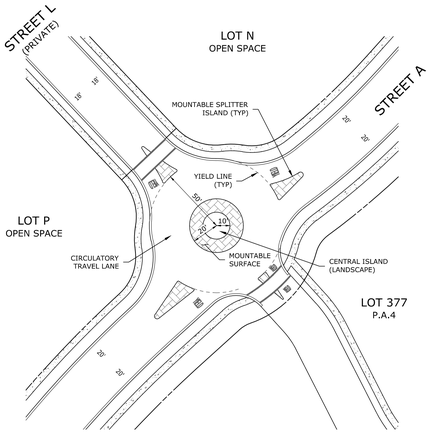

POINDEXTER AVE / GABBERT RD / HIGH ST
SCALE: 1"=40'



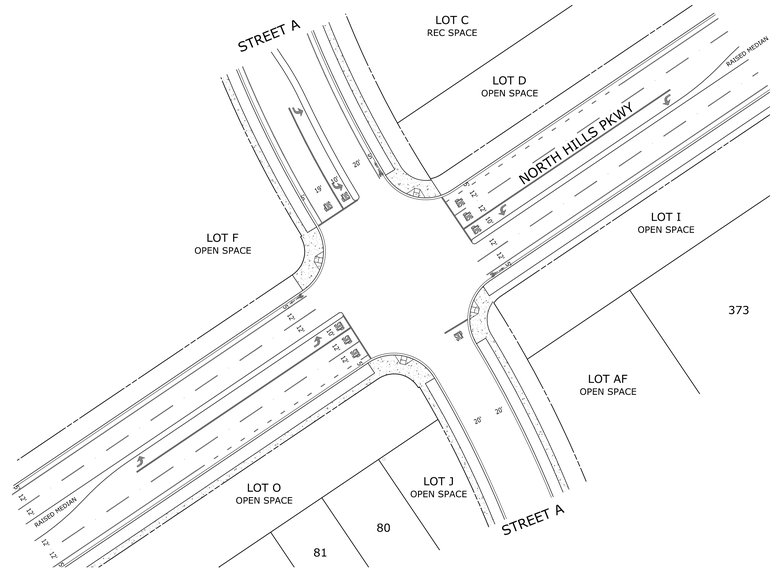

GABBERT RD / NORTH HILLS PKWY
SCALE: 1"=40'




HIGH ST / STREET A
SCALE: 1"=40'



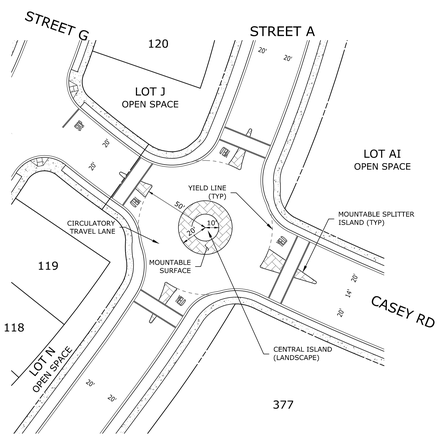

STREET A / STREET L
SCALE: 1"=40'



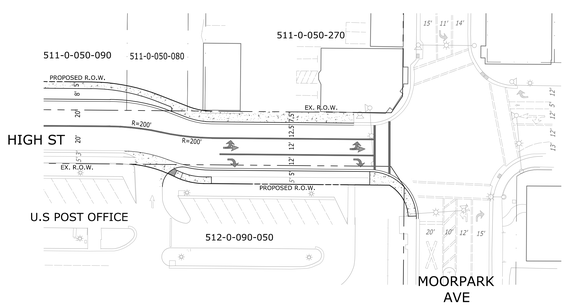

STREET A / NORTH HILLS PKWY
SCALE: 1"=40'




STREET A / MERIDIAN HILLS DR
SCALE: 1"=40'




STREET A / CASEY RD
SCALE: 1"=40'




HIGH ST / MOORPARK AVE
SCALE: 1"=40'

N
W E
S
SCALE: 1"=40'
0 40 80 120

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PROJECT ENGINEER
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HITCH RANCH
TENTATIVE TRACT MAP NO. 5708
PRELIMINARY INTERSECTION LAYOUTS
CITY OF MOORPARK, COUNTY OF VENTURA, STATE OF CALIFORNIA

SCALE: HORIZ. AS NOTED VERT. N/A
DATE: 04/06/2022
WORK ORDER 0047
DRAWN BY: GJM
CHECKED BY: GHP
SHEET NO. 7 OF 7

DRAWING: n:\projects\0047\02 hitch ranch - comstock\engineering\tacad\tentative map\0047-02_tmi.dwg

# Appendix F – ICU/Synchro Reports – 2025 Conditions

# Intersection #1

E-W Street: Casey Rd
N-S Street: Walnut Canyon Rc
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2025 without Project | | | | AM 2025 Plus Project | | | | PM 2025 without Project | | | | PM 2025 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 31 | 1 | 1.00 | 0.02 | 31 | 1 | 1.00 | 0.02 | 34 | 1 | 1.00 | 0.02 | 34 | 1 | 1.00 | 0.02 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 314 | 1 | 1.00 | 0.21 | 314 | 1 | 1.00 | 0.21 | 216 | 1 | 1.00 | 0.14 | 216 | 1 | 1.00 | 0.14 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 150 | 1 | 1.00 | 0.10 | 150 | 1 | 1.00 | 0.10 | 342 | 1 | 1.00 | 0.23 | 342 | 1 | 1.00 | 0.23 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 224 | 1 | 1.00 | 0.14 | 223 | 1 | 1.00 | 0.14 | 392 | 1 | 1.00 | 0.25 | 395 | 1 | 1.00 | 0.25 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 358 | 0 | 0.95 | 0.23 | 355 | 0 | 0.95 | 0.23 | 273 | 0 | 0.88 | 0.19 | 277 | 0 | 0.88 | 0.20 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 17 | 0 | 0.05 | 0.25 | 17 | 0 | 0.05 | 0.25 | 37 | 0 | 0.12 | 0.21 | 37 | 0 | 0.12 | 0.21 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| Critical Volumes | | | E-W: | 0.21 | | | E-W: | 0.21 | | | E-W: | 0.14 | | | E-W: | 0.14 |
| | | | N-S: | 0.35 | | | N-S: | 0.35 | | | N-S: | 0.43 | | | N-S: | 0.44 |
| | | | Total: | 0.56 | | | Total: | 0.56 | | | Total: | 0.58 | | | Total: | 0.58 |
| | | | | | | | | | | | | | | | | |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| | | | | | | | | | | | | | | | | |
| V/C | | | | 0.659 | | | | 0.657 | | | | 0.679 | | | | 0.681 |
| Level of Service | | | | B | | | | B | | | | B | | | | B |

# Intersection #3

E-W Street: High St
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2025 without Project | | | | AM 2025 Plus Project | | | | PM 2025 without Project | | | | PM 2025 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 3 | 0 | 0.03 | 0.06 | 2 | 0 | 0.02 | 0.06 | 5 | 0 | 0.04 | 0.08 | 6 | 0 | 0.04 | 0.10 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 47 | 0 | 0.52 | 0.06 | 44 | 0 | 0.53 | 0.05 | 68 | 0 | 0.54 | 0.08 | 76 | 0 | 0.53 | 0.09 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 40 | 0 | 0.44 | 0.06 | 37 | 0 | 0.45 | 0.06 | 53 | 0 | 0.42 | 0.08 | 61 | 0 | 0.43 | 0.10 |
| Comb. L-T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 198 | 0 | 0.89 | 0.15 | 198 | 0 | 0.93 | 0.14 | 222 | 0 | 0.76 | 0.19 | 222 | 0 | 0.74 | 0.20 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Thru | 24 | 0 | 0.11 | 0.14 | 15 | 0 | 0.07 | 0.13 | 69 | 0 | 0.24 | 0.18 | 80 | 0 | 0.26 | 0.19 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 209 | 1 | 1.00 | 0.14 | 207 | 1 | 1.00 | 0.14 | 349 | 1 | 1.00 | 0.23 | 351 | 1 | 1.00 | 0.23 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 23 | 0 | 0.05 | 0.29 | 14 | 0 | 0.03 | 0.28 | 78 | 0 | 0.14 | 0.38 | 89 | 0 | 0.15 | 0.39 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| NB Thru | 413 | 0 | 0.95 | 0.27 | 407 | 0 | 0.97 | 0.26 | 485 | 0 | 0.86 | 0.35 | 492 | 0 | 0.85 | 0.36 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 152 | 1 | 1.00 | 0.10 | 152 | 1 | 1.00 | 0.10 | 327 | 1 | 1.00 | 0.22 | 327 | 1 | 1.00 | 0.22 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 336 | 1 | 1.00 | 0.22 | 335 | 1 | 1.00 | 0.22 | 214 | 1 | 1.00 | 0.14 | 215 | 1 | 1.00 | 0.14 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 616 | 0 | 1.00 | 0.39 | 614 | 0 | 1.00 | 0.38 | 381 | 0 | 0.99 | 0.24 | 386 | 0 | 0.99 | 0.24 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 1 | 0 | 0.00 | 0.41 | 0 | 0 | 0.00 | 0.00 | 3 | 0 | 0.01 | 0.26 | 5 | 0 | 0.01 | 0.26 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Critical Volumes | | | E-W: | 0.21 | | | E-W: | 0.20 | | | E-W: | 0.32 | | | E-W: | 0.33 |
| | | | N-S: | 0.70 | | | N-S: | 0.66 | | | N-S: | 0.63 | | | N-S: | 0.65 |
| | | | Total: | 0.91 | | | Total: | 0.86 | | | Total: | 0.95 | | | Total: | 0.98 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 1.010 | | | | 0.962 | | | | 1.048 | | | | 1.077 |
| Level of Service | | | | F | | | | E | | | | F | | | | F |

# Intersection #4

E-W Street: Princeton Ave
N-S Street: Spring Rd
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2025 without Project | | | | AM 2025 Plus Project | | | | PM 2025 without Project | | | | PM 2025 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 12 | 1 | 1.00 | 0.01 | 11 | 1 | 1.00 | 0.01 | 41 | 1 | 1.00 | 0.03 | 42 | 1 | 1.00 | 0.03 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 281 | 1 | 1.00 | 0.18 | 280 | 1 | 1.00 | 0.18 | 338 | 1 | 1.00 | 0.21 | 341 | 1 | 1.00 | 0.21 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 233 | 1 | 1.00 | 0.16 | 231 | 1 | 1.00 | 0.15 | 194 | 1 | 1.00 | 0.13 | 199 | 1 | 1.00 | 0.13 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 77 | 1 | 1.00 | 0.05 | 77 | 1 | 1.00 | 0.05 | 105 | 1 | 1.00 | 0.07 | 105 | 1 | 1.00 | 0.07 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 245 | 1 | 1.00 | 0.15 | 242 | 1 | 1.00 | 0.15 | 342 | 1 | 1.00 | 0.21 | 346 | 1 | 1.00 | 0.22 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 253 | 1 | 1.00 | 0.17 | 253 | 1 | 1.00 | 0.17 | 416 | 1 | 1.00 | 0.28 | 416 | 1 | 1.00 | 0.28 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 146 | 1 | 1.00 | 0.10 | 140 | 1 | 1.00 | 0.09 | 315 | 1 | 1.00 | 0.21 | 322 | 1 | 1.00 | 0.21 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 241 | 2 | 2.00 | 0.08 | 241 | 2 | 2.00 | 0.08 | 579 | 2 | 2.00 | 0.18 | 579 | 2 | 2.00 | 0.18 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 168 | 1 | 1.00 | 0.11 | 168 | 1 | 1.00 | 0.11 | 224 | 1 | 1.00 | 0.15 | 224 | 1 | 1.00 | 0.15 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 395 | 1 | 1.00 | 0.26 | 395 | 1 | 1.00 | 0.26 | 253 | 1 | 1.00 | 0.17 | 253 | 1 | 1.00 | 0.17 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 531 | 1 | 1.91 | 0.17 | 531 | 1 | 1.91 | 0.17 | 297 | 1 | 1.75 | 0.11 | 297 | 1 | 1.74 | 0.11 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 26 | 0 | 0.09 | 0.19 | 24 | 0 | 0.09 | 0.19 | 42 | 0 | 0.25 | 0.11 | 44 | 0 | 0.26 | 0.11 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| Critical Volumes | | | E-W: | 0.23 | | | E-W: | 0.23 | | | E-W: | 0.30 | | | E-W: | 0.31 |
| | | | N-S: | 0.38 | | | N-S: | 0.38 | | | N-S: | 0.35 | | | N-S: | 0.35 |
| | | | Total: | 0.60 | | | Total: | 0.60 | | | Total: | 0.65 | | | Total: | 0.65 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 0.702 | | | | 0.702 | | | | 0.754 | | | | 0.755 |
| Level of Service | | | | C | | | | C | | | | C | | | | C |

# Intersection #5

E-W Street: Poindexter Ave/Fir
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2025 without Project | | | | AM 2025 Plus Project | | | | PM 2025 without Project | | | | PM 2025 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 98 | 1 | 1.00 | 0.07 | 93 | 1 | 1.00 | 0.06 | 235 | 1 | 1.00 | 0.16 | 240 | 1 | 1.00 | 0.16 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 10 | 0 | 0.24 | 0.03 | 10 | 0 | 0.24 | 0.03 | 27 | 0 | 0.27 | 0.06 | 27 | 0 | 0.27 | 0.06 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| EB Right | 31 | 0 | 0.76 | 0.03 | 31 | 0 | 0.76 | 0.03 | 73 | 0 | 0.73 | 0.07 | 73 | 0 | 0.73 | 0.07 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 5 | 1 | 1.00 | 0.00 | 5 | 1 | 1.00 | 0.00 | 16 | 1 | 1.00 | 0.01 | 16 | 1 | 1.00 | 0.01 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 30 | 0 | 0.91 | 0.02 | 30 | 0 | 0.91 | 0.02 | 12 | 0 | 0.48 | 0.02 | 12 | 0 | 0.48 | 0.02 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Right | 3 | 0 | 0.09 | 0.02 | 3 | 0 | 0.09 | 0.02 | 13 | 0 | 0.52 | 0.02 | 13 | 0 | 0.52 | 0.02 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 36 | 1 | 1.00 | 0.02 | 36 | 1 | 1.00 | 0.02 | 49 | 1 | 1.00 | 0.03 | 49 | 1 | 1.00 | 0.03 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 299 | 0 | 0.98 | 0.19 | 288 | 0 | 0.98 | 0.18 | 587 | 0 | 0.98 | 0.38 | 600 | 0 | 0.98 | 0.38 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| NB Right | 7 | 0 | 0.02 | 0.20 | 7 | 0 | 0.02 | 0.20 | 14 | 0 | 0.02 | 0.40 | 14 | 0 | 0.02 | 0.41 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 6 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 | 9 | 1 | 1.00 | 0.01 | 9 | 1 | 1.00 | 0.01 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 424 | 0 | 0.67 | 0.40 | 420 | 0 | 0.67 | 0.39 | 441 | 0 | 0.72 | 0.38 | 451 | 0 | 0.72 | 0.39 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 208 | 0 | 0.33 | 0.42 | 206 | 0 | 0.33 | 0.42 | 173 | 0 | 0.28 | 0.41 | 177 | 0 | 0.28 | 0.42 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Critical Volumes | | | E-W: | 0.09 | | | E-W: | 0.08 | | | E-W: | 0.17 | | | E-W: | 0.18 |
| | | | N-S: | 0.45 | | | N-S: | 0.44 | | | N-S: | 0.44 | | | N-S: | 0.45 |
| | | | Total: | 0.53 | | | Total: | 0.53 | | | Total: | 0.62 | | | Total: | 0.63 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 0.633 | | | | 0.625 | | | | 0.715 | | | | 0.728 |
| Level of Service | | | | B | | | | B | | | | C | | | | C |

# Intersection #6

E-W Street: Los Angeles Ave
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2025 without Project | | | | AM 2025 Plus Project | | | | PM 2025 without Project | | | | PM 2025 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 235 | 1 | 1.00 | 0.16 | 232 | 1 | 1.00 | 0.15 | 245 | 1 | 1.00 | 0.16 | 249 | 1 | 1.00 | 0.17 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 982 | 2 | 2.88 | 0.21 | 982 | 2 | 2.88 | 0.21 | 1030 | 2 | 2.82 | 0.23 | 1030 | 2 | 2.82 | 0.23 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| EB Right | 41 | 0 | 0.12 | 0.23 | 41 | 0 | 0.12 | 0.23 | 66 | 0 | 0.18 | 0.24 | 66 | 0 | 0.18 | 0.24 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 164 | 1 | 1.00 | 0.11 | 164 | 1 | 1.00 | 0.11 | 337 | 1 | 1.00 | 0.22 | 337 | 1 | 1.00 | 0.22 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 998 | 2 | 2.00 | 0.31 | 998 | 2 | 2.00 | 0.31 | 1204 | 2 | 2.00 | 0.38 | 1204 | 2 | 2.00 | 0.38 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 158 | 1 | 1.00 | 0.11 | 153 | 1 | 1.00 | 0.10 | 274 | 1 | 1.00 | 0.18 | 279 | 1 | 1.00 | 0.19 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 140 | 1 | 1.25 | 0.07 | 140 | 1 | 1.26 | 0.07 | 91 | 1 | 1.03 | 0.06 | 91 | 1 | 1.02 | 0.06 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| NB Thru | 84 | 0 | 0.75 | 0.07 | 82 | 0 | 0.74 | 0.07 | 85 | 0 | 0.97 | 0.06 | 87 | 0 | 0.98 | 0.06 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 145 | 1 | 1.00 | 0.10 | 145 | 1 | 1.00 | 0.10 | 127 | 1 | 1.00 | 0.08 | 127 | 1 | 1.00 | 0.08 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 285 | 1 | 0.48 | 0.40 | 283 | 1 | 0.47 | 0.40 | 254 | 1 | 0.46 | 0.37 | 258 | 1 | 0.46 | 0.37 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 82 | 0 | 0.14 | 0.38 | 81 | 0 | 0.14 | 0.37 | 116 | 0 | 0.21 | 0.34 | 117 | 0 | 0.21 | 0.35 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Right | 233 | 1 | 0.39 | 0.40 | 232 | 1 | 0.39 | 0.40 | 179 | 1 | 0.33 | 0.37 | 182 | 1 | 0.33 | 0.37 |
| Comb. L-T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| | | | | | | | | | | | | | | | | |
| Critical Volumes | | | E-W: | 0.47 | | | E-W: | 0.47 | | | E-W: | 0.54 | | | E-W: | 0.54 |
| | | | N-S: | 0.50 | | | N-S: | 0.49 | | | N-S: | 0.45 | | | N-S: | 0.46 |
| | | | Total: | 0.97 | | | Total: | 0.96 | | | Total: | 0.99 | | | Total: | 1.00 |
| | | | | | | | | | | | | | | | | |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| | | | | | | | | | | | | | | | | |
| V/C | | | | 1.065 | | | | 1.061 | | | | 1.090 | | | | 1.098 |
| Level of Service | | | | F | | | | F | | | | F | | | | F |

# Intersection #7

E-W Street: Spring Rd
N-S Street: Walnut Canyon Rc
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2025 without Project | | | | AM 2025 Plus Project | | | | PM 2025 without Project | | | | PM 2025 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 1.00 | 0.00 | 1 | 0 | 1.00 | 0.00 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| EB Thru | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 0.50 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 4 | 1 | 1.00 | 0.00 | 4 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 23 | 0 | 0.96 | 0.02 | 23 | 0 | 0.96 | 0.02 | 42 | 0 | 0.98 | 0.03 | 42 | 0 | 0.98 | 0.03 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Thru | 1 | 0 | 0.04 | 0.02 | 1 | 0 | 0.04 | 0.02 | 1 | 0 | 0.02 | 0.03 | 1 | 0 | 0.02 | 0.03 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 349 | 1 | 1.00 | 0.23 | 349 | 1 | 1.00 | 0.23 | 692 | 1 | 1.00 | 0.46 | 692 | 1 | 1.00 | 0.46 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 6 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 | 4 | 1 | 1.00 | 0.00 | 4 | 1 | 1.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 188 | 1 | 1.00 | 0.12 | 187 | 1 | 1.00 | 0.12 | 235 | 1 | 1.00 | 0.15 | 236 | 1 | 1.00 | 0.15 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 18 | 1 | 1.00 | 0.01 | 18 | 1 | 1.00 | 0.01 | 36 | 1 | 1.00 | 0.02 | 36 | 1 | 1.00 | 0.02 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 554 | 1 | 1.00 | 0.37 | 554 | 1 | 1.00 | 0.37 | 352 | 1 | 1.00 | 0.23 | 352 | 1 | 1.00 | 0.23 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 198 | 0 | 1.00 | 0.12 | 196 | 0 | 1.00 | 0.12 | 185 | 0 | 1.00 | 0.12 | 187 | 0 | 1.00 | 0.12 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| Critical Volumes | | | E-W: | 0.23 | | | E-W: | 0.23 | | | E-W: | 0.46 | | | E-W: | 0.46 |
| | | | N-S: | 0.49 | | | N-S: | 0.49 | | | N-S: | 0.38 | | | N-S: | 0.38 |
| | | | Total: | 0.72 | | | Total: | 0.72 | | | Total: | 0.84 | | | Total: | 0.84 |
| | | | | | | | | | | | | | | | | |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| | | | | | | | | | | | | | | | | |
| V/C | | | | 0.821 | | | | 0.820 | | | | 0.944 | | | | 0.944 |
| Level of Service | | | | D | | | | D | | | | E | | | | E |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 6 | 17 | 1 | 19 | 35 | 585 | 8 | 38 | 936 | 6 |
| Future Vol, veh/h | 1 | 0 | 6 | 17 | 1 | 19 | 35 | 585 | 8 | 38 | 936 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 7 | 18 | 1 | 21 | 38 | 636 | 9 | 41 | 1017 | 7 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1831 | 1824 | 1021 | 1823 | 1823 | 641 | 1024 | 0 | 0 | 645 | 0 | 0 |
| Stage 1 | 1103 | 1103 | - | 717 | 717 | - | - | - | - | - | - | - |
| Stage 2 | 728 | 721 | - | 1106 | 1106 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 59 | 77 | 287 | 60 | 77 | 475 | 678 | - | - | 940 | - | - |
| Stage 1 | 256 | 287 | - | 421 | 434 | - | - | - | - | - | - | - |
| Stage 2 | 415 | 432 | - | 255 | 286 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 52 | 69 | 287 | 54 | 69 | 475 | 678 | - | - | 940 | - | - |
| Mov Cap-2 Maneuver | 52 | 69 | - | 54 | 69 | - | - | - | - | - | - | - |
| Stage 1 | 242 | 274 | - | 397 | 410 | - | - | - | - | - | - | - |
| Stage 2 | 374 | 408 | - | 238 | 273 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 26.1 | 63.4 | 0.6 | 0.3 |
| HCM LOS | D | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 678 | - | - | 52 | 287 | 100 | 940 | - | - |
| HCM Lane V/C Ratio | 0.056 | - | - | 0.021 | 0.023 | 0.402 | 0.044 | - | - |
| HCM Control Delay (s) | 10.6 | - | - | 75.7 | 17.8 | 63.4 | 9 | - | - |
| HCM Lane LOS | B | - | - | F | C | F | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | 0.1 | 1.7 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 0 | 70 | 8 | 0 | 145 |
| Future Vol, veh/h | 20 | 0 | 70 | 8 | 0 | 145 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 0 | 76 | 9 | 0 | 158 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 234 | 76 | 0 | 0 | 85 | 0 |
| Stage 1 | 76 | - | - | - | - | - |
| Stage 2 | 158 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 754 | 985 | - | - | 1512 | - |
| Stage 1 | 947 | - | - | - | - | - |
| Stage 2 | 871 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 754 | 985 | - | - | 1512 | - |
| Mov Cap-2 Maneuver | 754 | - | - | - | - | - |
| Stage 1 | 947 | - | - | - | - | - |
| Stage 2 | 871 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.9 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 754 | - | 1512 | - |
| HCM Lane V/C Ratio | - | - | 0.029 | - | - | - |
| HCM Control Delay (s) | - | - | 9.9 | 0 | 0 | - |
| HCM Lane LOS | - | - | A | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 2 | 38 | 19 | 0 | 16 | 16 | 807 | 17 | 20 | 543 | 3 |
| Future Vol, veh/h | 4 | 2 | 38 | 19 | 0 | 16 | 16 | 807 | 17 | 20 | 543 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 2 | 41 | 21 | 0 | 17 | 17 | 877 | 18 | 22 | 590 | 3 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1565 | 1565 | 592 | 1577 | 1557 | 886 | 593 | 0 | 0 | 895 | 0 | 0 |
| Stage 1 | 636 | 636 | - | 920 | 920 | - | - | - | - | - | - | - |
| Stage 2 | 929 | 929 | - | 657 | 637 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 90 | 111 | 506 | 89 | 113 | 343 | 983 | - | - | 758 | - | - |
| Stage 1 | 466 | 472 | - | 325 | 350 | - | - | - | - | - | - | - |
| Stage 2 | 321 | 346 | - | 454 | 471 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 82 | 106 | 506 | 78 | 108 | 343 | 983 | - | - | 758 | - | - |
| Mov Cap-2 Maneuver | 82 | 106 | - | 78 | 108 | - | - | - | - | - | - | - |
| Stage 1 | 458 | 458 | - | 319 | 344 | - | - | - | - | - | - | - |
| Stage 2 | 299 | 340 | - | 403 | 457 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 17.6 | 47.8 | 0.2 | 0.3 |
| HCM LOS | C | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 983 | - | - | 89 | 506 | 121 | 758 | - | - |
| HCM Lane V/C Ratio | 0.018 | - | - | 0.073 | 0.082 | 0.314 | 0.029 | - | - |
| HCM Control Delay (s) | 8.7 | - | - | 48.6 | 12.7 | 47.8 | 9.9 | - | - |
| HCM Lane LOS | A | - | - | E | B | E | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.2 | 0.3 | 1.2 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 13 | 0 | 202 | 26 | 0 | 106 |
| Future Vol, veh/h | 13 | 0 | 202 | 26 | 0 | 106 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 0 | 220 | 28 | 0 | 115 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 335 | 220 | 0 | 0 | 248 | 0 |
| Stage 1 | 220 | - | - | - | - | - |
| Stage 2 | 115 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 660 | 820 | - | - | 1318 | - |
| Stage 1 | 817 | - | - | - | - | - |
| Stage 2 | 910 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 660 | 820 | - | - | 1318 | - |
| Mov Cap-2 Maneuver | 660 | - | - | - | - | - |
| Stage 1 | 817 | - | - | - | - | - |
| Stage 2 | 910 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.6 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 660 | - | 1318 | - |
| HCM Lane V/C Ratio | - | - | 0.021 | - | - | - |
| HCM Control Delay (s) | - | - | 10.6 | 0 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 3 | 17 | 1 | 19 | 27 | 584 | 8 | 38 | 934 | 4 |
| Future Vol, veh/h | 0 | 0 | 3 | 17 | 1 | 19 | 27 | 584 | 8 | 38 | 934 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 3 | 18 | 1 | 21 | 29 | 635 | 9 | 41 | 1015 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1808 | 1801 | 1017 | 1799 | 1799 | 640 | 1019 | 0 | 0 | 644 | 0 | 0 |
| Stage 1 | 1099 | 1099 | - | 698 | 698 | - | - | - | - | - | - | - |
| Stage 2 | 709 | 702 | - | 1101 | 1101 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 61 | 80 | 288 | 62 | 80 | 475 | 681 | - | - | 941 | - | - |
| Stage 1 | 258 | 288 | - | 431 | 442 | - | - | - | - | - | - | - |
| Stage 2 | 425 | 440 | - | 257 | 288 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 54 | 73 | 288 | 57 | 73 | 475 | 681 | - | - | 941 | - | - |
| Mov Cap-2 Maneuver | 54 | 73 | - | 57 | 73 | - | - | - | - | - | - | - |
| Stage 1 | 247 | 275 | - | 412 | 423 | - | - | - | - | - | - | - |
| Stage 2 | 388 | 421 | - | 243 | 275 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 17.6 | 59.1 | 0.5 | 0.4 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 681 | - | - | - | 288 | 105 | 941 | - | - |
| HCM Lane V/C Ratio | 0.043 | - | - | - | 0.011 | 0.383 | 0.044 | - | - |
| HCM Control Delay (s) | 10.5 | - | - | 0 | 17.6 | 59.1 | 9 | - | - |
| HCM Lane LOS | B | - | - | A | C | F | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0 | 1.6 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 19 | 0 | 70 | 6 | 0 | 145 |
| Future Vol, veh/h | 19 | 0 | 70 | 6 | 0 | 145 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 0 | 76 | 7 | 0 | 158 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 234 | 76 | 0 | 0 | 83 | 0 |
| Stage 1 | 76 | - | - | - | - | - |
| Stage 2 | 158 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 754 | 985 | - | - | 1514 | - |
| Stage 1 | 947 | - | - | - | - | - |
| Stage 2 | 871 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 754 | 985 | - | - | 1514 | - |
| Mov Cap-2 Maneuver | 754 | - | - | - | - | - |
| Stage 1 | 947 | - | - | - | - | - |
| Stage 2 | 871 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.9 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 754 | - | 1514 | - |
| HCM Lane V/C Ratio | - | - | 0.027 | - | - | - |
| HCM Control Delay (s) | - | - | 9.9 | 0 | 0 | - |
| HCM Lane LOS | - | - | A | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 5 | 2 | 45 | 19 | 0 | 16 | 25 | 808 | 17 | 20 | 545 | 5 |
| Future Vol, veh/h | 5 | 2 | 45 | 19 | 0 | 16 | 25 | 808 | 17 | 20 | 545 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 2 | 49 | 21 | 0 | 17 | 27 | 878 | 18 | 22 | 592 | 5 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1589 | 1589 | 595 | 1605 | 1582 | 887 | 597 | 0 | 0 | 896 | 0 | 0 |
| Stage 1 | 639 | 639 | - | 941 | 941 | - | - | - | - | - | - | - |
| Stage 2 | 950 | 950 | - | 664 | 641 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 87 | 108 | 504 | 85 | 109 | 343 | 980 | - | - | 757 | - | - |
| Stage 1 | 464 | 470 | - | 316 | 342 | - | - | - | - | - | - | - |
| Stage 2 | 312 | 339 | - | 450 | 469 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 79 | 102 | 504 | 72 | 103 | 343 | 980 | - | - | 757 | - | - |
| Mov Cap-2 Maneuver | 79 | 102 | - | 72 | 103 | - | - | - | - | - | - | - |
| Stage 1 | 451 | 456 | - | 307 | 332 | - | - | - | - | - | - | - |
| Stage 2 | 288 | 330 | - | 393 | 455 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 8.2 | 52.2 | 0.3 | 0.3 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 980 | - | - | 84 | 504 | 113 | 757 | - | - |
| HCM Lane V/C Ratio | 0.028 | - | - | 0.091 | 0.097 | 0.337 | 0.029 | - | - |
| HCM Control Delay (s) | 8.8 | - | - | 52.1 | 12.9 | 52.2 | 9.9 | - | - |
| HCM Lane LOS | A | - | - | F | B | F | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 0.3 | 1.3 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 14 | 0 | 202 | 28 | 0 | 106 |
| Future Vol, veh/h | 14 | 0 | 202 | 28 | 0 | 106 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 15 | 0 | 220 | 30 | 0 | 115 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 335 | 220 | 0 | 0 | 250 | 0 |
| Stage 1 | 220 | - | - | - | - | - |
| Stage 2 | 115 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 660 | 820 | - | - | 1316 | - |
| Stage 1 | 817 | - | - | - | - | - |
| Stage 2 | 910 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 660 | 820 | - | - | 1316 | - |
| Mov Cap-2 Maneuver | 660 | - | - | - | - | - |
| Stage 1 | 817 | - | - | - | - | - |
| Stage 2 | 910 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.6 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 660 | - | 1316 | - |
| HCM Lane V/C Ratio | - | - | 0.023 | - | - | - |
| HCM Control Delay (s) | - | - | 10.6 | 0 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

# Appendix G – ICU/Synchro Reports – 2037 Conditions

# Intersection #1

E-W Street: Casey Rd
N-S Street: Walnut Canyon Rc
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | AM 2037 Plus Project | | | | PM 2037 Without Project | | | | PM 2037 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 31 | 1 | 1.00 | 0.02 | 31 | 1 | 1.00 | 0.02 | 35 | 1 | 1.00 | 0.02 | 35 | 1 | 1.00 | 0.02 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 320 | 1 | 1.00 | 0.21 | 320 | 1 | 1.00 | 0.21 | 219 | 1 | 1.00 | 0.15 | 219 | 1 | 1.00 | 0.15 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 155 | 1 | 1.00 | 0.10 | 155 | 1 | 1.00 | 0.10 | 346 | 1 | 1.00 | 0.23 | 346 | 1 | 1.00 | 0.23 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 239 | 1 | 1.00 | 0.15 | 241 | 1 | 1.00 | 0.15 | 426 | 1 | 1.00 | 0.27 | 432 | 1 | 1.00 | 0.27 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 388 | 0 | 0.96 | 0.25 | 390 | 0 | 0.96 | 0.25 | 295 | 0 | 0.89 | 0.21 | 301 | 0 | 0.89 | 0.21 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 17 | 0 | 0.04 | 0.27 | 17 | 0 | 0.04 | 0.27 | 37 | 0 | 0.11 | 0.22 | 37 | 0 | 0.11 | 0.23 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Critical Volumes | E-W: | 0.21 | E-W: | 0.21 | E-W: | 0.15 | E-W: | 0.15 |
| | N-S: | 0.37 | N-S: | 0.37 | N-S: | 0.45 | N-S: | 0.46 |
| | Total: | 0.59 | Total: | 0.59 | Total: | 0.60 | Total: | 0.60 |
| Lost Time | | 0.10 | | 0.10 | | 0.10 | | 0.10 |
| V/C | | 0.687 | | 0.688 | | 0.698 | | 0.702 |
| Level of Service | | B | | B | | B | | C |

# Intersection #3

E-W Street: High St
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | AM 2037 Plus Project | | | | PM 2037 Without Project | | | | PM 2037 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 3 | 0 | 0.03 | 0.06 | 4 | 0 | 0.04 | 0.07 | 6 | 0 | 0.04 | 0.09 | 9 | 0 | 0.05 | 0.12 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 47 | 0 | 0.51 | 0.06 | 54 | 0 | 0.50 | 0.07 | 73 | 0 | 0.54 | 0.09 | 90 | 0 | 0.52 | 0.11 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 42 | 0 | 0.46 | 0.06 | 49 | 0 | 0.46 | 0.07 | 57 | 0 | 0.42 | 0.09 | 74 | 0 | 0.43 | 0.12 |
| Comb. L-T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 222 | 0 | 0.90 | 0.17 | 222 | 0 | 0.88 | 0.17 | 249 | 0 | 0.78 | 0.21 | 249 | 0 | 0.73 | 0.23 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Thru | 26 | 0 | 0.10 | 0.16 | 31 | 0 | 0.12 | 0.16 | 72 | 0 | 0.22 | 0.20 | 91 | 0 | 0.27 | 0.21 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 227 | 1 | 1.00 | 0.15 | 228 | 1 | 1.00 | 0.15 | 367 | 1 | 1.00 | 0.24 | 370 | 1 | 1.00 | 0.25 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 25 | 0 | 0.05 | 0.31 | 30 | 0 | 0.06 | 0.32 | 82 | 0 | 0.14 | 0.40 | 101 | 0 | 0.16 | 0.42 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| NB Thru | 447 | 0 | 0.95 | 0.30 | 451 | 0 | 0.94 | 0.30 | 516 | 0 | 0.86 | 0.37 | 528 | 0 | 0.84 | 0.39 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 170 | 1 | 1.00 | 0.11 | 170 | 1 | 1.00 | 0.11 | 366 | 1 | 1.00 | 0.24 | 366 | 1 | 1.00 | 0.24 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 355 | 1 | 1.00 | 0.24 | 356 | 1 | 1.00 | 0.24 | 225 | 1 | 1.00 | 0.15 | 228 | 1 | 1.00 | 0.15 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 666 | 0 | 1.00 | 0.42 | 671 | 0 | 1.00 | 0.42 | 407 | 0 | 0.99 | 0.26 | 419 | 0 | 0.99 | 0.27 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 1 | 0 | 0.00 | 0.44 | 2 | 0 | 0.00 | 0.45 | 3 | 0 | 0.01 | 0.27 | 6 | 0 | 0.01 | 0.28 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Critical Volumes | | | E-W: | 0.23 | | | E-W: | 0.24 | | | E-W: | 0.34 | | | E-W: | 0.36 |
| | | | N-S: | 0.76 | | | N-S: | 0.77 | | | N-S: | 0.67 | | | N-S: | 0.70 |
| | | | Total: | 0.99 | | | Total: | 1.01 | | | Total: | 1.01 | | | Total: | 1.06 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 1.086 | | | | 1.109 | | | | 1.107 | | | | 1.165 |
| Level of Service | | | | F | | | | F | | | | F | | | | F |

# Intersection #4

E-W Street: Princeton Ave
N-S Street: Spring Rd
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | AM 2037 Plus Project | | | | PM 2037 Without Project | | | | PM 2037 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 14 | 1 | 1.00 | 0.01 | 17 | 1 | 1.00 | 0.01 | 46 | 1 | 1.00 | 0.03 | 55 | 1 | 1.00 | 0.04 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 303 | 1 | 1.00 | 0.19 | 306 | 1 | 1.00 | 0.19 | 372 | 1 | 1.00 | 0.23 | 380 | 1 | 1.00 | 0.24 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 248 | 1 | 1.00 | 0.17 | 254 | 1 | 1.00 | 0.17 | 208 | 1 | 1.00 | 0.14 | 222 | 1 | 1.00 | 0.15 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 88 | 1 | 1.00 | 0.06 | 87 | 1 | 1.00 | 0.06 | 119 | 1 | 1.00 | 0.08 | 117 | 1 | 1.00 | 0.08 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 271 | 1 | 1.00 | 0.17 | 274 | 1 | 1.00 | 0.17 | 369 | 1 | 1.00 | 0.23 | 377 | 1 | 1.00 | 0.24 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 270 | 1 | 1.00 | 0.18 | 270 | 1 | 1.00 | 0.18 | 463 | 1 | 1.00 | 0.31 | 463 | 1 | 1.00 | 0.31 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 158 | 1 | 1.00 | 0.11 | 165 | 1 | 1.00 | 0.11 | 338 | 1 | 1.00 | 0.23 | 358 | 1 | 1.00 | 0.24 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 270 | 2 | 2.00 | 0.08 | 267 | 2 | 2.00 | 0.08 | 650 | 2 | 2.00 | 0.20 | 644 | 2 | 2.00 | 0.20 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 189 | 1 | 1.00 | 0.13 | 188 | 1 | 1.00 | 0.13 | 252 | 1 | 1.00 | 0.17 | 250 | 1 | 1.00 | 0.17 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 434 | 1 | 1.00 | 0.29 | 434 | 1 | 1.00 | 0.29 | 277 | 1 | 1.00 | 0.18 | 277 | 1 | 1.00 | 0.18 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 597 | 1 | 1.91 | 0.20 | 597 | 1 | 1.90 | 0.20 | 333 | 1 | 1.75 | 0.12 | 333 | 1 | 1.74 | 0.12 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 29 | 0 | 0.09 | 0.21 | 30 | 0 | 0.10 | 0.21 | 47 | 0 | 0.25 | 0.13 | 50 | 0 | 0.26 | 0.13 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| Critical Volumes | | | E-W: | 0.25 | | | E-W: | 0.25 | | | E-W: | 0.34 | | | E-W: | 0.35 |
| | | | N-S: | 0.42 | | | N-S: | 0.41 | | | N-S: | 0.39 | | | N-S: | 0.39 |
| | | | Total: | 0.66 | | | Total: | 0.66 | | | Total: | 0.73 | | | Total: | 0.73 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 0.763 | | | | 0.764 | | | | 0.827 | | | | 0.831 |
| Level of Service | | | | C | | | | C | | | | D | | | | D |

# Intersection #5

E-W Street: Poindexter Ave/Fir
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | AM 2037 Plus Project | | | | PM 2037 Without Project | | | | PM 2037 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 109 | 1 | 1.00 | 0.07 | 112 | 1 | 1.00 | 0.07 | 262 | 1 | 1.00 | 0.17 | 271 | 1 | 1.00 | 0.18 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 11 | 0 | 0.24 | 0.03 | 11 | 0 | 0.24 | 0.03 | 30 | 0 | 0.27 | 0.07 | 30 | 0 | 0.27 | 0.07 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| EB Right | 34 | 0 | 0.76 | 0.03 | 34 | 0 | 0.76 | 0.03 | 82 | 0 | 0.73 | 0.07 | 82 | 0 | 0.73 | 0.07 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 6 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 | 18 | 1 | 1.00 | 0.01 | 18 | 1 | 1.00 | 0.01 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 34 | 0 | 0.92 | 0.02 | 34 | 0 | 0.92 | 0.02 | 14 | 0 | 0.48 | 0.02 | 14 | 0 | 0.48 | 0.02 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Right | 3 | 0 | 0.08 | 0.02 | 3 | 0 | 0.08 | 0.02 | 15 | 0 | 0.52 | 0.02 | 15 | 0 | 0.52 | 0.02 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 40 | 1 | 1.00 | 0.03 | 40 | 1 | 1.00 | 0.03 | 55 | 1 | 1.00 | 0.04 | 55 | 1 | 1.00 | 0.04 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 318 | 0 | 0.98 | 0.20 | 324 | 0 | 0.98 | 0.21 | 626 | 0 | 0.98 | 0.40 | 648 | 0 | 0.98 | 0.42 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| NB Right | 8 | 0 | 0.02 | 0.22 | 8 | 0 | 0.02 | 0.22 | 16 | 0 | 0.02 | 0.43 | 16 | 0 | 0.02 | 0.44 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 7 | 1 | 1.00 | 0.00 | 7 | 1 | 1.00 | 0.00 | 10 | 1 | 1.00 | 0.01 | 10 | 1 | 1.00 | 0.01 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 446 | 0 | 0.66 | 0.42 | 454 | 0 | 0.66 | 0.43 | 473 | 0 | 0.71 | 0.42 | 493 | 0 | 0.71 | 0.43 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 232 | 0 | 0.34 | 0.45 | 236 | 0 | 0.34 | 0.46 | 192 | 0 | 0.29 | 0.44 | 201 | 0 | 0.29 | 0.46 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| Critical Volumes | | | E-W: | 0.10 | | | E-W: | 0.10 | | | E-W: | 0.19 | | | E-W: | 0.20 |
| | | | N-S: | 0.48 | | | N-S: | 0.49 | | | N-S: | 0.48 | | | N-S: | 0.50 |
| | | | Total: | 0.58 | | | Total: | 0.59 | | | Total: | 0.67 | | | Total: | 0.70 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 0.676 | | | | 0.686 | | | | 0.774 | | | | 0.799 |
| Level of Service | | | | B | | | | B | | | | C | | | | C |

# Intersection #6

E-W Street: Los Angeles Ave
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | AM 2037 Plus Project | | | | PM 2037 Without Project | | | | PM 2037 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 253 | 1 | 1.00 | 0.17 | 255 | 1 | 1.00 | 0.17 | 264 | 1 | 1.00 | 0.18 | 270 | 1 | 1.00 | 0.18 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 1076 | 2 | 2.88 | 0.23 | 1076 | 2 | 2.88 | 0.23 | 1135 | 2 | 2.82 | 0.25 | 1135 | 2 | 2.82 | 0.25 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| EB Right | 45 | 0 | 0.12 | 0.25 | 45 | 0 | 0.12 | 0.25 | 73 | 0 | 0.18 | 0.27 | 73 | 0 | 0.18 | 0.27 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 178 | 1 | 1.00 | 0.12 | 178 | 1 | 1.00 | 0.12 | 373 | 1 | 1.00 | 0.25 | 373 | 1 | 1.00 | 0.25 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Thru | 1110 | 2 | 2.00 | 0.35 | 1110 | 2 | 2.00 | 0.35 | 1326 | 2 | 2.00 | 0.41 | 1326 | 2 | 2.00 | 0.41 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 173 | 1 | 1.00 | 0.12 | 176 | 1 | 1.00 | 0.12 | 290 | 1 | 1.00 | 0.19 | 299 | 1 | 1.00 | 0.20 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 154 | 1 | 1.25 | 0.08 | 154 | 1 | 1.24 | 0.08 | 99 | 1 | 1.04 | 0.06 | 99 | 1 | 1.02 | 0.06 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| NB Thru | 93 | 0 | 0.75 | 0.08 | 94 | 0 | 0.76 | 0.08 | 92 | 0 | 0.96 | 0.06 | 95 | 0 | 0.98 | 0.06 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 164 | 1 | 1.00 | 0.11 | 164 | 1 | 1.00 | 0.11 | 143 | 1 | 1.00 | 0.10 | 143 | 1 | 1.00 | 0.10 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 305 | 1 | 0.47 | 0.43 | 309 | 1 | 0.48 | 0.43 | 275 | 1 | 0.46 | 0.40 | 284 | 1 | 0.46 | 0.41 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 89 | 0 | 0.14 | 0.40 | 90 | 0 | 0.14 | 0.41 | 129 | 0 | 0.22 | 0.37 | 132 | 0 | 0.22 | 0.38 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Right | 249 | 1 | 0.39 | 0.43 | 251 | 1 | 0.39 | 0.43 | 191 | 1 | 0.32 | 0.40 | 197 | 1 | 0.32 | 0.41 |
| Comb. L-T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: 0.52 | E-W: 0.52 | E-W: 0.59 | E-W: 0.59 |
| | N-S: 0.54 | N-S: 0.54 | N-S: 0.49 | N-S: 0.50 |
| | Total: 1.05 | Total: 1.06 | Total: 1.08 | Total: 1.10 |
| Lost Time | 0.10 | 0.10 | 0.10 | 0.10 |
| V/C | 1.154 | 1.160 | 1.182 | 1.198 |
| Level of Service | F | F | F | F |

# Intersection #7

E-W Street: Spring Rd
N-S Street: Walnut Canyon Rc
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | AM 2037 Plus Project | | | | PM 2037 Without Project | | | | PM 2037 Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 1.00 | 0.00 | 1 | 0 | 1.00 | 0.00 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| EB Thru | 1 | 0 | 0.50 | 0.00 | 1 | 0 | 0.50 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 4 | 1 | 1.00 | 0.00 | 4 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 26 | 0 | 0.96 | 0.02 | 26 | 0 | 0.96 | 0.02 | 48 | 0 | 0.98 | 0.03 | 48 | 0 | 0.98 | 0.03 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Thru | 1 | 0 | 0.04 | 0.02 | 1 | 0 | 0.04 | 0.02 | 1 | 0 | 0.02 | 0.03 | 1 | 0 | 0.02 | 0.03 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 377 | 1 | 1.00 | 0.25 | 377 | 1 | 1.00 | 0.25 | 773 | 1 | 1.00 | 0.52 | 773 | 1 | 1.00 | 0.52 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 6 | 1 | 1.00 | 0.00 | 6 | 1 | 1.00 | 0.00 | 4 | 1 | 1.00 | 0.00 | 4 | 1 | 1.00 | 0.00 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Thru | 198 | 1 | 1.00 | 0.12 | 199 | 1 | 1.00 | 0.12 | 254 | 1 | 1.00 | 0.16 | 257 | 1 | 1.00 | 0.16 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 20 | 1 | 1.00 | 0.01 | 20 | 1 | 1.00 | 0.01 | 41 | 1 | 1.00 | 0.03 | 41 | 1 | 1.00 | 0.03 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 612 | 1 | 1.00 | 0.41 | 612 | 1 | 1.00 | 0.41 | 389 | 1 | 1.00 | 0.26 | 389 | 1 | 1.00 | 0.26 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 213 | 0 | 1.00 | 0.13 | 214 | 0 | 1.00 | 0.13 | 196 | 0 | 1.00 | 0.12 | 199 | 0 | 1.00 | 0.12 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Critical Volumes | | | E-W: | 0.25 | | | E-W: | 0.25 | | | E-W: | 0.52 | | | E-W: | 0.52 |
| | | | N-S: | 0.53 | | | N-S: | 0.53 | | | N-S: | 0.42 | | | N-S: | 0.42 |
| | | | Total: | 0.78 | | | Total: | 0.79 | | | Total: | 0.93 | | | Total: | 0.94 |
| Lost Time | | | | 0.10 | | | | 0.10 | | | | 0.10 | | | | 0.10 |
| V/C | | | | 0.884 | | | | 0.885 | | | | 1.034 | | | | 1.036 |
| Level of Service | | | | D | | | | D | | | | F | | | | F |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 7 | 20 | 1 | 21 | 39 | 632 | 9 | 43 | 1003 | 7 |
| Future Vol, veh/h | 1 | 0 | 7 | 20 | 1 | 21 | 39 | 632 | 9 | 43 | 1003 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 8 | 22 | 1 | 23 | 42 | 687 | 10 | 47 | 1090 | 8 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1976 | 1969 | 1094 | 1968 | 1968 | 692 | 1098 | 0 | 0 | 697 | 0 | 0 |
| Stage 1 | 1188 | 1188 | - | 776 | 776 | - | - | - | - | - | - | - |
| Stage 2 | 788 | 781 | - | 1192 | 1192 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 46 | 63 | 260 | 47 | 63 | 444 | 636 | - | - | 899 | - | - |
| Stage 1 | 230 | 262 | - | 390 | 407 | - | - | - | - | - | - | - |
| Stage 2 | 384 | 405 | - | 228 | 261 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 39 | 56 | 260 | 42 | 56 | 444 | 636 | - | - | 899 | - | - |
| Mov Cap-2 Maneuver | 39 | 56 | - | 42 | 56 | - | - | - | - | - | - | - |
| Stage 1 | 215 | 248 | - | 364 | 380 | - | - | - | - | - | - | - |
| Stage 2 | 339 | 378 | - | 210 | 247 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 29.4 | 102.3 | 0.6 | 0.4 |
| HCM LOS | D | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 636 | - | - | 39 | 260 | 78 | 899 | - | - |
| HCM Lane V/C Ratio | 0.067 | - | - | 0.028 | 0.029 | 0.585 | 0.052 | - | - |
| HCM Control Delay (s) | 11.1 | - | - | 99.9 | 19.3 | 102.3 | 9.2 | - | - |
| HCM Lane LOS | B | - | - | F | C | F | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | 0.1 | 2.6 | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 0 | 73 | 8 | 0 | 147 |
| Future Vol, veh/h | 20 | 0 | 73 | 8 | 0 | 147 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 0 | 79 | 9 | 0 | 160 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 239 | 79 | 0 | 0 | 88 | 0 |
| Stage 1 | 79 | - | - | - | - | - |
| Stage 2 | 160 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 749 | 981 | - | - | 1508 | - |
| Stage 1 | 944 | - | - | - | - | - |
| Stage 2 | 869 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 749 | 981 | - | - | 1508 | - |
| Mov Cap-2 Maneuver | 749 | - | - | - | - | - |
| Stage 1 | 944 | - | - | - | - | - |
| Stage 2 | 869 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 749 | - | 1508 | - |
| HCM Lane V/C Ratio | - | - | 0.029 | - | - | - |
| HCM Control Delay (s) | - | - | 10 | 0 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 5 | 2 | 43 | 21 | 0 | 19 | 19 | 852 | 20 | 22 | 574 | 3 |
| Future Vol, veh/h | 5 | 2 | 43 | 21 | 0 | 19 | 19 | 852 | 20 | 22 | 574 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 2 | 47 | 23 | 0 | 21 | 21 | 926 | 22 | 24 | 624 | 3 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1664 | 1664 | 626 | 1677 | 1654 | 937 | 627 | 0 | 0 | 948 | 0 | 0 |
| Stage 1 | 674 | 674 | - | 979 | 979 | - | - | - | - | - | - | - |
| Stage 2 | 990 | 990 | - | 698 | 675 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 77 | 97 | 484 | 75 | 98 | 321 | 955 | - | - | 724 | - | - |
| Stage 1 | 444 | 454 | - | 301 | 328 | - | - | - | - | - | - | - |
| Stage 2 | 297 | 324 | - | 431 | 453 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 69 | 92 | 484 | 64 | 93 | 321 | 955 | - | - | 724 | - | - |
| Mov Cap-2 Maneuver | 69 | 92 | - | 64 | 93 | - | - | - | - | - | - | - |
| Stage 1 | 434 | 439 | - | 294 | 321 | - | - | - | - | - | - | - |
| Stage 2 | 272 | 317 | - | 375 | 438 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.6 | 63.4 | 0.2 | 0.4 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 955 | - | - | 74 | 484 | 103 | 724 | - | - |
| HCM Lane V/C Ratio | 0.022 | - | - | 0.103 | 0.097 | 0.422 | 0.033 | - | - |
| HCM Control Delay (s) | 8.9 | - | - | 59.1 | 13.2 | 63.4 | 10.1 | - | - |
| HCM Lane LOS | A | - | - | F | B | F | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 0.3 | 1.8 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 13 | 0 | 208 | 26 | 0 | 109 |
| Future Vol, veh/h | 13 | 0 | 208 | 26 | 0 | 109 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 0 | 226 | 28 | 0 | 118 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 344 | 226 | 0 | 0 | 254 | 0 |
| Stage 1 | 226 | - | - | - | - | - |
| Stage 2 | 118 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 652 | 813 | - | - | 1311 | - |
| Stage 1 | 812 | - | - | - | - | - |
| Stage 2 | 907 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 652 | 813 | - | - | 1311 | - |
| Mov Cap-2 Maneuver | 652 | - | - | - | - | - |
| Stage 1 | 812 | - | - | - | - | - |
| Stage 2 | 907 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.6 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 652 | - | 1311 | - |
| HCM Lane V/C Ratio | - | - | 0.022 | - | - | - |
| HCM Control Delay (s) | - | - | 10.6 | 0 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 0 | 14 | 20 | 1 | 21 | 43 | 633 | 9 | 43 | 1002 | 10 |
| Future Vol, veh/h | 2 | 0 | 14 | 20 | 1 | 21 | 43 | 633 | 9 | 43 | 1002 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage,-# | | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 0 | 15 | 22 | 1 | 23 | 47 | 688 | 10 | 47 | 1089 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1988 | 1981 | 1095 | 1983 | 1981 | 693 | 1100 | 0 | 0 | 698 | 0 | 0 |
| Stage 1 | 1189 | 1189 | - | 787 | 787 | - | - | - | - | - | - | - |
| Stage 2 | 799 | 792 | - | 1196 | 1194 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 46 | 62 | 260 | 46 | 62 | 443 | 635 | - | - | 898 | - | - |
| Stage 1 | 229 | 261 | - | 385 | 403 | - | - | - | - | - | - | - |
| Stage 2 | 379 | 401 | - | 227 | 260 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 39 | 54 | 260 | 39 | 54 | 443 | 635 | - | - | 898 | - | - |
| Mov Cap-2 Maneuver | 39 | 54 | - | 39 | 54 | - | - | - | - | - | - | - |
| Stage 1 | 212 | 247 | - | 357 | 373 | - | - | - | - | - | - | - |
| Stage 2 | 332 | 371 | - | 203 | 246 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.1 | 114.9 | 0.7 | 0.4 |
| HCM LOS | D | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 635 | - | - | 39 | 260 | 73 | 898 | - | - |
| HCM Lane V/C Ratio | 0.074 | - | - | 0.056 | 0.059 | 0.625 | 0.052 | - | - |
| HCM Control Delay (s) | 11.1 | - | - | 102.7 | 19.7 | 114.9 | 9.2 | - | - |
| HCM Lane LOS | B | - | - | F | C | F | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.2 | 0.2 | 2.8 | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 21 | 0 | 73 | 9 | 0 | 147 |
| Future Vol, veh/h | 21 | 0 | 73 | 9 | 0 | 147 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 23 | 0 | 79 | 10 | 0 | 160 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 239 | 79 | 0 | 0 | 89 | 0 |
| Stage 1 | 79 | - | - | - | - | - |
| Stage 2 | 160 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 749 | 981 | - | - | 1506 | - |
| Stage 1 | 944 | - | - | - | - | - |
| Stage 2 | 869 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 749 | 981 | - | - | 1506 | - |
| Mov Cap-2 Maneuver | 749 | - | - | - | - | - |
| Stage 1 | 944 | - | - | - | - | - |
| Stage 2 | 869 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 749 | - | 1506 | - |
| HCM Lane V/C Ratio | - | - | 0.03 | - | - | - |
| HCM Control Delay (s) | - | - | 10 | 0 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 8 | 2 | 61 | 21 | 0 | 19 | 35 | 855 | 20 | 22 | 573 | 10 |
| Future Vol, veh/h | 8 | 2 | 61 | 21 | 0 | 19 | 35 | 855 | 20 | 22 | 573 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 50 | - | - | - | 45 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 2 | 66 | 23 | 0 | 21 | 38 | 929 | 22 | 24 | 623 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1704 | 1704 | 629 | 1727 | 1698 | 940 | 634 | 0 | 0 | 951 | 0 | 0 |
| Stage 1 | 677 | 677 | - | 1016 | 1016 | - | - | - | - | - | - | - |
| Stage 2 | 1027 | 1027 | - | 711 | 682 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 72 | 91 | 482 | 70 | 92 | 320 | 949 | - | - | 722 | - | - |
| Stage 1 | 443 | 452 | - | 287 | 315 | - | - | - | - | - | - | - |
| Stage 2 | 283 | 312 | - | 424 | 450 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 64 | 84 | 482 | 56 | 85 | 320 | 949 | - | - | 722 | - | - |
| Mov Cap-2 Maneuver | 64 | 84 | - | 56 | 85 | - | - | - | - | - | - | - |
| Stage 1 | 425 | 437 | - | 276 | 302 | - | - | - | - | - | - | - |
| Stage 2 | 254 | 300 | - | 352 | 435 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 21.5 | 75.1 | 0.3 | 0.4 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 949 | - | - | 67 | 482 | 92 | 722 | - | - |
| HCM Lane V/C Ratio | 0.04 | - | - | 0.162 | 0.138 | 0.473 | 0.033 | - | - |
| HCM Control Delay (s) | 9 | - | - | 68.9 | 13.7 | 75.1 | 10.2 | - | - |
| HCM Lane LOS | A | - | - | F | B | F | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.5 | 0.5 | 2 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 16 | 0 | 208 | 29 | 0 | 109 |
| Future Vol, veh/h | 16 | 0 | 208 | 29 | 0 | 109 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 30 | 0 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 0 | 226 | 32 | 0 | 118 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 344 | 226 | 0 | 0 | 258 | 0 |
| Stage 1 | 226 | - | - | - | - | - |
| Stage 2 | 118 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 652 | 813 | - | - | 1307 | - |
| Stage 1 | 812 | - | - | - | - | - |
| Stage 2 | 907 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 652 | 813 | - | - | 1307 | - |
| Mov Cap-2 Maneuver | 652 | - | - | - | - | - |
| Stage 1 | 812 | - | - | - | - | - |
| Stage 2 | 907 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.7 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 652 | - | 1307 | - |
| HCM Lane V/C Ratio | - | - | 0.027 | - | - | - |
| HCM Control Delay (s) | - | - | 10.7 | 0 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0 | - |

## Appendix H – ICU/Synchro Reports – with Mitigation Measure Conditions

# Intersection #3

E-W Street: High St
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | PM 2025 without Project | | | | PM 2025 Plus Project & Mitigation | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 5 | 0 | 0.04 | 0.08 | 6 | 0 | 0.04 | 0.10 |
| Comb. L-T | | 0 | | | | 0 | | |
| EB Thru | 68 | 0 | 0.54 | 0.08 | 76 | 0 | 0.53 | 0.09 |
| Comb. T-R | | 0 | | | | 0 | | |
| EB Right | 53 | 0 | 0.42 | 0.08 | 61 | 0 | 0.43 | 0.10 |
| Comb. L-T-R | | 1 | | | | 1 | | |
| | | | | | | | | |
| WB Left | 222 | 0 | 0.76 | 0.19 | 222 | 0 | 0.74 | 0.20 |
| Comb. L-T | | 1 | | | | 1 | | |
| WB Thru | 69 | 0 | 0.24 | 0.18 | 80 | 0 | 0.26 | 0.19 |
| Comb. T-R | | 0 | | | | 0 | | |
| WB Right | 349 | 1 | 1.00 | 0.23 | 351 | 1 | 1.00 | 0.23 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| NB Left | 78 | 0 | 0.14 | 0.38 | 89 | 1 | 1.00 | 0.06 |
| Comb. L-T | | 1 | | | | 0 | | |
| NB Thru | 485 | 0 | 0.86 | 0.35 | 492 | 1 | 1.00 | 0.31 |
| Comb. T-R | | 0 | | | | 0 | | |
| NB Right | 327 | 1 | 1.00 | 0.22 | 327 | 1 | 1.00 | 0.22 |
| Comb. L-T-R | | 0 | | | | 0 | | |
| | | | | | | | | |
| SB Left | 214 | 1 | 1.00 | 0.14 | 215 | 1 | 1.00 | 0.14 |
| Comb. L-T | | 0 | | | | 0 | | |
| SB Thru | 381 | 0 | 0.99 | 0.24 | 386 | 0 | 0.99 | 0.24 |
| Comb. T-R | | 1 | | | | 1 | | |
| SB Right | 3 | 0 | 0.01 | 0.26 | 5 | 0 | 0.01 | 0.26 |
| Comb. L-T-R | | 0 | | | | 0 | | |

| | | | | |
|---|---|---|---|---|
| Critical Volumes | E-W: | 0.32 | E-W: | 0.33 |
| | N-S: | 0.63 | N-S: | 0.45 |
| | Total: | 0.95 | Total: | 0.78 |

| | | |
|---|---|---|
| Lost Time | 0.10 | 0.10 |

| | | |
|---|---|---|
| V/C | 1.048 | 0.880 |
| Level of Service | F | D |

# Intersection #3

E-W Street: High St
N-S Street: Moorpark Ave
Thru Lane Capacity: 1600
Turn Lane Capacity: 1500

| Movement | AM 2037 Without Project | | | | PM 2037 Without Project | | | | AM 2037 Plus Project & Mitigation | | | | PM 2037 Plus Project & Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C | Total Volume | No. of Lanes | Equivalent Lanes | Movement V/C |
| EB Left | 3 | 0 | 0.03 | 0.06 | 6 | 0 | 0.04 | 0.09 | 6 | 0 | 0.06 | 0.07 | 17 | 0 | 0.09 | 0.12 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Thru | 47 | 0 | 0.51 | 0.06 | 73 | 0 | 0.54 | 0.09 | 54 | 0 | 0.50 | 0.07 | 92 | 0 | 0.50 | 0.11 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| EB Right | 42 | 0 | 0.46 | 0.06 | 57 | 0 | 0.42 | 0.09 | 49 | 0 | 0.45 | 0.07 | 74 | 0 | 0.40 | 0.12 |
| Comb. L-T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| | | | | | | | | | | | | | | | | |
| WB Left | 222 | 0 | 0.90 | 0.17 | 249 | 0 | 0.78 | 0.21 | 222 | 0 | 0.87 | 0.17 | 249 | 0 | 0.73 | 0.23 |
| Comb. L-T | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| WB Thru | 26 | 0 | 0.10 | 0.16 | 72 | 0 | 0.22 | 0.20 | 33 | 0 | 0.13 | 0.16 | 94 | 0 | 0.27 | 0.21 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| WB Right | 227 | 1 | 1.00 | 0.15 | 367 | 1 | 1.00 | 0.24 | 227 | 1 | 1.00 | 0.15 | 367 | 1 | 1.00 | 0.24 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| NB Left | 25 | 0 | 0.05 | 0.31 | 82 | 0 | 0.14 | 0.40 | 72 | 1 | 1.00 | 0.05 | 133 | 1 | 1.00 | 0.09 |
| Comb. L-T | | 1 | | | | 1 | | | | 0 | | | | 0 | | |
| NB Thru | 447 | 0 | 0.95 | 0.30 | 516 | 0 | 0.86 | 0.37 | 451 | 1 | 1.00 | 0.28 | 528 | 1 | 1.00 | 0.33 |
| Comb. T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| NB Right | 170 | 1 | 1.00 | 0.11 | 366 | 1 | 1.00 | 0.24 | 170 | 1 | 1.00 | 0.11 | 366 | 1 | 1.00 | 0.24 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| | | | | | | | | | | | | | | | | |
| SB Left | 355 | 1 | 1.00 | 0.24 | 225 | 1 | 1.00 | 0.15 | 356 | 1 | 1.00 | 0.24 | 228 | 1 | 1.00 | 0.15 |
| Comb. L-T | | 0 | | | | 0 | | | | 0 | | | | 0 | | |
| SB Thru | 666 | 0 | 1.00 | 0.42 | 407 | 0 | 0.99 | 0.26 | 671 | 0 | 1.00 | 0.42 | 419 | 0 | 0.99 | 0.27 |
| Comb. T-R | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| SB Right | 1 | 0 | 0.00 | 0.44 | 3 | 0 | 0.01 | 0.27 | 2 | 0 | 0.00 | 0.45 | 6 | 0 | 0.01 | 0.28 |
| Comb. L-T-R | | 0 | | | | 0 | | | | 0 | | | | 0 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Critical Volumes | E-W: | 0.23 | E-W: | 0.34 | E-W: | 0.24 | E-W: | 0.37 |
| | N-S: | 0.76 | N-S: | 0.67 | N-S: | 0.52 | N-S: | 0.48 |
| | Total: | 0.99 | Total: | 1.01 | Total: | 0.76 | Total: | 0.85 |
| Lost Time | | 0.10 | | 0.10 | | 0.10 | | 0.10 |
| V/C | | 1.086 | | 1.107 | | 0.862 | | 0.949 |
| Level of Service | | F | | F | | D | | E |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 14 | 20 | 0 | 21 | 0 | 635 | 9 | 43 | 1002 | 10 |
| Future Vol, veh/h | 0 | 0 | 14 | 20 | 0 | 21 | 0 | 635 | 9 | 43 | 1002 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | 50 | - | - |
| Veh in Median Storage,# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 15 | 22 | 0 | 23 | 0 | 690 | 10 | 47 | 1089 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 1095 | 1891 | 1889 | 695 | - | 0 | 0 | 700 | 0 | 0 |
| Stage 1 | - | - | - | 695 | 695 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 1196 | 1194 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.22 | 7.12 | 6.52 | 6.22 | - | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.318 | 3.518 | 4.018 | 3.318 | - | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 260 | 53 | 70 | 442 | 0 | - | - | 897 | - | - |
| Stage 1 | 0 | 0 | - | 433 | 444 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 227 | 260 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | 260 | 48 | 66 | 442 | - | - | - | 897 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 48 | 66 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 433 | 444 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 203 | 246 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 19.7 | 82 | 0 | 0.4 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 260 | 88 | 897 | - | - |
| HCM Lane V/C Ratio | - | - | 0.059 | 0.506 | 0.052 | - | - |
| HCM Control Delay (s) | - | - | 19.7 | 82 | 9.2 | - | - |
| HCM Lane LOS | - | - | C | F | A | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 2.2 | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 61 | 21 | 0 | 19 | 0 | 863 | 20 | 22 | 573 | 10 |
| Future Vol, veh/h | 0 | 0 | 61 | 21 | 0 | 19 | 0 | 863 | 20 | 22 | 573 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | 50 | - | - |
| Veh in Median Storage,# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 66 | 23 | 0 | 21 | 0 | 938 | 22 | 24 | 623 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | - | 629 | 1659 | 1631 | 949 | - | 0 | 0 | 960 | 0 | 0 |
| Stage 1 | - | - | - | 949 | 949 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 710 | 682 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.22 | 7.12 | 6.52 | 6.22 | - | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.318 | 3.518 | 4.018 | 3.318 | - | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 482 | 78 | 101 | 316 | 0 | - | - | 717 | - | - |
| Stage 1 | 0 | 0 | - | 313 | 339 | - | 0 | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 424 | 450 | - | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | - | 482 | 66 | 98 | 316 | - | - | - | 717 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 66 | 98 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 313 | 339 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 353 | 435 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 13.7 | 60.8 | 0 | 0.4 |
| HCM LOS | B | F | | |

| Minor Lane/Major Mvmt | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 482 | 106 | 717 | - | - |
| HCM Lane V/C Ratio | - | - | 0.138 | 0.41 | 0.033 | - | - |
| HCM Control Delay (s) | - | - | 13.7 | 60.8 | 10.2 | - | - |
| HCM Lane LOS | - | - | B | F | B | - | - |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 1.7 | 0.1 | - | - |

PSOMAS

# Appendix D

# Attachments to Comment Letter 6

# EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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March 8, 2021

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**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

## Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Minimum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

## Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 3,623 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

| Location Type | Location Name | Rural H-W (miles) | Urban H-W (miles) |
|---|---|---|---|
| Air Basin | Great Basin | 16.8 | 10.8 |
| Air Basin | Lake County | 16.8 | 10.8 |
| Air Basin | Lake Tahoe | 16.8 | 10.8 |
| Air Basin | Mojave Desert | 16.8 | 10.8 |
| Air Basin | Mountain | 16.8 | 10.8 |
| Air Basin | North Central | 17.1 | 12.3 |
| Air Basin | North Coast | 16.8 | 10.8 |
| Air Basin | Northeast | 16.8 | 10.8 |
| Air Basin | Sacramento | 16.8 | 10.8 |
| Air Basin | Salton Sea | 14.6 | 11 |
| Air Basin | San Diego | 16.8 | 10.8 |
| Air Basin | San Francisco | 10.8 | 10.8 |
| Air Basin | San Joaquin | 16.8 | 10.8 |
| Air Basin | South Central | 16.8 | 10.8 |
| Air Basin | South Coast | 19.8 | 14.7 |
| Air District | Amador County | 16.8 | 10.8 |
| Air District | Antelope Valley | 16.8 | 10.8 |
| Air District | Bay Area AQMD | 10.8 | 10.8 |
| Air District | Butte County | 12.54 | 12.54 |
| Air District | Calaveras | 16.8 | 10.8 |
| Air District | Colusa County | 16.8 | 10.8 |
| Air District | El Dorado | 16.8 | 10.8 |
| Air District | Feather River | 16.8 | 10.8 |
| Air District | Glenn County | 16.8 | 10.8 |
| Air District | Great Basin | 16.8 | 10.8 |
| Air District | Imperial County | 10.2 | 7.3 |
| Air District | Kern County | 16.8 | 10.8 |
| Air District | Lake County | 16.8 | 10.8 |
| Air District | Lassen County | 16.8 | 10.8 |
| Air District | Mariposa | 16.8 | 10.8 |
| Air District | Mendocino | 16.8 | 10.8 |
| Air District | Modoc County | 16.8 | 10.8 |
| Air District | Mojave Desert | 16.8 | 10.8 |
| Air District | Monterey Bay | 16.8 | 10.8 |
| Air District | North Coast | 16.8 | 10.8 |
| Air District | Northern Sierra | 16.8 | 10.8 |
| Air District | Northern | 16.8 | 10.8 |
| Air District | Placer County | 16.8 | 10.8 |
| Air District | Sacramento | 15 | 10 |

| | | | |
|---|---|---|---|
| Air District | San Diego | 16.8 | 10.8 |
| Air District | San Joaquin | 16.8 | 10.8 |
| Air District | San Luis Obispo | 13 | 13 |
| Air District | Santa Barbara | 8.3 | 8.3 |
| Air District | Shasta County | 16.8 | 10.8 |
| Air District | Siskiyou County | 16.8 | 10.8 |
| Air District | South Coast | 19.8 | 14.7 |
| Air District | Tehama County | 16.8 | 10.8 |
| Air District | Tuolumne | 16.8 | 10.8 |
| Air District | Ventura County | 16.8 | 10.8 |
| Air District | Yolo/Solano | 15 | 10 |
| County | Alameda | 10.8 | 10.8 |
| County | Alpine | 16.8 | 10.8 |
| County | Amador | 16.8 | 10.8 |
| County | Butte | 12.54 | 12.54 |
| County | Calaveras | 16.8 | 10.8 |
| County | Colusa | 16.8 | 10.8 |
| County | Contra Costa | 10.8 | 10.8 |
| County | Del Norte | 16.8 | 10.8 |
| County | El Dorado-Lake | 16.8 | 10.8 |
| County | El Dorado- | 16.8 | 10.8 |
| County | Fresno | 16.8 | 10.8 |
| County | Glenn | 16.8 | 10.8 |
| County | Humboldt | 16.8 | 10.8 |
| County | Imperial | 10.2 | 7.3 |
| County | Inyo | 16.8 | 10.8 |
| County | Kern-Mojave | 16.8 | 10.8 |
| County | Kern-San | 16.8 | 10.8 |
| County | Kings | 16.8 | 10.8 |
| County | Lake | 16.8 | 10.8 |
| County | Lassen | 16.8 | 10.8 |
| County | Los Angeles- | 16.8 | 10.8 |
| County | Los Angeles- | 19.8 | 14.7 |
| County | Madera | 16.8 | 10.8 |
| County | Marin | 10.8 | 10.8 |
| County | Mariposa | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Merced | 16.8 | 10.8 |
| County | Modoc | 16.8 | 10.8 |
| County | Mono | 16.8 | 10.8 |
| County | Monterey | 16.8 | 10.8 |
| County | Napa | 10.8 | 10.8 |

| | | | |
|---|---|---|---|
| County | Nevada | 16.8 | 10.8 |
| County | Orange | 19.8 | 14.7 |
| County | Placer-Lake | 16.8 | 10.8 |
| County | Placer-Mountain | 16.8 | 10.8 |
| County | Placer- | 16.8 | 10.8 |
| County | Plumas | 16.8 | 10.8 |
| County | Riverside- | 16.8 | 10.8 |
| County | Riverside- | 19.8 | 14.7 |
| County | Riverside-Salton | 14.6 | 11 |
| County | Riverside-South | 19.8 | 14.7 |
| County | Sacramento | 15 | 10 |
| County | San Benito | 16.8 | 10.8 |
| County | San Bernardino- | 16.8 | 10.8 |
| County | San Bernardino- | 19.8 | 14.7 |
| County | San Diego | 16.8 | 10.8 |
| County | San Francisco | 10.8 | 10.8 |
| County | San Joaquin | 16.8 | 10.8 |
| County | San Luis Obispo | 13 | 13 |
| County | San Mateo | 10.8 | 10.8 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Clara | 10.8 | 10.8 |
| County | Santa Cruz | 16.8 | 10.8 |
| County | Shasta | 16.8 | 10.8 |
| County | Sierra | 16.8 | 10.8 |
| County | Siskiyou | 16.8 | 10.8 |
| County | Solano- | 15 | 10 |
| County | Solano-San | 16.8 | 10.8 |
| County | Sonoma-North | 16.8 | 10.8 |
| County | Sonoma-San | 10.8 | 10.8 |
| County | Stanislaus | 16.8 | 10.8 |
| County | Sutter | 16.8 | 10.8 |
| County | Tehama | 16.8 | 10.8 |
| County | Trinity | 16.8 | 10.8 |
| County | Tulare | 16.8 | 10.8 |
| County | Tuolumne | 16.8 | 10.8 |
| County | Ventura | 16.8 | 10.8 |
| County | Yolo | 15 | 10 |
| County | Yuba | 16.8 | 10.8 |
| Statewide | Statewide | 16.8 | 10.8 |

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Mininum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1969 | 213.1969 | 0.0601 | 0.0000 | 214.6993 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6826 | 1,721.6826 | 0.1294 | 0.0000 | 1,724.9187 |
| 2023 | 0.6148 | 3.3649 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5295 | 1,627.5295 | 0.1185 | 0.0000 | 1,630.4925 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9078 | 52.9078 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6826** | **1,721.6826** | **0.1294** | **0.0000** | **1,724.9187** |

## 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 | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1967 | 213.1967 | 0.0601 | 0.0000 | 214.6991 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6823 | 1,721.6823 | 0.1294 | 0.0000 | 1,724.9183 |
| 2023 | 0.6148 | 3.3648 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5291 | 1,627.5291 | 0.1185 | 0.0000 | 1,630.4921 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9077 | 52.9077 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6823** | **1,721.6823** | **0.1294** | **0.0000** | **1,724.9183** |

| | 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** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **9-1-2021** | **11-30-2021** | 1.4103 | 1.4103 |
| **2** | **12-1-2021** | **2-28-2022** | 1.3613 | 1.3613 |
| **3** | **3-1-2022** | **5-31-2022** | 1.1985 | 1.1985 |
| **4** | **6-1-2022** | **8-31-2022** | 1.1921 | 1.1921 |
| **5** | **9-1-2022** | **11-30-2022** | 1.1918 | 1.1918 |
| **6** | **12-1-2022** | **2-28-2023** | 1.0774 | 1.0774 |
| **7** | **3-1-2023** | **5-31-2023** | 1.0320 | 1.0320 |
| **8** | **6-1-2023** | **8-31-2023** | 1.0260 | 1.0260 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 1.0265 | 1.0265 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8857 | 2.8857 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6207 | 1.6207 |
| | | **Highest** | 2.8857 | 2.8857 |

## 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | 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**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| 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 | Scrapers | 2 | 8.00 | 367 | 0.48 |
| 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 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 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 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 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 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**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 | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### 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 | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| 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 | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

### 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 | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**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 | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| 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 | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

## 3.3 Site Preparation - 2021

**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 | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### 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 | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

### 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 | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**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 | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

## 3.4 Grading - 2021

**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 | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### 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 | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

### 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 | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

### 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 | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

## 3.4 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 | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

### 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 | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

## 3.5 Building Construction - 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 | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 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 | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

### 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 | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 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 | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

## 3.5 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 | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 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 | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

### 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 | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 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 | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

## 3.6 Paving - 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 | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

### 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 | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

## 3.6 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 | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 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 | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

### 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 | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 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 | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

## 3.7 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 | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 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 | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

### 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 | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 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 | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

## 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 | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 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 |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | 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 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 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 | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 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 | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 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 | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 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 | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1521 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

## 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 | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1520 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

| | 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** |

## 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | 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 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| 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 | Scrapers | 2 | 8.00 | 367 | 0.48 |
| 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 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 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 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 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 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### 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 | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| 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 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

### 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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**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 | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| 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 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

## 3.3 Site Preparation - 2021

**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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### 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 |
| 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 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

### 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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**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 |
| 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 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

## 3.4 Grading - 2021

**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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### 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 |
| 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 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**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 |
| 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 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

## 3.4 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

## 3.5 Building Construction - 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 | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

### 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 | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

## 3.5 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** |

## 3.5 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 | 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 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

### 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** |

## 3.5 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 | 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 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

## 3.6 Paving - 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

### 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

## 3.6 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

### 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

## 3.7 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 | 236.4115 | | | | | 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** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 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 | 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 |
| 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 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

### 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 | 236.4115 | | | | | 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** | **236.5923** | **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** |

### 3.7 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 | 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 |
| 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 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

## 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 | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 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 |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | 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 | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 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 | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 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 | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

## 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 | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

| | 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** |

## 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | 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 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| 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 | Scrapers | 2 | 8.00 | 367 | 0.48 |
| 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 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 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 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 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 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### 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 | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| 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 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

### 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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**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 | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| 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 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

## 3.3 Site Preparation - 2021

**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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### 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 |
| 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 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

### 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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**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 |
| 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 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

## 3.4 Grading - 2021

**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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### 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 |
| 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 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**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 |
| 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 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

## 3.4 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

## 3.5 Building Construction - 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 | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

### 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 | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

## 3.5 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** |

## 3.5 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 | 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 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

### 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** |

## 3.5 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 | 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 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

## 3.6 Paving - 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

### 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

## 3.6 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

### 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

## 3.7 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 | 236.4115 | | | | | 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** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 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 | 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 |
| 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 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

### 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 | 236.4115 | | | | | 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** | **236.5923** | **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** |

### 3.7 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 | 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 |
| 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 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

## 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 | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 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 |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | 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 | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 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 | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 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 | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7654 | 210.7654 | 0.0600 | 0.0000 | 212.2661 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6554 | 1,418.6554 | 0.1215 | 0.0000 | 1,421.6925 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4412 | 1,342.4412 | 0.1115 | 0.0000 | 1,345.2291 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6355 | 44.6355 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6554** | **1,418.6554** | **0.1215** | **0.0000** | **1,421.6925** |

## 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 | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7651 | 210.7651 | 0.0600 | 0.0000 | 212.2658 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6550 | 1,418.6550 | 0.1215 | 0.0000 | 1,421.6921 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4409 | 1,342.4409 | 0.1115 | 0.0000 | 1,345.2287 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6354 | 44.6354 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6550** | **1,418.6550** | **0.1215** | **0.0000** | **1,421.6921** |

| | 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** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **9-1-2021** | **11-30-2021** | 1.4091 | 1.4091 |
| **2** | **12-1-2021** | **2-28-2022** | 1.3329 | 1.3329 |
| **3** | **3-1-2022** | **5-31-2022** | 1.1499 | 1.1499 |
| **4** | **6-1-2022** | **8-31-2022** | 1.1457 | 1.1457 |
| **5** | **9-1-2022** | **11-30-2022** | 1.1415 | 1.1415 |
| **6** | **12-1-2022** | **2-28-2023** | 1.0278 | 1.0278 |
| **7** | **3-1-2023** | **5-31-2023** | 0.9868 | 0.9868 |
| **8** | **6-1-2023** | **8-31-2023** | 0.9831 | 0.9831 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 0.9798 | 0.9798 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8757 | 2.8757 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6188 | 1.6188 |
| | | **Highest** | 2.8757 | 2.8757 |

## 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | 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**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| 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 | Scrapers | 2 | 8.00 | 367 | 0.48 |
| 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 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**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 | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### 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 | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| 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 | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

### 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 | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**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 | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| 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 | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

## 3.3 Site Preparation - 2021

**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 | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### 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 | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

### 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 | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**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 | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

## 3.4 Grading - 2021

**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 | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### 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 | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

### 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 | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

**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 | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

## 3.4 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 | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

### 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 | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

## 3.5 Building Construction - 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 | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 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 | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

### 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 | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 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 | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

## 3.5 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 | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 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 | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

### 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 | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 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 | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

## 3.6 Paving - 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 | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

### 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 | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

### 3.6 Paving - 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

### 3.6 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 | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 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 | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

### 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 | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 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 | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

## 3.7 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 | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 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 | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

### 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 | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 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 | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

## 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 | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 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 |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | 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 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 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 | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 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 | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 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 | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 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 | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0956 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

## 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 | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0955 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

| | 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** |

## 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | 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 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| 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 | Scrapers | 2 | 8.00 | 367 | 0.48 |
| 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 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### 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 | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| 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 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

### 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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**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 | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| 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 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

## 3.3 Site Preparation - 2021

**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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### 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 |
| 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 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

### 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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**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 |
| 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 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

## 3.4 Grading - 2021

**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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### 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 |
| 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 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**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 |
| 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 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

## 3.4 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

## 3.5 Building Construction - 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 | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

### 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 | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

## 3.5 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** |

## 3.5 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 | 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 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

### 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** |

## 3.5 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 | 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 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

## 3.6 Paving - 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

### 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

## 3.6 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

### 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

## 3.7 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 | 236.4115 | | | | | 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** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 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 | 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 |
| 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 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

### 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 | 236.4115 | | | | | 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** | **236.5923** | **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** |

### 3.7 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 | 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 |
| 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 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

## 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 | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 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 |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | 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 | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 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 | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 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 | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

## 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 | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

| | 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** |

## 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | 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 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| 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 | Scrapers | 2 | 8.00 | 367 | 0.48 |
| 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 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### 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 | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| 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 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

### 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 | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**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 | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| 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 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

## 3.3 Site Preparation - 2021

**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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### 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 |
| 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 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

### 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 | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**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 |
| 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 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

## 3.4 Grading - 2021

**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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### 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 |
| 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 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**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 |
| 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 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

## 3.4 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

### 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 | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 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** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 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 | 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 |
| 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 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

## 3.5 Building Construction - 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 | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

### 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 | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 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 | 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 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

## 3.5 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** |

## 3.5 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 | 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 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

### 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** |

## 3.5 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 | 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 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

## 3.6 Paving - 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### 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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 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 | 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 |
| 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 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

## 3.6 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

### 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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **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** |

## 3.6 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 | 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 |
| 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 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

## 3.7 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 | 236.4115 | | | | | 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** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 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 | 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 |
| 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 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

### 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 | 236.4115 | | | | | 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** | **236.5923** | **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** |

### 3.7 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 | 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 |
| 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 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

## 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 | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 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 |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | 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 | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 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 | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 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 | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | 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 | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 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 | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 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

Attachment C

| Local Hire Provision Net Change | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,623 |
| Amortized (MT CO2e/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized (MT CO2e/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

**EXHIBIT B**

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

**SOIL WATER AIR PROTECTION ENTERPRISE**
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
**Email:** prosenfeld@swape.com

# *Paul Rosenfeld, Ph.D.*

**Chemical Fate and Transport & Air Dispersion Modeling**

*Principal Environmental Chemist*

**Risk Assessment & Remediation Specialist**

## Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

## Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex $H_2O$ Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E**. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.,** J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.,** M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.,** J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.,** and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49( 9), 171-178.

**Rosenfeld, P. E**., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.,** Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E**., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.,** and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

**Rosenfeld, P.E.,** C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.,** and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.,** and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E. (**1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld, P. E. (**1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

## Presentations:

**Rosenfeld, P.E.,** Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

**Rosenfeld, P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D**. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D**. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E**., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D**. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

**Rosenfeld. P.E. (**October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E. (**2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

# EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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## Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization**
**Industrial Stormwater Compliance**
**Investigation and Remediation Strategies**
**Litigation Support and Testifying Expert**
**CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

**Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

**Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F**., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F**., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F**., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F**., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F**., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F**., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F**., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F**., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F**., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F**., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F**., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F**., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F**., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.**F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F**., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F**., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.