# City of Salinas General Plan Amendment No. 2022-002 and Rezone No. 2022-002 for Alisal Marketplace

## INITIAL STUDY – MITIGATED NEGATIVE DECLARATION

**AUGUST 2023**

*Prepared for*

City of Salinas
Community Development Department
65 West Alisal Street, 2nd Floor
Salinas, CA 93901

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# 1 INTRODUCTION

Precision Civil Engineering, Inc. (PCE) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Salinas (City) to address the environmental effects of the proposed City of Salinas General Plan Amendment (GPA) No. 2022-002 and Rezone No. 2022-002 for Alisal Marketplace ("Project" or "proposed Project"). GPA No. 2022-002 requests a land use change from Retail and General Commercial/Light Industrial to Mixed-Use. Rezone No. 2022-002 requests a rezone from CR – Commercial Retail and IGC – Industrial General Commercial to MX – Mixed Use, consistent with the proposed land use designation. The Project site consists of 18 parcels that total approximately 12.1 acres. The purpose of the GPA and Rezone is to provide additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. This Project is funded by SB 2 grant funding for the purpose of increasing housing production in the city. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq. The City of Salinas is the Lead Agency for this proposed Project. The site and the proposed Project are described in detail in SECTION 2 ENVIRONMENTAL CHECKLIST FORM.

## 1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, et seq.), also known as the CEQA Guidelines, Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels.

A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence considering the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or mitigated ND shall be prepared for a project subject to CEQA when either:

*a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or*

*b. The IS identified potentially significant effects, but:*

> *1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed Mitigated Negative Declaration and Initial Study is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and*
>
> *2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.*

## 1.2 Purpose of the Initial Study

This Project is funded by SB 2 grant funding for the purpose of providing additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. Currently, the site is occupied by mostly light-industrial uses and big-box retail buildings collectively identified as "Alisal

Marketplace." A 2010 proposal envisioned a transformation of Alisal Marketplace into a new mixed-use neighborhood integrating housing and services with public open space and educational and civic buildings, including a new police station. The city considers the Project site to have significant redevelopment potential and proposes to change the land use designation and zone district for 18 parcels that total approximately 12.1 acres to facilitate future mixed-use development.

Although no physical development is proposed by the Project, this Initial Study analyzes the potential buildout of the Project site at a programmatic level, using reasonable assumptions so that future development of the site can tier from this Initial Study pursuant to CEQA Guidelines Section 15168(c)(1) and 15168(d) for evaluations of environmental issues associated with later activities/subsequent projects. However, depending on the final design of future physical development, additional project specific CEQA review may be required as determined by the City through the entitlement review and approval process.

### 1.3 Document Format

This IS/MND contains five (5) chapters plus appendices. SECTION 1 INTRODUCTION provides bases of the IS/MND's regulatory information and an overview of the Project. SECTION 2 ENVIRONMENTAL CHECKLIST FORM provides a detailed description of Project components. SECTION 3 DETERMINATION concludes that the Initial Study is a mitigated negative declaration, identifies the environmental factors potentially affected based on the analyses contained in this IS, and includes with the Lead Agency's determination based upon those analyses. SECTION 4 EVALUATION OF ENVIRONMENTAL IMPACTS presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the Project impact is anticipated to be potentially significant, less than significant with mitigation incorporated, less than significant, or why no impacts are expected is included. SECTION 5 MITIGATION MONITORING AND REPORTING PROGRAM presents the mitigation measures recommended in the IS/MND for the Project. The CalEEMod Output Files, CNDDB Occurrence Report, CHRIS Search Record, NAHC SLF Results Letter, Noise Assessment, and Trip Generation Memo are provided as Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, and Appendix F respectively, at the end of this document.

# 2 ENVIRONMENTAL CHECKLIST FORM

This section describes the components of the proposed Project in more detail, including project location, project objectives, and required project approvals.

## 2.1 Project Title

Alisal Marketplace General Plan Amendment and Rezone Project (General Plan Amendment No. 2022-002 and Rezone No. 2022-002)

## 2.2 Lead Agency Name and Address

City of Salinas
Community Development Department
65 West Alisal Street, 2nd Floor
Salinas, CA 93901

## 2.3 Contact Person and Phone Number

### Lead Agency/Applicant

City of Salinas
Community Development Department
Attn. Oscar Resendiz, Associate Planner
oscarr@ci.salinas.ca.us
(831) 775-4259

## 2.4 Study Prepared By

Precision Civil Engineering
1234 O Street
Fresno, CA 93721
(559) 449-4500

## 2.5 Project Location

The Project site is in the jurisdiction of the City of Salinas, Monterey County, California (Figure 2-1). The site is generally located adjacent to East Alisal Street between Front Street and Griffin Street ("Alisal Marketplace"), consisting of 18 parcels that total approximately 12.1 acres (Figure 2-3). The site is identified by the Monterey County Assessor as Assessor's Parcel Numbers (APNs) 003-051-082-000, 003-051-083-000, 003-051-065-000, 003-051-054-000, 003-051-055-000, 003-051-008-000, 003-052-001-000, 003-052-002-000, 003-052-018-000, 003-052-019-000, 003-052-023-000, 003-052-032-000, 003-052-017-000, 003-052-031-000, 003-041-029-000, 003-041-031-000, 003-041-001-000, 003-041-028-000. The site is a portion of Township 14 South, Range 3 East, Mount Diablo Base and Meridian. Site attributes are summarized in Table 2-1. It should be noted that the Project site is within a Federal Opportunity Zone (ID 06053014500).

## 2.6 Latitude and Longitude

The centroid of the Project site is 36.67497450062506, -121.64417025816442.

CITY OF SALINAS - General Plan Amendment & Rezone: Alisal Marketplace

Created 10/7/2022

Figure 2-1 Alisal Marketplace Project Location

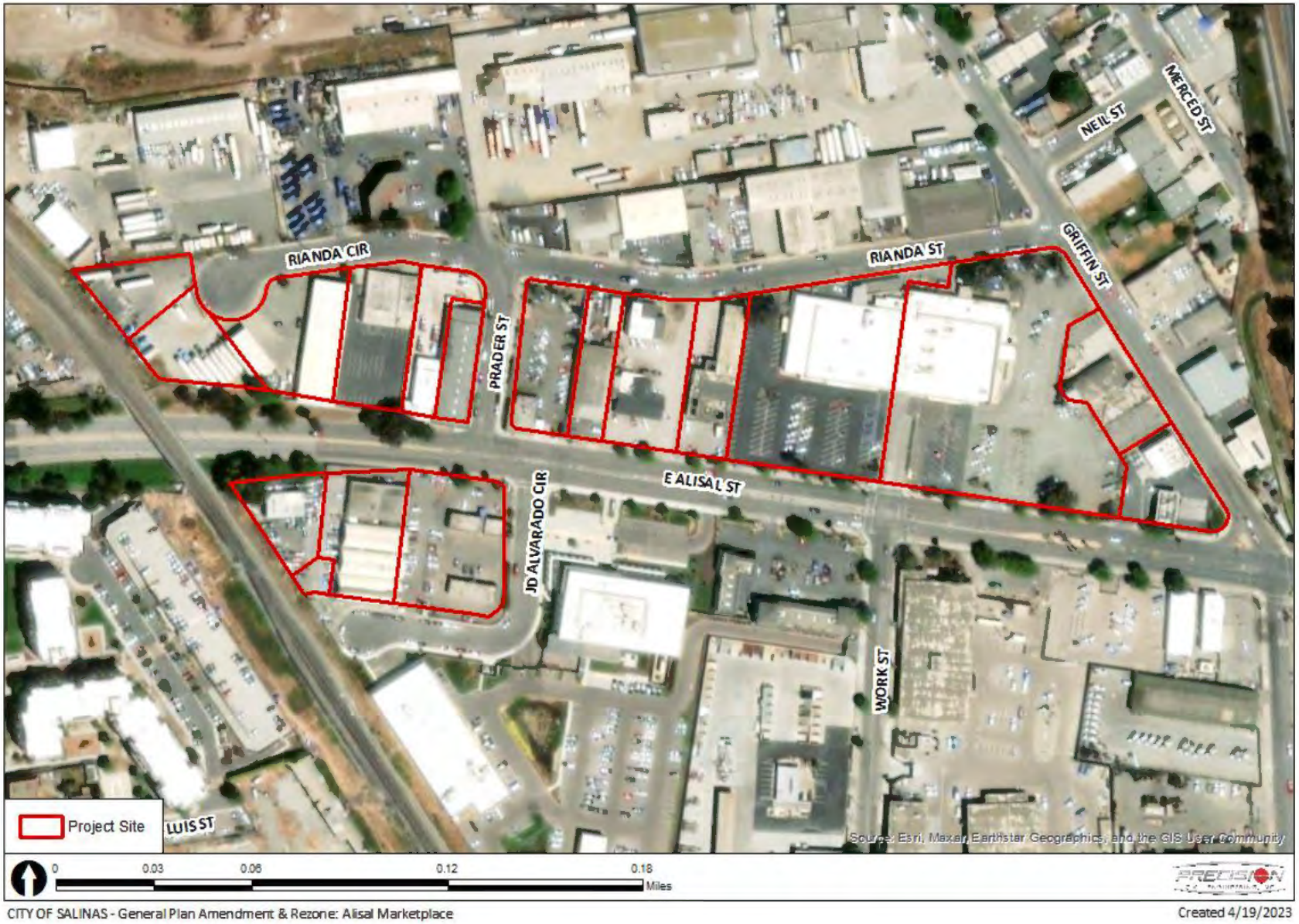
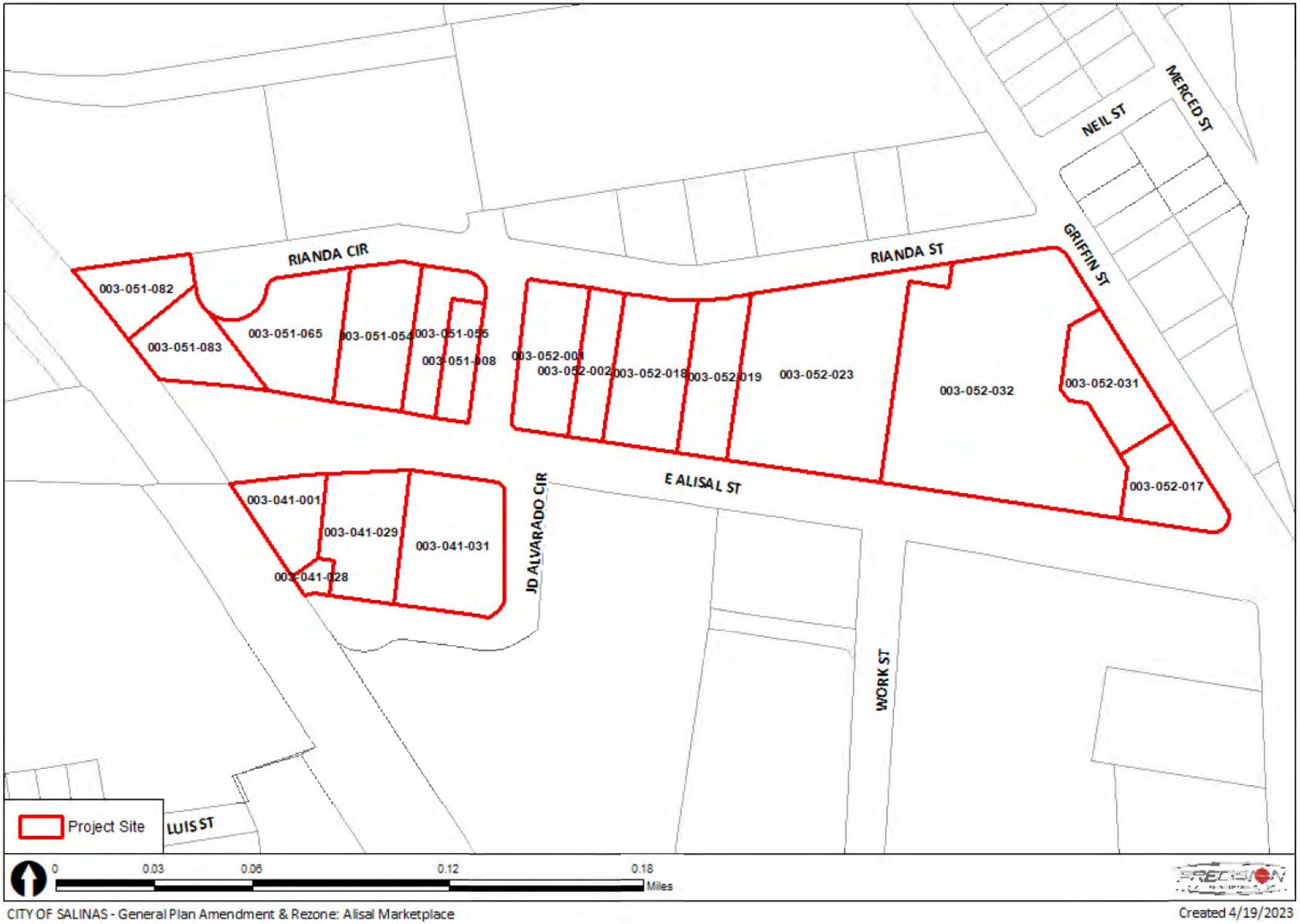



Figure 2-2 Alisal Marketplace Project Aerial




CITY OF SALINAS - General Plan Amendment & Rezone: Alisal Marketplace

Created 4/19/2023

Figure 2-3 Alisal Marketplace APN Map

Table 2-1 Project Site Attribute Summary: APN, Address, Acreage, Land Use, Zoning

| APN | Site Address | Acreage | Existing Land Use | General Plan Land Use (Existing) | Zone District (Existing) |
|---|---|---|---|---|---|
| 003-041-001-000 | 268 E Alisal St, Salinas, CA 93901 | 0.35 | Fernando's Auto Repair | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-041-028-000 | 20 Murphy St, Salinas, CA 93901 | 0.07 | Cul-de-sac | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-041-029-000 | 278 E Alisal St, Salinas, CA 93901<br>10 Murphy St, Salinas, CA 93901<br>14 Murphy St, Salinas, CA 93901<br>18 Murphy St, Salinas, CA 93901 | 0.59 | Low-Cost Interlock<br>Audio Express<br>Works Autobody<br>Jamie's Auto Services<br>Tolos Body Shop | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-041-031-000 | 282 E Alisal St, Salinas, CA 93901<br>310 E Alisal St, Salinas, CA 93901 | 0.84 | Car Wash and Pet Wash | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-051-008-000 | 225 Prader St, Salinas, CA 93901<br>285 Prader St, Salinas, CA 93901<br>285 E Alisal St, Salinas, CA 93901 | 0.24 | Rojas Auto Care & Towing<br>Rock Boxing Gym<br>Rent A Wheel | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-051-054-000 | 270 Rianda St, Salinas, CA 93901<br>283 Rianda St, Salinas, CA 93901 | 0.60 | Knights of Columbus Auditorium | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-051-055-000 | 283 E Alisal St, Salinas, CA 93901 | 0.35 | First Class Fumigation | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-051-065-000 | 260 Rianda St # A, Salinas, CA 93901 | 0.67 | Tri County Fire | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-051-082-000 | 251 Rianda Circle, Salinas, CA 93901 | 0.34 | Truck Parking | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-051-083-000 | 250 Rianda Circle, Salinas, CA 93901 | 0.43 | Truck Parking | General Commercial/Light Industrial | Industrial -General Commercial |
| 003-052-001-000 | 301 E Alisal St, Salinas, CA 93901 | 0.55 | Los Dos Potrillos | Retail | Commercial Retail |
| 003-052-002-000 | 311 E Alisal St, Salinas, CA 93901 | 0.31 | Pacific Coast Battery Services Inc | Retail | Commercial Retail |
| 003-052-017-000 | 385 E Alisal St, Salinas, CA 93901 | 0.46 | ampm, Arco Gas | Retail | Commercial Retail |
| 003-052-018-000 | 314 Rianda St, Salinas, CA 93901<br>315 E Alisal St, Salinas, CA 93901 | 0.67 | Church (Iglesia)<br>Mountain Mike's Pizza | Retail | Commercial Retail |

| | | | | | |
|---|---|---|---|---|---|
| 003-052-019-000 | 320 Rianda St, Salinas, CA 93901<br>323 E Alisal St, Salinas, CA 93901 | 0.49 | Mecánico auto repair shop | Retail | Commercial Retail |
| 003-052-023-000 | 341 E Alisal St, Salinas, CA 93901<br>335 E Alisal St, Salinas, CA 93901 | 1.82 | Alisal Plaza<br>Las Palmas Furniture | Retail | Commercial Retail |
| 003-052-031-000 | 260 Griffin St, Salinas, CA 93901<br>258 Griffin St, Salinas, CA 93901 | 0.51 | Kelly-Moore Paints | Retail | Commercial Retail |
| 003-052-032-000 | 347 E Alisal St, Salinas, CA 93901<br>235 Kern St, Salinas, CA 93905 | 2.80 | CVS Pharmacy<br>Aloha Motel | Retail | Commercial Retail |
| **Total Acreage** | | **12.1** | | | |

## 2.7 General Plan Designation

The Project site has a City of Salinas General Plan (General Plan) land use designation of Retail and General Commercial/Light Industrial (Figure 2-4). According to the General Plan, the Retail land use designation *"provides for a variety of retail uses such as retail stores, restaurants, hotels, personal services, business services and financial services. The maximum intensity of development is a floor area ratio of 0.4."* The General Commercial/Light Industrial land use designation *"provides for uses such as automobile dealerships and repair shops, building materials sales, light manufacturing, distribution, warehousing and wholesaling that would generally not be appropriate in more restrictive designations because of potential nuisance factors. The maximum intensity of development is a floor area ratio of 0.4. Residential development (e.g., Single Room development is a floor area ratio of 0.4 + 10 units per acre)."*

The City of Salinas (Applicant) proposes General Plan Amendment (GPA) No. 2022-002 to change the land use designation from Retail and General Commercial/Light Industrial to Mixed Use (Figure 2-5). The purpose of the GPA is to provide additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. According to the General Plan, the Mixed-Use land use designation *"allows for development including a mixture of retail, office and residential uses in the same building, on the same parcel or in the same area. The intent of this designation is to create activity centers with pedestrian-oriented uses in certain portions of the City."* This land use designation allows for a maximum residential density of 80 units per acre.

## 2.8 Zoning

The Project site is in the CR – Commercial Retail and IGC – Industrial General Commercial zoning districts (Figure 2-6). According to Section 37-30.190 of the Salinas Municipal Code (SMC), the CR zoning district *"allows a wide range of retail stores, restaurants, hotels and motels, commercial recreation, personal services, business services, offices, financial services, mixed use residential, and/or limited residential uses."* SMC Section 37-30.300 indicates that the IGC zone district *"provides for a range of retail, wholesale, and service businesses not generally suitable in commercial districts because they attract heavy automobile and truck traffic or have certain adverse impacts; and to provide opportunities for certain limited manufacturing uses that have impacts comparable to those of retail and service."*

The City of Salinas (Applicant) proposes Rezone No. 2022-002 to change the zoning district from CR and IGC to MX – Mixed Use (Figure 2-7). The Review Memo dated May 24, 2022, states that they are to be rezoned MX – Mixed Use. The purpose of the Rezone is to provide additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. According to SMC Section 37-30.230, the MX zone district *"provides opportunities for mixed use, office, public and semipublic uses, and commercial uses that emphasize retail, entertainment, and service activities."* Medium and high-density residential uses are encouraged within MX districts to facilitate pedestrian-oriented activity centers. The proposed zoning district would be consistent with the land use designation, MX – Mixed Use.

On the Project site, there are existing commercial uses such as adult entertainment facilities and vehicle sales and services, among other uses, which are not permitted in the MX zoning district per SMC Section 37-30.240 and would become legal, non-conforming uses subject to SMC *Section 37-50.160*. Other existing uses, such as service stations, may require a Conditional Use Permit for any proposed changes to their use.

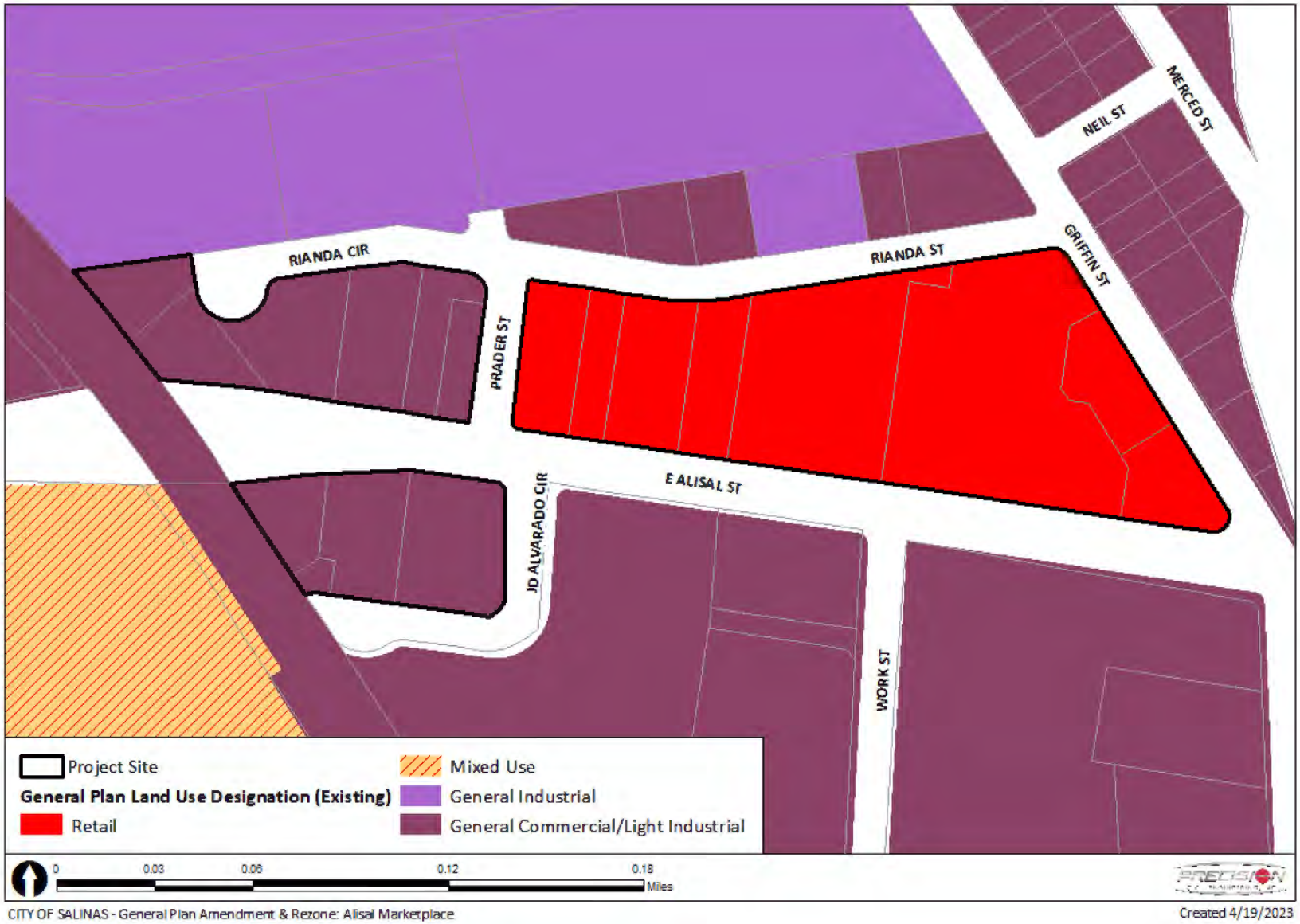



Figure 2-4 City of Salinas General Plan Land Use Designation Map for Alisal Marketplace (Existing)

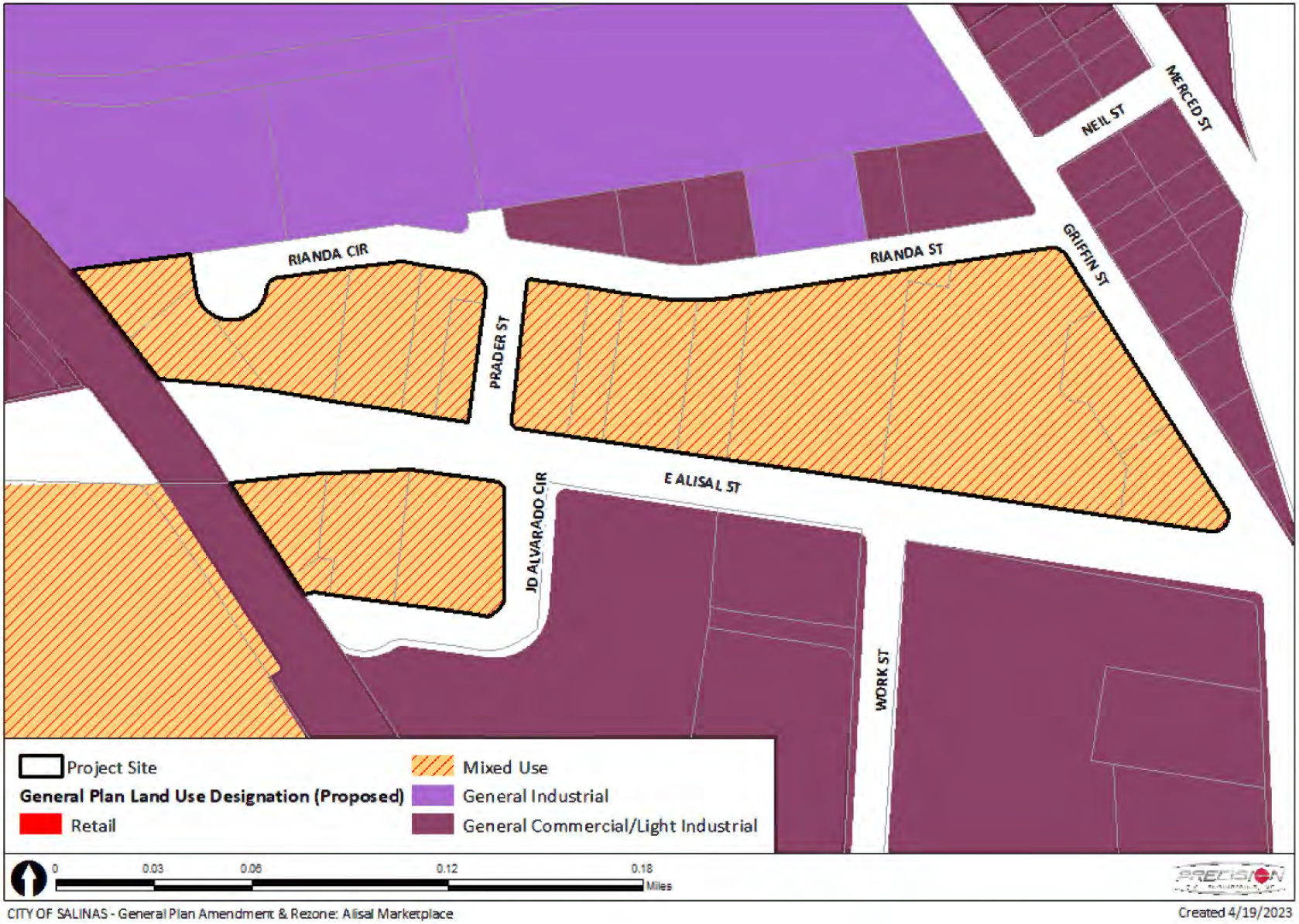



Figure 2-5 City of Salinas General Plan Land Use Designation Map for Alisal Marketplace (Proposed)

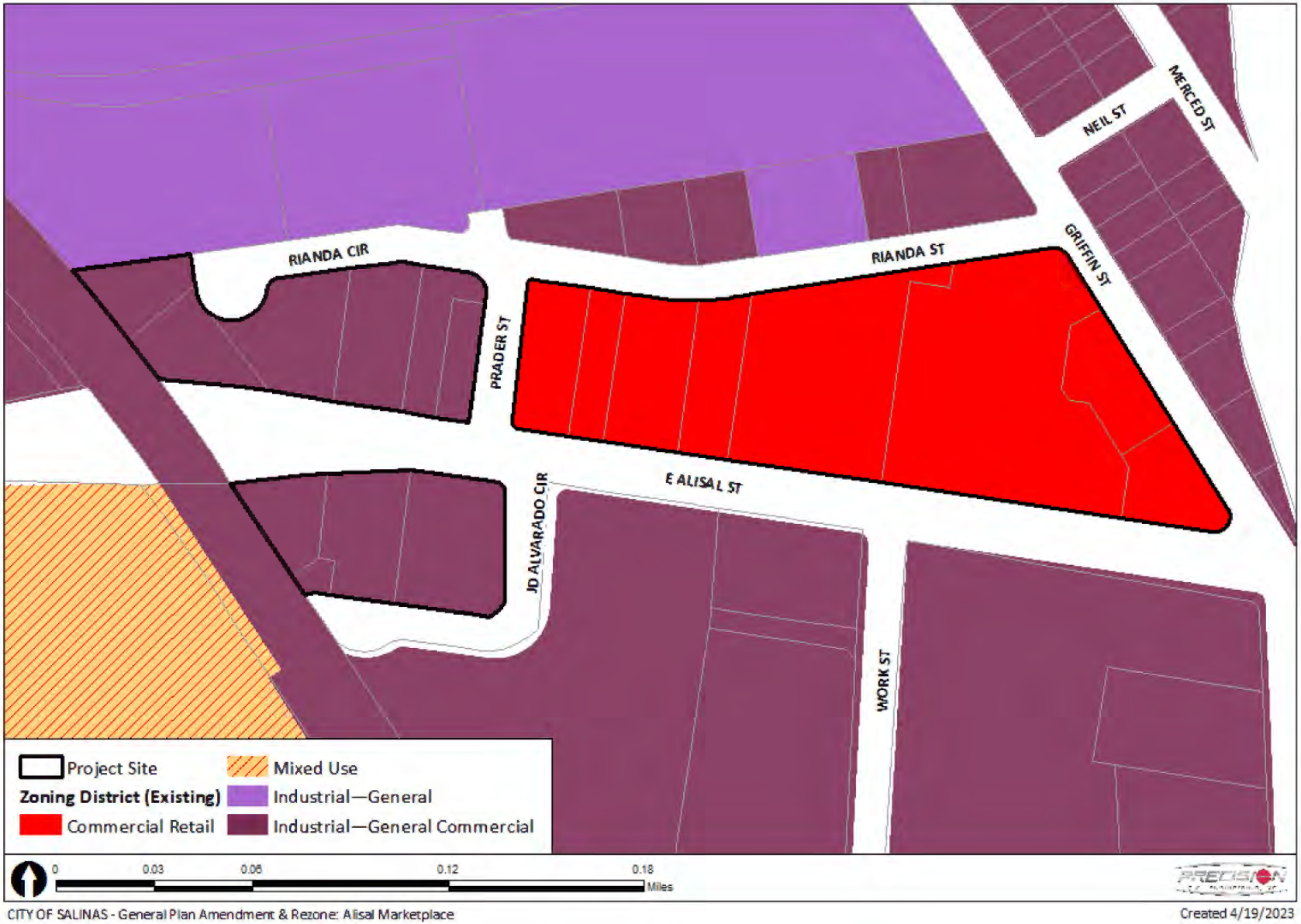



Figure 2-6 City of Salinas Zone District Map for Alisal Marketplace (Existing)

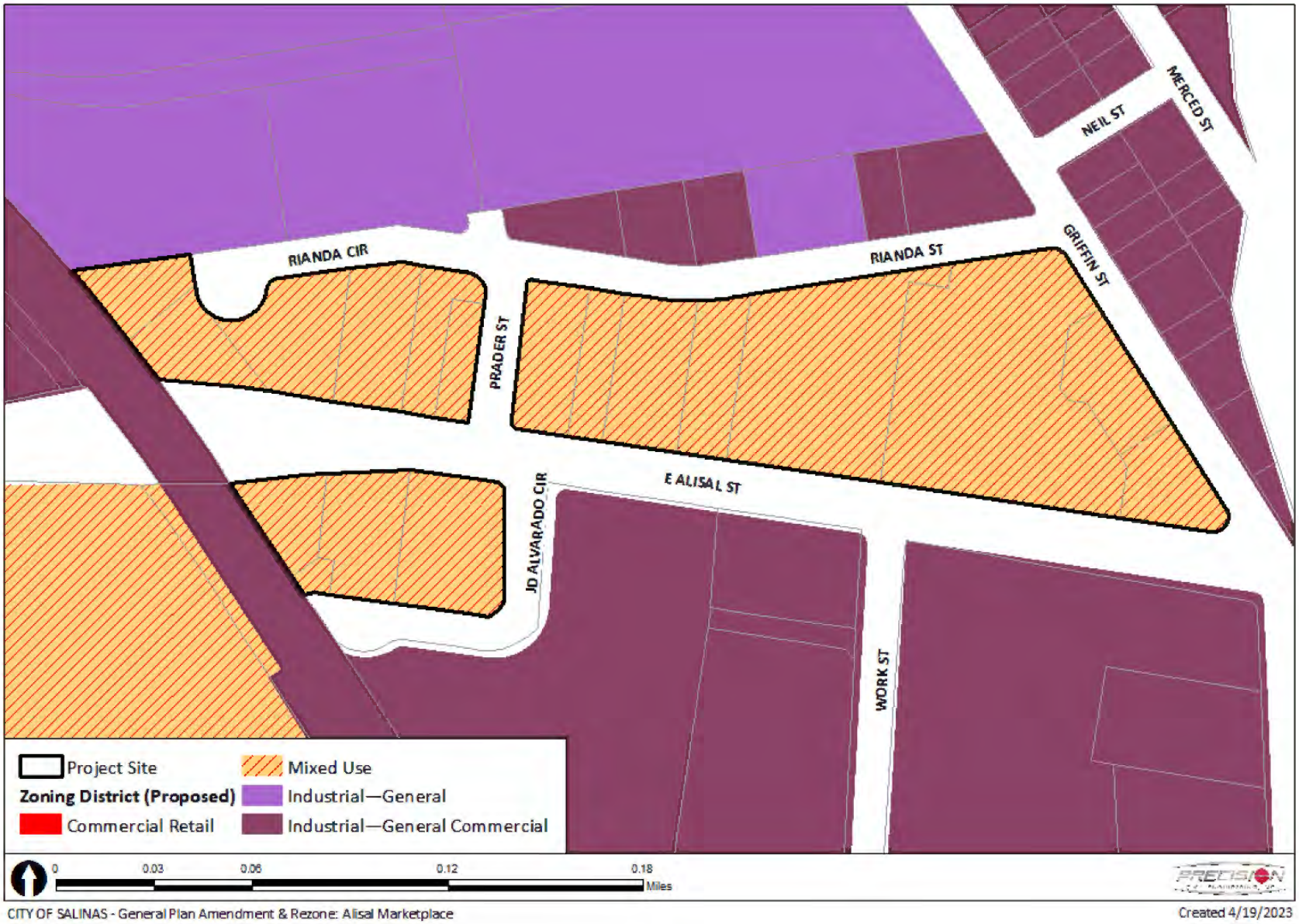



Figure 2-7 City of Salinas Zone District Map for Alisal Marketplace (Proposed)

## 2.9 Description of Project

General Plan Amendment (GPA) No. 2022-002 and Rezone No. 2022-002 are filed by the City of Salinas (Applicant) and pertain to 18 parcels that are generally located adjacent to East Alisal Street between Front Street and Griffin Street ("Project site") and total approximately 12.1 acres. The site is identified by the Monterey County Assessor as APNs 003-051-082-000, 003-051-083-000, 003-051-065-000, 003-051-054-000, 003-051-055-000, 003-051-008-000, 003-052-001-000, 003-052-002-000, 003-052-018-000, 003-052-019-000, 003-052-023-000, 003-052-032-000, 003-052-017-000, 003-052-031-000, 003-041-029-000, 003-041-031-000, 003-041-001-000, 003-041-028-000. GPA No. 2022-002 requests a land use change from Retail and General Commercial/Light Industrial to Mixed-Use. Rezone No. 2022-002 requests a rezone from CR – Commercial Retail and IGC – Industrial General Commercial to MX – Mixed Use, consistent with the proposed land use designation. No physical development is proposed.

*Project Assumptions*

This Project is funded by SB 2 grant funding for the purpose of providing additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. Currently, the site is occupied by mostly light-industrial uses and big-box retail buildings collectively identified as "Alisal Marketplace." A 2010 proposal envisioned a transformation of Alisal Marketplace into a new mixed-use neighborhood integrating housing and services with public open space and educational and civic buildings, including a new and already existing police station. The city considers the Project site to have significant redevelopment potential and proposes to change the land use designation and zone district for 18 parcels that total approximately 12.1 acres to facilitate future mixed-use development.

Although no physical development is proposed by the Project, this Initial Study analyzes the potential buildout of the Project site at a programmatic level, using reasonable assumptions so that future development of the site can tier from this Initial Study pursuant to CEQA Guidelines Section 15168(c)(1) and 15168(d) for evaluations of environmental issues associated with later activities/subsequent projects. However, depending on the final design of future physical development, additional project specific CEQA review may be required as determined by the City through the entitlement review and approval process.

For the purposes of the analysis contained in this Initial Study, the vision for the Project site is mixed-use development containing mixed use buildings, whereby a "mixed use building" is defined as *"a structure containing both residential and pedestrian-oriented commercial uses (including retail, restaurants, offices, services, and similar uses deemed compatible with residential uses)"* pursuant to SMC Section 37-10.370. In mixed-use buildings, the commercial use or uses are typically located on the ground floor of the structure with the residential dwellings predominantly located on the second or higher floors.

Therefore, the assumed "project" to be analyzed in this Initial Study is a mixed-use development containing four (4)-story mixed use buildings with commercial uses located on the ground floor and residential dwellings on the second and higher floors on a Project site that totals approximately 12.1 acres, or 525,625 square feet (sf.) of site area. The following Project assumptions are consistent with the development standards contained in SMC Section 37-30.250.

- The estimated commercial buildout potential is approximately 131,406 sf. of ground floor commercial, which is based on a 0.25 floor area ratio (FAR) to allow for the maximum residential density permitted in the MX Zone District (calculation: 525,625 sf. multiplied by 0.25 FAR = 131,406 sf.).
- The estimated residential buildout potential is approximately 515 residential dwelling units, which is based on three (3) floors of multi-family residential dwelling units (calculation: 525,625 sf. multiplied by 0.25 FAR = 131,406 sf.; 525,625 sf. minus 131,406 sf. = 394,219 sf.; 394,219 sf./1,000 sf. = 394 units; plus 10 units to the acre: 12.1 acres multiplied by 10 units = 121 units; 121 units plus 394 units = 515 units).[1] The resulting residential density is 42.7 dwelling units per acre (calculation: 515 dwelling units divided by 12.1 acres = 42.6).
- Based on buildout assumptions of commercial sf. and residential units, an estimated 843 parking stalls would be required pursuant to SMC Section 37-50.360 (calculation: 131,406 sf. divided by 400 sf. equals 328 plus 515 dwelling units = 843 parking stalls).

## 2.10 Project Setting and Surrounding Land Uses

*Project Setting*

The Project site is currently fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping. There are approximately 23 existing structures on the site that predominately consist of commercial and industrial uses (Table 2-1). The ariel image of the Project site is shown in Figure 2-2. Street frontage includes East Alisal Street, a four (4)-lane east-west major arterial in addition to two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. A segment of Union Pacific Railroad is located adjacent to the Project site to the west. The existing biotic conditions and resources of the site can be defined primarily as urban landscaping with heavy alteration and disturbance given the existing commercial and industrial uses. There are existing trees and shrubs throughout the site and along the East Alisal Street rights-of-way. No water features are present.

*Surrounding Land Uses*

The Project site is generally surrounded by a mix of commercial and industrial uses. As referenced in Table 2-2, all properties to the north, south, east, and west are planned and zoned for commercial and industrial uses. A segment of Union Pacific Railroad is located adjacent to the Project site to the west.

[1] Pursuant to SMC Section 37-30.250, mixed use developments shall have a maximum commercial FAR of 1.0 plus ten dwelling units per net acre. Further, as described in Section 37-30.260, within a mixed-use building providing commercial uses of at least 0.25 FAR, allowable floor area may be substituted for residential dwelling units at a ratio of one dwelling unit for each one thousand square feet of allowable floor area to the maximum FAR of 1.0. For example, the maximum development potential of a one-acre lot is forty-three thousand five hundred sixty square feet of commercial floor area plus ten dwelling units. A proposed mixed-use building providing at least 10,890 sq. ft. of commercial floor area could also include forty-three dwelling units as follows: 43,560 sq. ft. × 0.25 = 10,890 sq. ft.; 43,560 sq. ft. - 10,890 sq. ft. = 32,670 sq. ft./1,000 sq. ft. = 33 dwelling + 10 dwelling units = 43 dwelling units.

Table 2-2 Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

| Direction from the Project site | Existing Land Use | Planned Land Use | Zone District |
|---|---|---|---|
| North | Industrial (San Juanita Tostada Factory), Services (Republic Services), and Commercial (wholesale, used appliance store, and golf cart dealer) | General Industrial, General Commercial/ Light Industrial | Industrial General, Industrial General Commercial |
| South | Public (Salinas Police Department), Service (PG&E), and Commercial (auto care, gas station, tire shop) | General Commercial/ Light Industrial | Industrial General Commercial |
| East | Commercial (laundromat, window installation service) | General Commercial/ Light Industrial | Industrial General Commercial |
| West | Railroad – Union Pacific | General Commercial/ Light Industrial | Industrial General Commercial |

## 2.11 Other Public Agencies Whose Approval is Required

The Project would require approval by the City of Salinas City Council. No permits would be required from other agencies for approval of the Project. However, future redevelopment of the Project site would require review, permits, and/or approvals, such as grading, building, encroachment, and sign permits. Other approvals may be required as identified through the entitlement review and approval process.

## 2.12 Consultation with California Native American Tribes

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the CEQA Guidelines. Pursuant to PRC *Section 21080.3.1*, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC *Section 21074(a)(1-2)*). According to the most recent census data, California is home to 109 currently recognized Indian tribes.

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 PRC *Section 21083.3.2*.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

A consultation list of tribes with traditional lands or cultural places located within Monterey County was requested and received from the California Native American Heritage Commission (NAHC) on April 8, 2022. The listed tribes include Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Esselen Tribe of Monterey County, Indian Canyon Mutsun Band of Costanoan, Ohlone/Costanoan-

Esselen Nation, Wuksache Indian Tribe/Eshom Valley Band, Xolon-Salinan Tribe, and Runsen Am:a Tur:ataj Ohlone. The NAHC also conducted a Sacred Lands File (SFL) search which was positive.

The City of Salinas conducted formal tribal consultation pursuant to AB 52 (Chapter 532, Statutes 2014) and SB 18 (Chapter 905, Statutes 2004) on June 14, 2022, utilizing the consultation list of tribes received from the NAHC. The same nine (9) tribes listed above were included in the formal consultation. Consultation for AB 52 ended on July 14, 2022, and consultation for SB 18 ended on September 12, 2022. Chairperson Louise Miranda-Ramirez of the Ohlone/Costanoan-Esselen Nation requested formal consultation on September 13, 2022. Formal consultation was held by telephone on June 21, 2023. Nine (9) mitigation measures were requested through the formal consultation, as listed below and incorporated in Section 4.5 and Section 4.18. No response was received from the other tribes.

*CUL-1 Historical Resources Identification and Treatment Plan*

*Prior to permit approval for development on the Project site, a historical resources evaluation shall be completed for that individual site to confirm if existing buildings and/or structures withing these sites qualify as historical resources as defined by Section 15064.5(a) of CEQA Guidelines. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. All properties 45 years of age or older shall be evaluated within their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented in the Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and concurrence.*

*Any relocation, rehabilitation, or alteration of the resource shall be implemented consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR Section 15126.4[b][1]). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence, in addition to the historical resources evaluation.*

*If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not feasible, the applicant or developer shall provide a report explaining why compliance with the Standards and or avoidance is not feasible for the City's review and approval. Site-specific mitigation measures shall be established and undertaken, including, but not limited to, documentation of the historical resource in the form of a Historic American Buildings Survey-Like report. The report shall be commissioned by the project applicant or their consultant to comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the Historic American Buildings Survey Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the PQS and submitted to the City prior to issuance of any permits for demolition or alteration of the historical resource.*

*CUL-2 Phase I Cultural Resources Study*

*Prior to the issuance of any grading or construction permits for each individual site, a Phase I cultural resources study shall be performed by a qualified professional meeting the Secretary of the Interior's (SOI's) Professional Qualification Standards (PQS) for archaeology (National Park Service 1983). The Phase I cultural resources study shall include a pedestrian survey of the project site when appropriate and sufficient background research and field sampling to determine whether archaeological resources may be present. Archival research shall include a records search of the Northwest Information Center (NWIC) no more than two years old and a Sacred Lands File search with the NAHC. The Phase I technical report documenting the study shall include recommendations that shall be implemented prior to and/or during construction to avoid or reduce impacts to archaeological resources. Recommendations may include, but would not be limited to, archaeological construction monitoring, sensitivity training, or additional testing and mitigation (outlined in Mitigation Measures CUL-3 through CUL-7). The report shall be submitted to the City for review and approval prior to the issuance of any grading or construction permits. The City shall include recommendations in the Phase I technical report as Conditions of Approval to be implemented throughout all ground disturbance activities. The final report shall be submitted to the NWIC.*

*CUL-3 Extended Phase I Testing*

*If recommended by the Phase I study for each individual site (Mitigation Measure CUL-2), the project applicant shall retain a qualified archaeologist to conduct an Extended Phase I (XPI) study to determine the presence/absence and extent of archaeological resources on the project site. XPI testing shall include a series of shovel test pits and/or hand augured units and/or mechanical trenching to establish the boundaries of archaeological site(s) on the project site. If the boundaries of the archaeological site are already well understood from previous archaeological work, an XPI will not be required. All archaeological excavation shall be conducted by a qualified archaeologist(s) under the direction of a principal investigator meeting the SOI's PQS for archaeology (National Park Service 1983). If an XPI report is prepared, it shall be submitted to the City for review and approval prior to the issuance of a grading or construction permit. Recommendations therein shall be implemented for all ground disturbance activities. Recommendations may include, but would not be limited to, site avoidance, Phase II Site Evaluation, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-4, CUL-5, CUL-7, and CUL-8). The final report shall be submitted to the NWIC.*

*CUL-4 Archaeological Site Avoidance*

*Any identified archaeological sites (determined after implementing Mitigation Measures CUL-2 and/or CUL-3) or archaeological resources encountered during ground-disturbing activities shall be avoided by project-related construction activities, where feasible. A barrier (temporary fencing) and flagging shall be placed between the work location and any resources within 60 feet of a work location to minimize the potential for inadvertent impacts. If the resource cannot be avoided, Mitigation Measure CUL-5 shall be implemented.*

*CUL-5 Phase II Site Evaluation*

*evaluation shall include any necessary archival research to identify significant historical associations and mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit. The sample excavation would be carried out to characterize the nature of the site(s), define the artifact and feature contents, determine horizontal and vertical boundaries, and retrieve representative samples of artifacts and other remains.*

*If the archaeologist and, if applicable, a Native American monitor or other interested tribal representative determine it is appropriate, cultural materials collected from the site shall be processed and analyzed in a laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the site(s) shall be evaluated according to the criteria of the CRHR and if applicable, NRHP. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)." Recommendations in the Phase II report shall be implemented for all ground disturbance activities. Recommendations may include, but would not be limited to, Phase III Data Recovery, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-6 through CUL-8). The report shall be submitted to the City for review and approval prior to the issuance of any grading or construction permits. The final report shall be submitted to the NWIC.*

*CUL-6 Phase III Data Recovery*

*Should the results of the Phase II site evaluation for each individual site (Mitigation Measure CUL-5) yield resources that meet CRHR significance standards and if the resource cannot be avoided by project construction in accordance with CUL-4, the project applicant shall ensure that all feasible recommendations for mitigation of archaeological impacts are incorporated into the final design and approved by the City prior to construction. Any necessary Phase III data recovery excavation, conducted to exhaust the data potential of significant archaeological sites, shall be carried out by a qualified archaeologist meeting the SOI's PQS for archeology (National Park Service 1983). Data recovery shall be conducted in accordance with a research design reviewed and approved by the City, prepared in advance of fieldwork, and using the appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. If the archaeological resource(s) of concern are Native American in origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s).*

*As applicable, the final Phase III Data Recovery reports shall be submitted to the City prior to issuance of any grading or construction permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities. Recommendations may include, but would not be limited to, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-7 and CUL-8). The final report shall be submitted to the NWIC upon completion.*

*CUL-7 Cultural Resources Monitoring*

*If recommended by Phase I, XPI, Phase II, or Phase III studies for each individual site (Mitigation Measures CUL-2, CUL-3, CUL-5, and/or CUL-6), the project applicant shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities which may include the following but not limited to: grubbing, vegetation removal, trenching, grading, and/or excavations. The archaeological monitor shall coordinate with any Native American monitor as required. Monitoring logs must be completed by the archaeologist daily. Cultural resources monitoring may be reduced for the project if the qualified archaeologist finds it appropriate to reduce the monitoring efforts. Upon completion of ground disturbance for the project, a final report must be submitted to the City for review and approval documenting the monitoring efforts, cultural resources finding, and resource disposition. The final report shall be submitted to the NWIC.*

*CUL-8 Unanticipated Discovery of Cultural Resources*

*If archaeological resources are encountered during ground-disturbing activities, work within 50 feet shall be halted and the project archaeologist meeting the SOI's PQS for archeology (National Park Service 1983) shall immediately to evaluate the find pursuant to Public Resources Code Section 21083.2. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery excavation, to mitigate any significant impacts to significant resources. If the resource is of Native American origin, implementation of Mitigation Measures TCR-1 may be required. Any reports required to document and/or evaluate unanticipated discoveries shall be submitted to the City for review and approval and submitted to the NWIC after completion. Recommendations contained therein shall be implemented throughout the remainder of ground disturbance activities.*

*TCR-1 Inadvertent Discoveries During Construction*

*In the event that cultural resources of Native American origin are identified during grading or construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find; an appropriate Native American representative, based on the nature of the find, is consulted; and mitigation measures are put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American group(s) prior to continuation of any earth disturbing work within the vicinity of the find. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.*

# 3 DETERMINATION

## 3.1 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 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 Planning
- ☐ Mineral Resources
- ☒ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☒ Transportation
- ☒ Tribal and Cultural Resources
- ☒ Utilities and Service Systems
- ☐ Wildfire

For purposes of this Initial Study, the following answers have the corresponding meanings:

"No Impact" means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.

"Less Than Significant Impact" means there is an impact related to the threshold under consideration, but that impact is less than significant.

"Less Than Significant with Mitigation Incorporation" means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant. For purposes of this Initial Study "mitigation incorporated into the project" means mitigation originally described in the GP PEIR and applied to an individual project, as well as mitigation developed specifically for an individual project.

"Potentially Significant Impact" means there is substantial evidence that an effect may be significant related to the threshold under consideration.

## 3.2 Determination

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ 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 (EIR) 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 EIR 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.

Approved By:

8/9/2023

Oscar Resendiz, Associate Planner — Date

City of Salinas, Community Development Department

# 4 EVALUATION OF ENVIRONMENTAL IMPACTS

## 4.1 AESTHETICS

| Except as provided in Public Resources Code Section 21099, **would the project:** | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *a)* Have a substantial adverse effect on a scenic vista? | | | | X |
| *b)* Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway? | | | | X |
| *c)* In non-urbanized areas, substantially degrade the existing visual character or quality 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? | | | X | |
| *d)* Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | X | |

### *4.1.1 Environmental Setting*

The Project site is currently fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping (see Figure 4-1 and Figure 4-2). There are approximately 23 existing structures on the site that predominately consist of low-rise buildings that are mostly contemporary with uniform massing, non-descript facades, with parking lots between the structures and surrounding street frontage. Street frontage includes East Alisal Street, a four (4)-lane east-west major arterial in addition to two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. A segment of Union Pacific Railroad is located adjacent to the Project site to the west. The Project site is generally surrounded by a mix of commercial and industrial uses. A thin horizontal line of the Coastal Mountain Ranges can be seen to the east, but the view is obstructed by Highway 101, the flat topography of the site, and intervening development.

Figure 4-1 Visual features within the Project Vicinity
East Alisal Street, looking west. Source: Google Earth, 2022

Figure 4-2 Mountain Ranges to the East
East Alisal Street, looking east (cross street: Prader Street). Source: Google Earth 2022

### *General Plan*

The Salinas General Plan Community Design Element helps to protect and enhance the image and identity of Salinas by addressing the visual improvement of the major entrances to the community, the maintenance of sharply defined urban/agricultural edges, and the preservation and enhancement of view corridors from Highway 101. Highway 101 is the primary "view corridor" identified by the General Plan. The primary views from Highway 101 include: agricultural views, views of Northridge Shopping Center, Auto Center, and Westridge Shopping Center, and Carr Lake. No other vista points or resources are identified.

General Plan policies applicable to the visual appearance and character of the city include:

> ***Policy CD-1.10:*** *Require a balance of housing types and designs to avoid both monotony and visual chaos.*
>
> ***Policy CD-2.1:*** *Maximize a strong sense of neighborhood identity and harmony by implementing architectural design and community layout techniques, such as building location and spacing, landscaping features, and lighting that create distinct neighborhoods, encourage interactions among residents, and facilitate safe street life.*
>
> ***Policy CD-2.2:*** *Minimize potential light and sound impacts of new development on surrounding areas.*
>
> ***Policy CD-2.3:*** *Require infill development to be consistent with the scale and character of existing neighborhoods.*
>
> ***Policy CD-2.6:*** *Preserve architecturally important historic buildings that are capable of being adapted for viable use.*
>
> ***Policy CD-2.7:*** *Minimize the use and visual effect of sound attenuation walls.*
>
> ***Policy CD-2.8:*** *Avoid large un-landscaped parking areas and blank building walls facing streets or adjoining properties.*

### *Municipal Code*

Salina Municipal Code (SMC) Section *37.50.480 – Outdoor Lighting* contains enforceable requirements for all new development intended to prevent light and glare impacts.

> *(a) Outdoor lighting shall employ cutoff optics that allows no light emitted above a horizontal plane running through the bottom of the fixture. Parking lots shall be illuminated to no more than an average maintained two and four-tenths footcandles at ground level with uniform lighting levels. All building-mounted and freestanding parking lot lights (including the fixture, base, and pole) shall not exceed a maximum of twenty-five feet (a maximum of forty feet in the IG district) in height in all districts. Illumination at an R or NU (NE, NG-1, and NG-2) district property line shall not exceed one-half footcandle maximum. Lighting adjacent to other property or public rights-of-way shall be shielded to reduce light trespass. No portion of the lamp (including the lens and reflectors) shall extend below the bottom edge of the lighting fixture nor be visible from an adjacent property or public right-of-way. A point to point lighting plan showing horizontal illuminance in footcandles and demonstrating compliance with this section shall be submitted for review and approval prior to issuance of a building permit.*

*(e) Lighting in the focused growth overlay district, central city overlay (downtown core area) district, mixed use (MU), and new urbanism (NU) districts shall be supplemented by the lighting standards and regulations specified for these districts.*

### *California Scenic Highway Program*

The California Scenic Highway Program was established in 1963 with the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. There are no officially designated State Scenic Highways in the City of Salinas, inclusive of the Project area. However, State Route 68 (SR 68) is an eligible State Scenic Highway, located approximately 0.23 miles south of the Project area. [2]

### *4.1.2 Impact Assessment*

*Except as provided in PRC Section 21099,* ***would the project****:*

*a) Have a substantial adverse effect on a scenic vista?*

**No Impact.** The Project site is located to the west of Highway 101. Because the site is located to the west of Highway 101, visibility of scenic vistas such as the Coastal Mountain Ranges from Highway 101 are not impacted. A thin horizontal line of the Coastal Mountain Ranges can be seen to the east of the Project site, but the view is obstructed by Highway 101, the flat topography of the site, existing structures on the site, and intervening development. Furthermore, the General Plan does not identify or designate scenic vistas or views within the general vicinity of the Project site. As a result, the Project would not adversely affect scenic vistas and no impact would occur because of the Project.

*b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No Impact.** According to the California State Scenic Highway Program, there are no officially designated State Scenic Highways in the City of Salinas. SR 68 is an eligible State Scenic Highway but is located approximately 0.23 miles south of the Project site and would not be impacted by the Project. As such, the proposed Project would not damage scenic resources, including trees, rock out-croppings, and historic buildings within a state scenic highway and no impact would occur as a result of the Project.

*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 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?*

**Less than Significant Impact.** The Project site is in an urbanized area surrounded by existing development. Although no physical development is proposed, future development of the Project site would be subject to the entitlement

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[2] Caltrans. California State Scenic Highway System Map. Accessed on October 11, 2022, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

review and approval process through the City of Salinas. Through this process, future development would be subject to compliance with applicable policies and regulations that govern scenic quality including but not limited to the General Plan, SMC, and California Building Code. Compliance would ensure that future development of the site would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, a less than significant impact would occur because of the Project.

*d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less than Significant Impact. Generally, lighting impacts are associated with artificial lighting in evening hours either through interior lighting from windows or exterior lighting (e.g., street lighting, parking lot lighting, landscape lighting, cars, and trucks). Although no physical development is proposed, future development of the Project site would incrementally increase the amount of light from streetlights, exterior lighting, and vehicular headlights. Such sources could create adverse effects on day or nighttime views in the area. Future development would be subject to site development standards contained in SMC *Section 37-50.480 – Outdoor Lighting*, specifically sub-section (a) which contains specific, enforceable requirements intended to prevent light and glare impacts, and sub-section (e) which refers to additional lighting standards for MX zone districts. In addition, future development would be required to comply with Title 24 lighting requirements which would also reduce impacts related to nighttime light. The Title 24 lighting requirements cover outdoor spaces including regulations for mounted luminaires (i.e., high efficacy, motion sensor controlled, time clocks, energy management control systems, etc.). As such, conditions imposed on future development by the City pursuant to the SMC and Title 24 would reduce light and glare impacts to a less than significant impact.

### *4.1.3 Mitigation Measures*

None required.

## 4.2 AGRICULTURE AND FORESTRY RESOURCES

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farm-land), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | X |
| *b)* | Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |
| *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))? | | | | X |
| *d)* | Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| *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? | | | | X |

### *4.2.1 Environmental Setting*

The Project site is located within the Salinas city limits and is planned and zoned for industrial and commercial uses. The Project site is currently fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping. There are approximately 23 existing structures on the site that predominately consist of commercial and industrial uses. Street frontages includes East Alisal Street, a four (4)-lane east-west major arterial in addition to several two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. A segment of Union Pacific Railroad is located adjacent to the Project site to the west. The existing biotic conditions and resources of the site can be defined primarily as urban landscaping with heavy alteration and disturbance given the existing commercial and industrial uses. There are existing trees and shrubs throughout the site and along the East Alisal Street rights-

of-way. No water features are present. Lastly, the Project site does not contain any agricultural or forestry resources such as agricultural land, forest land, or timberland.

### *Farmland Monitoring and Mapping Program*

The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP) that provides maps and data for analyzing land use impacts to farmland. The FMMP produces the Important Farmland Finder as a resource map that shows quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status, in addition to many other physical and chemical characteristics. The highest quality land is called "Prime Farmland" which is defined by the FMMP as *"farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.* [3] Maps are updated every two years. According to the FMMP, California Important Farmland Finder, the Project site, and all properties in its immediate vicinity are classified as "Urban and Built-Up Land." [4]

### *California Land Conservation Act*

The California Land Conservation Act of 1965 (i.e., the Williamson Act) allows local governments to enter contracts with private landowners to restrict parcels of land agricultural or open space uses. In return, property tax assessments of the restricted parcels are lower than full market value. The minimum length of a Williamson Act contract is 10 years and automatically renews upon its anniversary date; as such, the contract length is essentially indefinite. The Project site is not subject to the Williamson Act.

### *4.2.2 Impact Assessment*

***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?

**No Impact.** According to the FMMP, the Project site is designated as "Urban and Built-Up Land." As such, the Project site is not located on lands designated as "Prime Farmland," "Unique Farmland," or "Farmland of Statewide Importance." Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and no impact would occur.

b) *Conflict with existing zoning for agricultural use or a Williamson Act contract?*

**No Impact.** The Project site is not zoned for agricultural use and is not subject to the Williamson Act. Therefore, the Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and no impact would occur.

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[3] California Department of Conservation. Important Farmland Categories. Accessed on July 28, 2022, https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx

[4] California Department of Conservation. (2018). California Important Farmland Finder. Accessed on October 11, 2022, https://maps.conservation.ca.gov/DLRP/CIFF/

*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))?*

No Impact. The Project site does is not planned or zoned for forest land or timberland. Further, the Project site would not cause the rezoning of forest land, timberland, or timberland zoned Timberland Production. As a result, the Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production and no impact would occur.

*d) Result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. The Project site does not contain forest land and is not planned or zoned for forest land or forest uses. Implementation of the Project would therefore not result in the loss of forest land or conversion of forest land to non-forest use. As a result, no impact would occur.

*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?*

No impact. The Project site is planned and zoned for urban uses and does not contain agricultural or forestry uses or resources. The properties in the vicinity of the Project site are also planned and zoned for urban uses and do not contain agricultural or forestry uses or resources. According to the FMMP, California Important Farmland Finder, the Project site and the properties in its immediate vicinity are classified as "Urban and Built-Up Land." Therefore, future development of the Project site with mixed use development would be generally consistent with the existing environment of the surrounding, urbanized and non-agricultural or forestry uses. As a result, the Project would not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, no impact would occur because of the Project.

### *4.2.3 Mitigation Measures*

None required.

## 4.3 AIR QUALITY

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Conflict with or obstruct implementation of the applicable air quality plan? | | | X | |
| *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? | | X | | |
| *c)* | Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| *d)* | Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | X | |

### *4.3.1 Environmental Setting*

The proposed Project is located within the North Central Coast Air Basin (NCCAB), which is formed by the Monterey Bay Unified Air Pollution Control District (MBUAPCD). The Monterey Bay Air Resources District (MBARD) oversees air quality regulations across Monterey, Santa Cruz, and San Benito counties. The NCCAB is in nonattainment status for the State ozone ($O_3$) and inhalable particulates ($PM_{10}$) pollutants, and in attainment for all other state and federal pollutants. The MBARD developed CEQA Air Quality Guidelines to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potential impacts to air quality. [5] This guidance document also includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. The MBARD also adopted an Air Quality Management Plan [6] (AQMP) focused on achieving the State's ozone standard, and updating air quality trends analysis, emission inventory, and mobile source programs.

#### *Thresholds of Significance*

Accordingly, the MBARD-recommended thresholds of significance (i.e., CEQA Air Quality Guidelines) are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact on human

[5] Monterey Bay Unified Air Pollution Control District. (2008). CEQA Air Quality Guidelines. Accessed March 24, 2022, https://www.mbard.org/files/0ce48fe68/CEQA+Guidelines.pdf

[6] Monterey Bay Air Resources District. (2017). 2012 – 2015 Air Quality Management Plan. Accessed on April 19, 2022, https://www.mbard.org/files/6632732f5/2012-2015-AQMP_FINAL.pdf

health and welfare. Section 5.6 of the guidelines determines a less than significant impact is appropriate if all following criteria are met:

*(1) Under Criteria Air Pollutants thresholds:*
*(2) No violation of any other State or national AAQS;*
*(3) Consistent with the Air Quality Management Plan;*
*(4) No other significant adverse impacts (e.g., create objectionable odors; alter air movement, moisture, temperature, or climate).*

Each of these criteria is further described as follows.

**(1) Criteria Air Pollutants:** The MBARD-adopted thresholds of significance for criteria air pollutants are shown in Table 4-1. The thresholds of significance are based on a per day basis. These thresholds are utilized in the impact assessment to determine whether the proposed Project would result in significant impacts. The following summarizes these thresholds:

*Short-Term Emissions of Particulate Matter ($PM_{10}$)*: Construction impacts would be considered less than significant if the project emits less than 82 lb/day of $PM_{10}$ or will not cause a violation of $PM_{10}$ AAQS at existing receptors; and the equipment used is" typical construction equipment".

*Long-Term Emissions of Particulate Matter ($PM_{10}$)*: Operational impacts associated with the proposed Project would be considered less than significant if the project directly emits less than 82 lb/day of $PM_{10}$ on-site or will not cause a violation of $PM_{10}$ AAQS or contribute 82 lb/day to an existing or projected violation at existing or reasonably foreseeable receptors.

*Long-Term Emissions of Ozone Precursors (ROG and NOX):* Operational impacts associated with the proposed Project would be considered less than significant if the project directly emits less than 137 lb/day of VOC or NOx.

*Long-Term Emissions of Carbon Monoxide (CO):* Operational impacts associated with the proposed Project would be considered less than significant if the project directly emits less than 550 lb/day of CO or will not cause a violation of CO AAQS at existing or reasonably foreseeable receptors.

*Long-Term Emissions of Sox:* Operational impacts associated with the proposed Project would be considered less than significant if the project directly emits less than 150 lb/day of SOx or will not cause a violation of $SO_2$ AAQS at existing or reasonably foreseeable receptors.

**Table 4-1 Criteria Air Pollutants Thresholds of Significance**

| Pollutant | Significance Threshold | |
|---|---|---|
| | Construction Emissions (lbs/day) | Operational Emission (lbs/day) |
| CO | N/A | 550 |
| $NO_X$ | N/A | 137 |
| ROG | N/A | 137 |
| $SO_X$ | N/A | 150 |
| $PM_{10}$ | 82 | 82 |
| $PM_{2.5}$ | N/A | N/A |
| ***Source:*** *MBARD, CEQA Air Quality Guidelines, 2008* | | |

**(2) Conflict with or Obstruct Implementation of Applicable Air Quality Plan:** Due to the region's nonattainment status for ozone and $PM_{10}$, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and $NO_x$) or $PM_{10}$ would exceed the MBARD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in population generation, housing, or employment growth exceeding 2015 AQMP forecasts, the project may conflict with the AQMP. Consistency with population forecasts is based on countywide forecasts and not individual cities. Further, the AQMP utilizes forecasts adopted by the Association of Monterey Bay Area Governments (AMBAG).

**(3) Odors:** The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. MBARD's Guidelines identify pollutants associated with objectionable odors to include sulfur compound and methane. Typical sources of odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries. [7] Odor impacts would be significant if the project emits pollutants in substantial amounts that cause nuisance or endanger the public's health and safety, thus analysis should assess impacts on existing or foreseeable sensitive receptors.

**(4) Toxic Air Contaminants (TACs):** The California Air Pollution Control Officers Association (CAPCOA) provides guidance on CEQA and health risk assessments for projects. According to the CAPCOA Guidance document titled "Health Risk Assessments for Proposed Land Use Projects," there are two types of land use project that have the potential to cause long-term public health risk impacts. [8] These project types are as follows:

- Type A: Land use projects with toxic emissions that impact receptors, and
- Type B: Land use project that will place receptors in the vicinity of existing toxics sources.

In this Guidance document, Type A projects examples are (project impacts receptors):

- combustion related power plants,
- gasoline dispensing facilities,
- asphalt batch plants,
- warehouse distribution centers,
- quarry operations, and
- other stationary sources that emit toxic substances.

Similarly, MBARD's CEQA Air Quality Guidelines established criteria for significance for TACs. A project would have a significant impact if it were located near a sensitive receptor near an unregulated source of TAC emission, such as diesel-fuel fueled vehicles parking, gas stations, and dry cleaners. For construction, equipment or processes that emit non-carcinogenic TACs could result in significant impacts and emissions of carcinogenic TAC that can result in

[7] Monterey Bay Unified Air Pollution Control District. (2008). CEQA Air Quality Guidelines. Accessed October 12, 2022, https://www.mbard.org/files/0ce48fe68/CEQA+Guidelines.pdf

[8] CAPCOA. (2009). Health Risk Assessments for Proposed Land Use Projects. Accessed October 12, 2022, http://www.capcoa.org/wp-content/uploads/2020/12/with-stamp_CAPCOA_HRA_LU_Guidelines_8-6-09-min.pdf

a cancer risk greater than one incident per 100,000 population are considered significant. For operational equipment and processes, impacts would be less than significant if it complies with Rule 1000.

### *Methodology*

MBARD's Guidelines recommend using the CalEEMod software program to calculate project emissions. CalEEMod is a statewide 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 from land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model also identifies mitigation measures to reduce criteria pollutant and GHG emissions. The Project's construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0.

**(1) CalEEMod Assumptions:** Although no specific development project is currently proposed, short-term construction and long-term operational GHG emissions for the Project were estimated using CalEEMod™ (v.2020.4.0) (See Appendix A for output files) with the following assumptions:

- The Project site is 12.1 acres, or 525,625 sf.
- The estimated commercial buildout potential is approximately 131,406 sf. of ground floor commercial, which is based on a 0.25 floor area ratio (FAR) to allow for the maximum residential density permitted in the MX Zone District (calculation: 525,625 sf. multiplied by 0.25 FAR = 131,406 sf.). In CalEEMod, this use is modeled as the "Strip Mall" land use, which is a use that contains a variety of retail shops and specializes in quality apparel, hard goods, and services such as real estate offices, dance studios, florists, and small restaurants.
- The estimated residential buildout potential is approximately 515 residential dwelling units, which is based on three (3) floors of multi-family residential dwelling units (calculation: 525,625 sf. multiplied by 0.25 FAR = 131,414 sf.; 525,625 sf. minus 131,406 sf. = 394,219 sf.; 394,219 sf./1,000 sf. = 394 units; plus 10 units to the acre: 12.1 acres multiplied by 10 units = 121 units; 121 units plus 394 units = 515 units).[9] The resulting residential density is 42.6 dwelling units per acre (calculation: 515 dwelling units divided by 12.1 acres = 42.6). In CalEEMod, this use is modeled as the "Apartments Mid Rise" land use (apartment buildings between 3 to 10 levels).
- Based on buildout assumptions of commercial sf. and residential units, an estimated 843 parking stalls would be required pursuant to SMC Section 37-50.360 (calculation: 131,406sf. divided by 400 sf. plus 515 dwelling units = 843 parking stalls).

[9] Pursuant to SMC Section 37-30.250, mixed use developments shall have a maximum commercial FAR of 1.0 plus ten dwelling units per net acre. Further, as described in Section 37-30.260, within a mixed-use building providing commercial uses of at least 0.25 FAR, allowable floor area may be substituted for residential dwelling units at a ratio of one dwelling unit for each one thousand square feet of allowable floor area to the maximum FAR of 1.0. For example, the maximum development potential of a one-acre lot is forty-three thousand five hundred sixty square feet of commercial floor area plus ten dwelling units. A proposed mixed-use building providing at least 10,890 sq. ft. of commercial floor area could also include forty-three dwelling units as follows: 43,560 sq. ft. × 0.25 = 10,890 sq. ft.; 43,560 sq. ft. - 10,890 sq. ft. = 32,670 sq. ft./1,000 sq. ft. = 33 dwelling + 10 dwelling units = 43 dwelling units.

In addition, most CalEEMod default factors were utilized. All lengths of the construction phases were multiplied by three (3) to assume a buildout by the end of 2026 and starting operations in 2027. Note: the model assumes simultaneous buildout of all the parcels.

### *4.3.2 Impact Assessment*

*Would the project:*

*a) Conflict with or obstruct implementation of the applicable air quality plan?*

**Less than Significant Impact.** The applicable air quality plan is the MBARD's 2012-2015 Air Quality Management Plan (AQMP). A project could be inconsistent with the AQMP if: 1) the project-generated emissions of either of the ozone precursor pollutants (ROG, NOx) or PM10 would exceed the MBARD's significance thresholds and 2) the project would result in a change of land use and corresponding increases in population generation, housing, or employment growth exceeding 2015 AQMP forecasts.

For the proposed Project, operational and construction-related emissions of criteria air pollutants were estimated using CalEEMod. As shown in Table 4-2, estimated total operational emissions for ROG, NOx, and $PM_{10}$ are below all significance thresholds. Further, as shown in Table 4-3, estimated total construction-related emissions for $PM_{10}$ are below the significance threshold. For these reasons, it can be determined that the Project-generated emissions would not exceed the MBARD's significance thresholds and therefore, a less than significant impact would occur.

Table 4-2 Operational Emissions of Criteria Air Pollutants, Unmitigated

| Emissions Source (lbs per day) | CO | $NO_x$ | ROG | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| Area | 42.4613 | 0.4891 | 17.3750 | 0.2356 | 0.2356 |
| Energy | 0.5332 | 1.1725 | 0.1366 | 0.0944 | 0.0944 |
| Mobile | 182.7619 | 24.6417 | 21.4448 | 36.2175 | 9.8476 |
| **Total Operational Emissions** | **225.7563** | **26.3033** | **38.9564** | **36.5475** | **10.1776** |
| Significance Threshold | 550 | 137 | 137 | 150 | 82 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** |

***Source:*** *CalEEMod, Version 2020.4.0, ran on November 21, 2022*
*Emissions presented are the highest of the winter and summer modeled emissions.*

Table 4-3 Construction Emissions of Criteria Air Pollutants, Unmitigated

| Emissions Source (lbs per day) | CO | $NO_x$ | ROG | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| Construction Year 2023 | 67.5007 | 83.6699 | 8.4372 | 32.9868 | 17.2775 |
| Construction Year 2024 | 28.5573 | 18.3989 | 2.9348 | 4.5726 | 1.6693 |
| Construction Year 2025 | 27.6269 | 17.2605 | 2.7427 | 4.4854 | 1.5873 |
| Construction Year 2026 | 41.8064 | 25.7114 | 139.2398 | 5.0263 | 2.0042 |
| **Maximum Emissions** | **67.5007** | **83.6699** | **139.2398** | **32.9868** | **17.2775** |
| Significance Threshold | N/A | N/A | N/A | 82 | N/A |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** |

***Source:*** *CalEEMod, Version 2020.4.0, ran on November 21, 2022*
*Emissions presented are the highest of the winter and summer modeled emissions.*

While the Project would result in a change of land use, it would not generate corresponding increases in population generation, housing, or employment growth that exceeds 2015 AQMP forecasts. Although no physical development is proposed, the Project site could yield up to 131,414 square feet of commercial use and 515 residential units, which would generate approximately 382 employees and 2,137 residents (See Section 4.14). As described in Section 4.14, these increases are within the 2015 AQMP forecasts. Therefore, it can be determined that the Project would

not result in a change of land use and corresponding increases in population generation, housing, or employment growth that would exceed 2015 AQMP forecasts. As a result, a less than significant impact would occur because of the Project.

Overall, the Project-generated emissions of either of the ozone precursor pollutants or $PM_{10}$ would not exceed the MBARD's significance thresholds, and the Project would not result in a change of land use and corresponding increases in population generation, housing, or employment growth exceeding 2015 AQMP forecasts. For these reasons, it can be determined that the Project would not conflict with or obstruct implementation of the applicable air quality plan and a less than significant impact would occur.

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?***

Less than Significant with Mitigation Incorporated. Operational and construction-related emissions of criteria air pollutants were estimated for the proposed Project using CalEEMod.

*Operational Emissions*

Operational activities such as vehicle trips, use of natural gas and electricity, consumer products, architectural coatings, and landscape maintenance equipment can generate long-term mobile, energy, and area-type emissions. Operational emissions were estimated using CalEEMod, assuming an operational date/assumed buildout of the site by end of year 2026. This assumption provides a conservative estimate for operational emissions as it is likely that parcels within the Project site would be developed independently and at varying time intervals. As shown in Table 4-2, estimated total operational-related emissions are below all MBARD significance thresholds. Because emissions are below these thresholds, the Project can be presumed to have a less than significant impact.

*Construction Emissions*

Construction activities such as excavation, grading, and on-site vehicles generate emissions that represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. According to MBARD's CEQA Guidelines, construction activities which directly generate 82 pounds per day or more of PM10 would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. If modeling demonstrates that direct emissions under individual or cumulative conditions would not cause the exceedance of the PM10 significance thresholds at existing receptors as averaged over 24 hours, the impact would not be considered significant.

Construction emissions were estimated using CalEEMod, assuming a four (4)-year buildout of all parcels within the Project site simultaneously. This assumption provides a conservative estimate for construction emissions as it is likely that parcels within the Project site would be developed independently and at varying time intervals. As shown in Table 4-3, estimated total construction-related emissions for PM10 are below the 82 pounds per day significance threshold. Because emissions are below this threshold, the Project can be presumed to have a less than significant impact. However, to further ensure that emissions of future development of the Project site are below the significance threshold, the Project shall incorporate ***Mitigation Measure AQ-1*** and ***Mitigation Measure AQ-2***. Through incorporation, the Project would have a less than significant impact with mitigation incorporated.

Lastly, future development resulting from Project implementation would be reviewed and conditioned by the MBARD for compliance with applicable rules and regulations including but not limited to *Rule 200* (Permits

Required), *Rule 400* (Visible Emissions), *Rule 403* (Particulate Matter), *Rule 402* (Nuisance), *Rule 425* (Use of Cutback Asphalt), and *Rule 426* (Architectural Coatings). Thus, compliance with MBARD's rules would further reduce emissions during operations and/or construction activity.

Overall, the anticipated development of the Project site would not have potential emissions of regulated criterion pollutants that exceed the MBARD adopted thresholds. Incorporation of ***Mitigation Measure AQ-1*** and ***Mitigation Measure AQ-2*** and compliance with MBARD's rules would further reduce emissions. Consequently, the Project would result in a less than significant impact with mitigation incorporated.

***Mitigation Measure AQ-1:*** *Construction Air Quality. During construction, the applicant or successor in interest for each individual site shall:*

- *Limit grading to 8.1 acres per day, and limit grading and excavation to 2.2 acres per day.*
- *Provide watering trucks on site to maintain adequate soil moisture during grading and water. graded/excavated areas at least twice daily, thus minimizing dust generation. In addition, the water trucks shall be used to wash down trucks and tractors, including earth loads, prior to entering public roadways.*
- *Prohibit all grading activities whenever wind speeds exceed 15 miles per hour (mph).*
- *Maintain a minimum of two feet for freeboard for all haul trucks.*
- *Cover all trucks hauling dirt, sand, or loose materials.*
- *Cover inactive storage piles.*
- *Enforce a 15-mph speed limit for all unpaved surfaces when visible dust clouds are formed by vehicle movement.*
- *Place gravel base near site entrances to clean tires prior to entering public roadways.*

***Mitigation Measure AQ-2:*** *MBARD Health Risk Consultation. Prior to issuance of any grading permit and/or building permit for each individual site, the applicant or successor in interest shall consult with MBARD regarding the potential need for a diesel health risk assessment (HRA). If required, the applicant or successor in interest shall prepare a diesel HRA and shall implement the measures contained therein to ensure that project-specific emissions are below MBARD's established health risk thresholds: hazard index greater than 1 for acute or chronic impacts, and cancer risk greater than 10 in one million for long-term operational emissions or 1 per 100,000 population for temporary construction-related emissions. Measures may include, but would not be limited to:*

- *Use of diesel-fueled equipment equipped with Tier 4 (or Tier 3 if the Tier 4 standard is unavailable) USEPA engine standards. The USEPA estimates that Tier 4 engines would reduce PM emissions by approximately 90 percent compared to the USEPA Tier 2 standards (USEPA 2008).*
- *Retrofit off-road diesel equipment with Verified Diesel Emissions Control Strategy (VDECS) like Diesel Particulate Filters (DPF). Particulate Matter level 3 VDECS can provide at least an 85 percent reduction (CARB 2015).*
- *Use alternatively fueled (e.g., natural gas) diesel construction equipment, including all off-road and portable diesel-powered equipment.*
- *Use electrically driven equipment that is not powered by a portable generator set.*
- *Limit the hours of operation for heavy-duty equipment and/or limit the quantity of heavy-duty equipment operating at the same time.*

*c) Expose sensitive receptors to substantial pollutant concentrations?*

Less than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The nearest sensitive receptors to the Project site are single-family residences located approximately 75 feet northeast of the site. As stated under criterion a) above, emissions during construction or operation would not reach the significance thresholds and would not be anticipated to result in concentrations that reach or surpass ambient air quality requirements. Further, anticipated development that would result from Project implementation would not be uses that would generate toxic emissions (i.e., Type A uses identified by the CAPCOA guidelines). Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations and a less than significant impact would occur.

*d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less than Significant Impact. Construction activities may emit temporary odors from exhaust and fumes associated with vehicles and equipment. Such odors would be short-term and cease upon completion. In addition, discharge of air contaminants or other materials that would cause a nuisance or detriment to a considerable number of persons or the public would be prohibited through compliance with MBARD *Rule 402.* Therefore, construction activities would not result in other emissions adversely affecting a substantial number of people and a less than significant impact would occur.

Specific uses and operations that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The Project would not consist of such land uses; rather, implementation of the proposed Project would facilitate mixed use development, including residential and commercial uses that are unlikely to produce odors that would be considered to adversely affect a substantial number of people. Therefore, a less than significant impact would occur.

### *4.3.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Air Quality related mitigation measures AQ-1 and AQ-2 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.4 BIOLOGICAL RESOURCES

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | X | | |
| *b)* | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | X |
| *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? | | | | X |
| *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? | | | X | |
| *e)* | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | X | |
| *f)* | Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. | | | | X |

### *4.4.1 Environmental Setting*

The Project site is located within the Salinas city limits and is planned and zoned for industrial and commercial uses. The Project site is currently fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping. There are approximately 23 existing structures on the site that predominately consist of commercial and industrial uses. Street frontage includes East Alisal Street, a four (4)-lane east-west major arterial in addition to several two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. A segment of Union Pacific Railroad is located adjacent to the Project site to the west. The existing biotic conditions and resources of the site can be defined primarily as urban landscaping with heavy alteration and disturbance given the existing commercial and industrial uses. There are existing trees and shrubs throughout the site and along the East Alisal Street rights-of-way. No water features are present.

#### *U.S. Fish and Wildlife – Special-Status Species Database*

The U.S. Fish and Wildlife Service (USFWS) operates an "Information for Planning and Consultation" (IPaC) database, which is a project planning tool for the environmental review process that provides general information on the location of special-status species that are "known" or "expected" to occur (**note:** the database does not provide occurrences; refer to the California Department of Fish and Wildlife – Natural Diversity Database below). [10] Specifically, the IPaC database identifies 13 endangered species in Salinas including: California condor, Least Bell's Vireo, Southwestern Willow Flycatcher, Yellow-billed Cuckoo, California Red-legged Frog, California Tiger Salamander, Monarch Butterfly, Vernal Pool Fairy Shrimp, Contra Costa Goldfields, Marsh Sandwort, Monterey Gilia, Monterey Spineflower, and Yandon's Piperia.

#### *U.S. Fish and Wildlife – Critical Habitat Report*

Once a species is listed under the federal Endangered Species Act, NOAA Fisheries is required to determine whether there are areas that meet the definition of Critical Habitat. Per NOAA Fisheries, Critical Habitat is defined as:

- *Specific areas within the geographical area occupied by the species at the time of listing that contain physical or biological features essential to conservation of the species and that may require special management considerations or protection; and*
- *Specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation.* [11]

The process of Critical Habitat designation is complex and involves the consideration of scientific data, public and peer review, economic, national security, and other relevant impacts.

According to the Critical Habitat for Threatened & Endangered Species Report updated September 28, 2022, the City of Salinas, inclusive of the Project site and its immediate vicinity (0.5-mile radius from the site) are not located

[10] U.S. Fish and Wildlife Service. Information and Planning Consultation Online System. Accessed on October 12, 2022, https://ecos.fws.gov/ipac/

[11] National Oceanic and Atmospheric Administration (NOAA). Critical Habitat. Accessed on October 12, 2022, https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#key-regulations

within a federally designated Critical Habitat.[12] No critical habitats are identified in the city limits. The closest federally designated Critical Habitat is located approximately 5.3 miles southwest of the Project site designated for the Monterey spineflower (Chorizanthe pungens var. pungens).

### *U.S. Fish & Wildlife Service – National Wetlands Inventory*

The USFWS provides a National Wetlands Inventory (NWI) with detailed information on the abundance, characteristics, and distribution of U.S. wetlands. A search of the NWI shows no federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) on the Project site or within the immediate vicinity (0.5-mile radius) of the Project site.[13] The NWI does not identify any water features within the Project site. The closest water feature identified is a 0.6-acre R2UBHx riverine habitat, Alisal Creek, approximately 0.02 miles east of the Project site. R2UBHx indicates Riverine System (R) of a lower perennial (2) with an unconsolidated bottom (UB) that is permanently flooded (H) and has been excavated by humans (x) (i.e., canal). Additionally, the Project site is not within or adjacent to a riparian area nor does the site contain water features.

### *Environmental Protection Agency – WATERS Geoviewer*

The U.S. Environmental Protection Agency (EPA) WATERS GeoViewer provides a GeoPlatform based web mapping application of water features by location. According to the WATERS GeoViewer, there is a catchment within the Project site, where a catchment is defined as a local drainage area for a specific stream segment (see Figure 4-3). The catchment is further associated with Alisal Slough which has been drained and filled. Alisal Creek runs to the east of the Project site. There are no streams, canals, or waterbodies on the Project site. [14]

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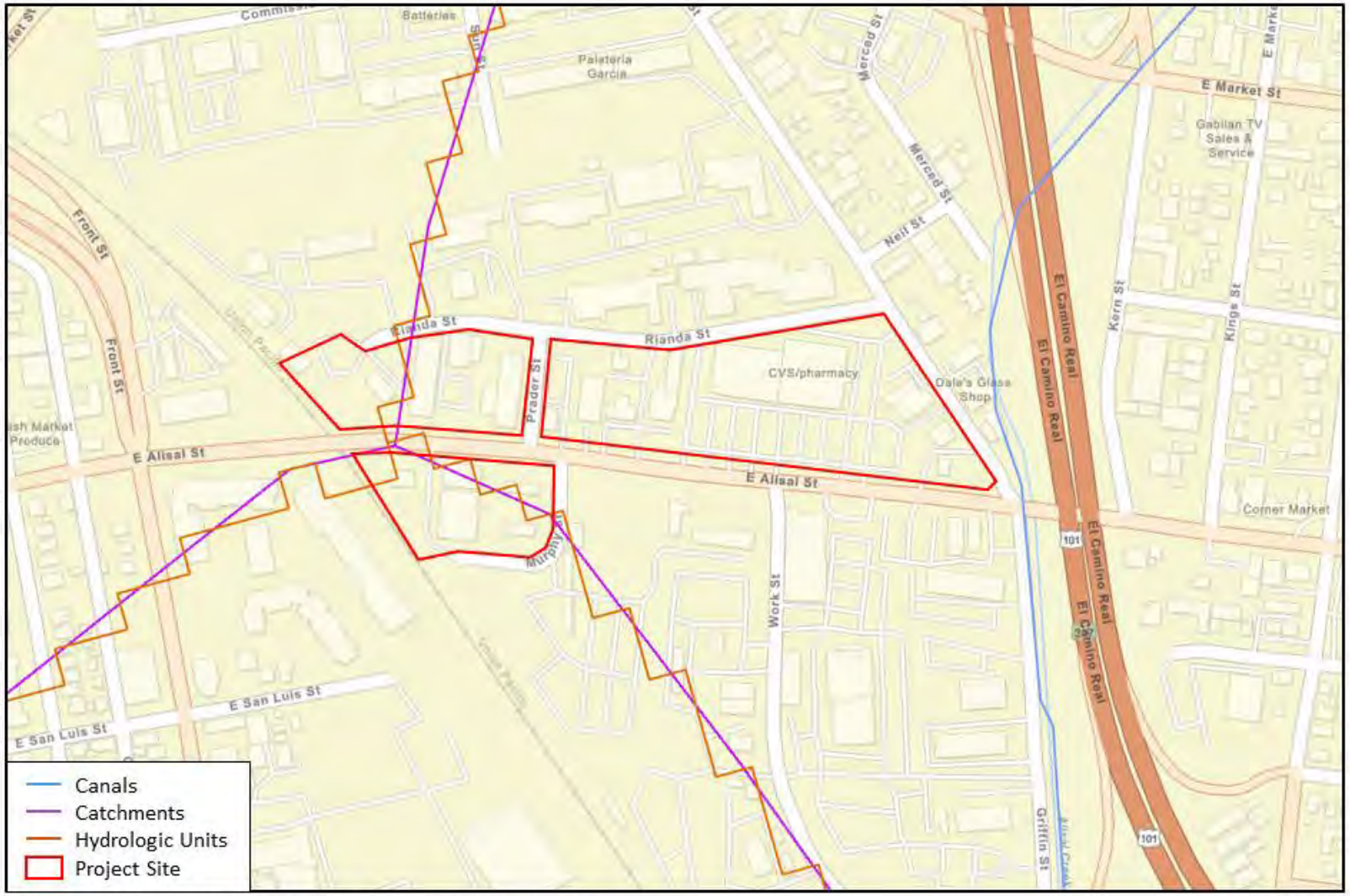
[12] U.S. Fish & Wildlife. (2021). ECOS Environmental Conservation Online System - USFWS Threatened & Endangered Species Active Critical Habitat Report (updated September 28, 2022). Accessed October 12, 2022, https://ecos.fws.gov/ecp/report/table/critical-habitat.html

[13] U.S. Fish & Wildlife Service. National Wetlands Inventory. Accessed October 12, 2022, https://www.fws.gov/wetlands/data/Mapper.html

[14] U.S. Environmental Protection Agency. WATERS GeoViewer. Accessed October 12, 2022, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=074cfede236341b6a1e03779c2bd0692




CITY OF SALINAS – General Plan Amendment & Rezone: Alisal Marketplace

Created 10/12/2022

Figure 4-3 Water Features in Project Vicinity

### *California Department of Fish and Wildlife – Natural Diversity Database*

The California Department of Fish and Wildlife (CDFW) operates the California Natural Diversity Database (CNDDB), which is an inventory of the status and locations of rare plants and animals in California in addition to the reported occurrences of such species.[15] According to the CDFW CNDDB, there are 38 special-status species with a total of 75 occurrences that have been observed and reported to the CDFW in or near the Salinas Quad as designated by the United States Geological Survey (USGS) (the Salinas Quad includes most of the City of Salinas, inclusive of the Project site). Of the 38 species, there are seven (7) federally or state-listed species: tricolored blackbird, California tiger salamander, Monterey spineflower, seaside bird-beak, Monterey gilia, Contra Costa goldfields, and California red-legged frog.[16] Appendix B lists the CNDDB-identified animal and plant species within the Salinas Quad, including their habitat and occurrences.

The CNDDB also provides CNDDB-known occurrences within a set geographic radius. Figure 4-4 shows the CNDDB-identified occurrences of animal and plant species within the five (5)-mile radius of the Project site. Table 4-4 lists all federally or state-listed special-status species CNDDB-known occurrences within the five (5)-mile radius of the Project site, organized by distance to the site. As shown, the nearest occurrences are California red-legged frog approximately 3.8 miles northeast of the site, dated 2004, and Tricolored Blackbird approximately 4.0 miles northeast, dated 2004. Other species that are not federally or state-listed that are near the Project site include western spadefoot, western bumble bee, alkali milk-vetch, and burrowing owl. The CNNDB ranks occurrences by the condition of habitat and ability of the species to persist over time. As shown, the occurrences within the five (5)-mile radius of the Project site are ranked as unknown and fair. Table 4-5 provides an analysis of essential habitats and the potential for the existence of the special-status species to exist on the Project site.

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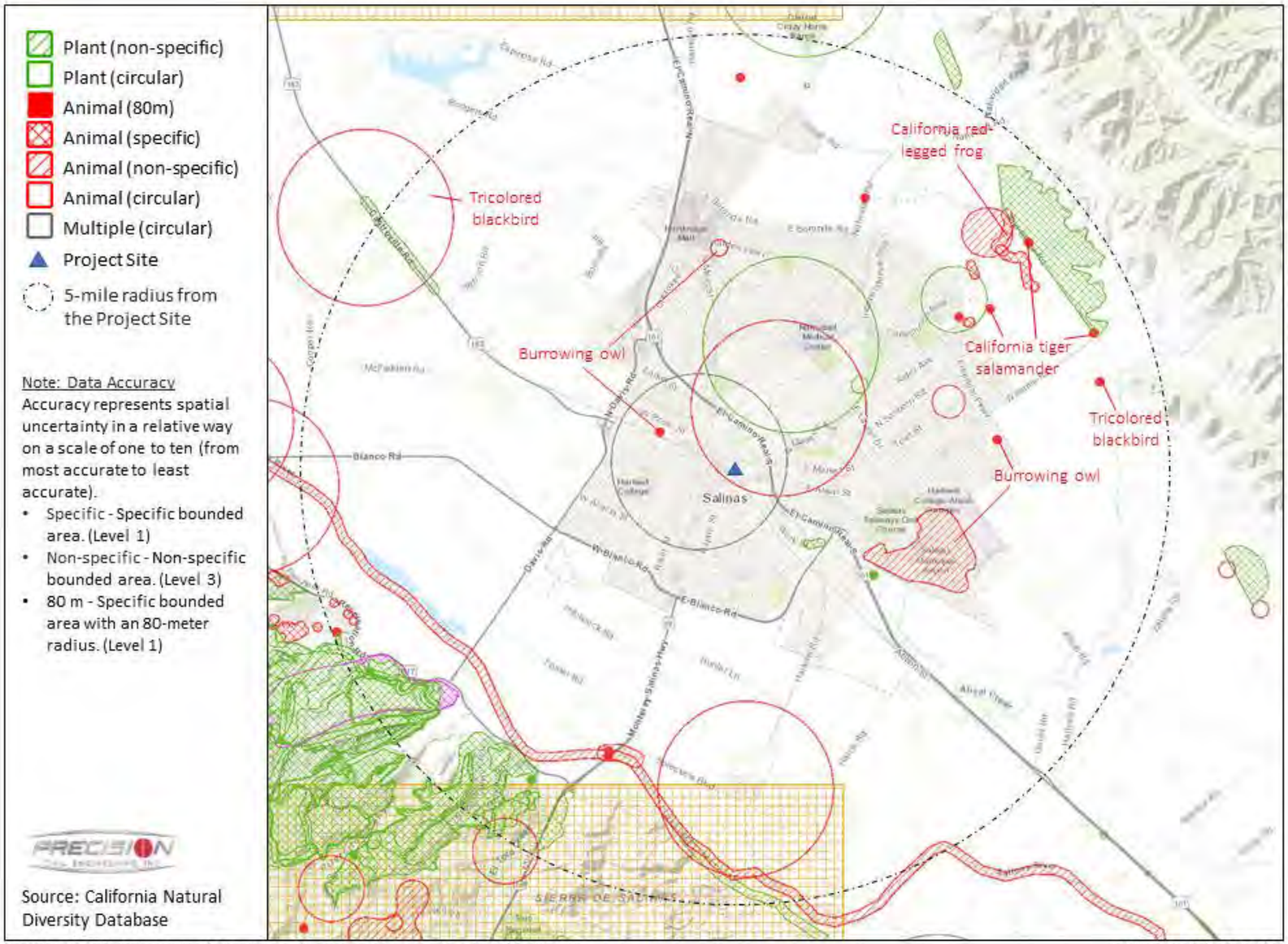
[15] California Department of Fish and Wildlife. California Natural Diversity Database. Accessed September 7, 2022, https://wildlife.ca.gov/Data/CNDDB

[16] California Department of Fish and Wildlife. Biogeographic Information and Observation System. Accessed September 7, 2022, https://apps.wildlife.ca.gov/bios/?tool=cnddbQuick




CITY OF SALINAS – General Plan Amendment & Rezone: Alisal Marketplace Created 10/12/2022

Figure 4-4 CNDDB Species Occurrences

Table 4-4 Special-Status Species Occurrences within 5-mile radius of Project site

| Species | Date | Rank | Distance to site |
|---|---|---|---|
| California red-legged frog | 5/12/2004 | Fair* | 3.8 miles northeast |
| Tricolored Blackbird | 5/19/2004 | Fair* | 4.0 miles northeast |
| California tiger salamander | 11/8/2021 | Unknown | 4.2 miles northeast |
| Tricolored Blackbird | 5/4/1932 | Unknown | 5.0 miles northwest |

*Only federally or state-listed threatened/endangered species are listed in the table.*
*Extirpated or possible extirpated occurrences are not shown in the table.*
** Fair (C) - Population small and/or potentially not very viable OR habitat in disturbed, fragmented or otherwise suboptimal condition. Disturbances are more severe and can include nearby development, heavy recreational use, ORV use and damage, heavy weed infestation, and more. Population not expected to persist in the long term but may persist for 10 years.*

Table 4-5 Essential Habitats and Potential Existence of Special-Status Species on Site

| Special-Status Species | General Habitat | Micro Habitat | Assessment |
|---|---|---|---|
| California red-legged frog | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. | Requires 11-20 weeks of permanent water for larval development. Must have access for estivation habitat. | The Project site is fully developed. The site does not contain any waterbodies. As such, the site does not provide suitable habitat. |
| Tricolored Blackbird | Highly colonial species, most numerous in central valley and vicinity. Largely endemic to California. | Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony. | The Project site is fully developed. The site does not contain any open water. As such, the site does not provide suitable habitat. |
| California tiger salamander | Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. | Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. | The Project site is fully developed and mostly paved. The site does not contain grassland, burrows, woodland, or waterbodies. As such, the site does not provide suitable habitat. |

### *California Fish and Game Code*

Sections 3503, 3503.5, and 3513 of the California Fish and Game Code specifically protect native birds and raptors. Mitigation for avoidance of impacts to nesting birds is typically necessary to comply with these Sections of the Fish and Game Code in CEQA. [17]

[17] The California Biologist's Handbook. California Fish and Game Code. Accessed on October 12, 2022, https://biologistshandbook.com/regulations/state-regulations/state-fish-and-game-code/#:~:text=Section%203503,any%20regulation%20made%20pursuant%20thereto.%E2%80%9D

***Section 3503:*** *It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.*

***Section 3503.5:*** *It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

***Section 3513:*** *It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.*

### *General Plan*

The Ecological and Biological Resources Element of the Salinas General Plan provides policies to protect and enhance significant ecological and biological resources within the City. The General Plan identifies resources including Salinas River, Carr Lake, Carr Lake tributaries and sloughs, and the reclamation ditch that provide riparian habitat for a variety of species. Figure 4-5 from the General Plan identifies vegetative communities in the city's planning area. The Project site is not located in an area with an identified vegetative community. A policy included in the General Plan that may be applicable to the Project site is:

***Policy COS-20 Oak Tree Retention.*** *Require project developers to retain coast live oak and valley oak trees within the planning area, including oaks within new development areas. All coast live oak and valley oak trees should be surveyed prior to construction to determine if any raptor nests are present and active. If active nests are observed, the construction should be postponed until the end of the fledgling.*

### *City of Salinas Municipal Code*

The City of Salinas Municipal Code *Chapter 35 - Trees and Shrubs,* establishes standards for the planting of trees, plants, or shrubs. Applicable regulations include:

***Section 35-14 – Trees, etc., to be protected during construction.*** *During the erection, repair or alteration of any building, house or structure in the city, no person in charge of such work shall leave any tree, shrub or plant in any street, parkway or alley in the city in the vicinity of such building or structure without such good and sufficient guards or protectors as shall prevent injury to such tree, shrub or plant arising out of or by reason of the erection, repair or alteration.*

***Section 35-18 – Heritage and/or landmark trees.*** *No heritage or landmark Oak tree shall be removed from city property except with the prior written approval by the director.*

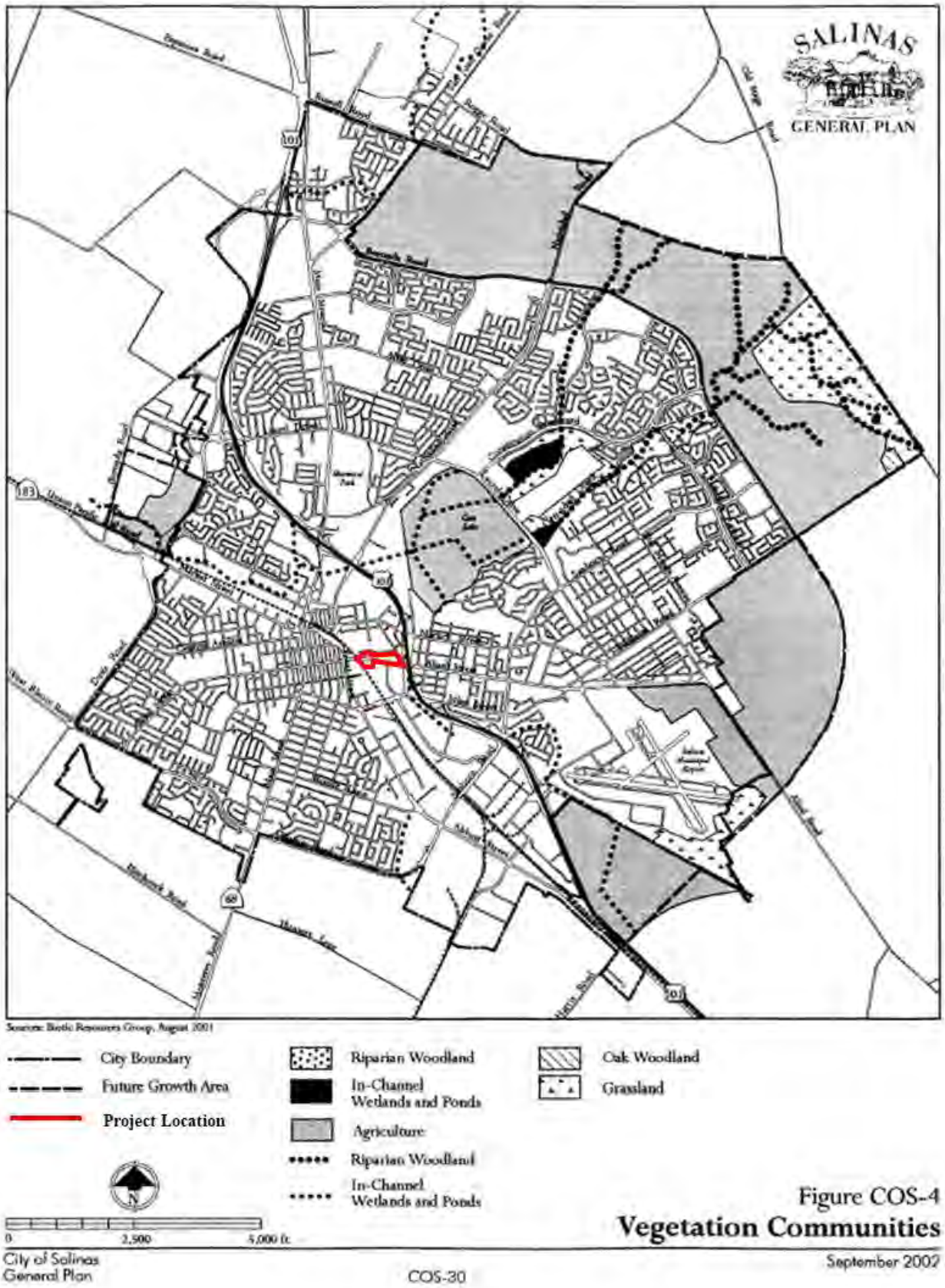



Figure 4-5 Vegetation Communities in the City of Salinas

### *4.4.2 Impact Assessment*

*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 the U.S. Fish and Wildlife Service?*

**Less than Significant with Mitigation Incorporated.** The Project site is fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping. There are approximately 23 existing structures on the site that predominately consist of commercial and industrial uses. The existing biotic conditions and resources of the site can be defined primarily as urban landscaping with heavy alteration and disturbance given the existing commercial and industrial uses. There are existing trees and shrubs throughout the site and along the East Alisal Street rights-of-way. No water features are present.

As shown in Table 4-4, there are no recorded occurrences of special-status species or critical habitats on the Project site. In addition, as described in Table 4-5, the site conditions provide low suitability for habitat for any candidate, sensitive, or special-status species that may occur on the Project site or vicinity. However, the existing trees and shrubs throughout the site and along the East Alisal Street rights-of-way could provide habitat for birds and raptors that are protected under CFGC Sections 3503 and 3503.5. Future development of the site could result in the removal of this vegetation and thereby impact protected nesting birds through direct habitat modifications.

Therefore, to reduce impacts to protected nesting birds that may occur during site construction and development, the Project shall incorporate ***Mitigation Measure BIO-1***. Through incorporation of the mitigation measure, potentially significant impacts would be reduced to less than significant with mitigation incorporated and the Project would not 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 CDFW or USFWS.

***Mitigation Measure BIO-1:*** *Nesting Bird Surveys and Avoidance. The Project shall implement the following measures to mitigate for loss of nesting habitat of the Project in compliance with the federal Migratory Bird Treaty Act and relevant Fish and Game Codes:*

- ***Avoidance.*** *In order to avoid impacts to nesting raptors and migratory birds, the Project will be constructed, if feasible, from September 16th and January 31st, which is outside the avian nesting season.*
- ***Preconstruction Surveys.*** *If Project activities must occur during the nesting season (February 1-September 15), a qualified biologist will conduct preconstruction surveys for active raptor and migratory bird nests within 10 days prior to the start of these activities. The survey will include the proposed work area(s) and surrounding lands within 500 feet, where accessible, for all nesting raptors and migratory birds. If no active nests are found within the survey area, no further mitigation is required.*
- ***Establish Buffers.*** *Should any active nests be discovered near proposed work areas, no disturbance buffers of 250 feet around active nests of non-listed bird species and 500 feet around active nests of non-listed raptors will be established. If work needs to occur within these no disturbance buffers, a qualified biologist will monitor the nest daily for one week, and thereafter once a week, throughout the duration of*

*construction activity. Should the nature of construction activity significantly change, such that a higher level of disturbance will be generated, monitoring will occur daily for one week and then resume the once-a-week regime. If, at any time, the biologist determines that construction activity may be compromising nesting success, construction activity within the designated buffer will be altered or suspended until the biologist determines that the nest site is no longer susceptible to deleterious disturbance.*

b) ***Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?***

No Impact. According to the General Plan and CDFW and USFWS databases, there are no known riparian habitats or other sensitive natural communities identified on the Project site or within the immediate vicinity of the Project. In addition, the site does not contain any water features that would provide habitat for riparian species. Further, the site consists of scant vegetation. For these reasons, it can be determined that the Project site does not provide any riparian or sensitive natural community habitat and thus, no impact would occur because of the Project.

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?***

No Impact. Based on the search of the NWI, the Project site does not contain any federally protected wetlands. As a result, it can be determined that the Project site would not result in any impact on state or federally protected wetlands and no impact would occur because of the Project.

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. Wildlife movement corridors are linear habitats that function to connect two (2) or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors).

Wildlife corridors typically include vegetation and topography that facilitate the movements of wild animals from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

As previously mentioned, the Project site does not contain habitat that could support wildlife species in nesting, foraging, or escaping from predators. This is based on the existing conditions of the site including the site's heavy alteration and lack of cover, vegetation, or water features. Due to these conditions, it can be determined that the Project would not interfere with wildlife movement and a less than significant impact would occur.

e) ***Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Less than Significant Impact. SMC *Chapter 35 - Trees and Shrubs* establishes standards and regulations related to the planting, maintenance, and removal of trees and shrubs in the City of Salinas. Planting, maintenance, and removal of existing trees on the Project site would be subject to compliance with these standards and regulations.

There are no other local policies or ordinances that protect biological resources applicable to the Project. Through compliance, the Project would have a less than significant impact.

*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?*

No Impact. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans applicable to the Project site. As such there would be no impact.

### *4.4.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Biological Resources related mitigation measure BIO-1 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.5 CULTURAL RESOURCES

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | | X | | |
| *b)* | Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | | X | | |
| *c)* | Disturb any human remains, including those interred outside of formal cemeteries? | | | X | |

### *4.5.1 Environmental Setting*

Generally, the term 'cultural resources' describes property types such as prehistoric and historical archaeological sites, buildings, bridges, roadways, and tribal cultural resources. As defined by CEQA, cultural resources are considered "historical resources" that meet criteria in *Section 15064.5(a)* of the CEQA Guidelines. If a Lead Agency determines that a project may have a significant effect on a historical resource, then the project is determined to have a significant impact on the environment. No further environmental review is required if a cultural resource is not found to be a historical resource.

*California Historical Resource Information System Record Search*

The Northwest Information Center (NWIC) was requested to conduct a California Historical Resources Information System (CHRIS) Record Search for the Project site and surrounding "Project Area" (0.5-mile radius from perimeter of Project site). Results of the CHRIS Record Search were provided on April 14, 2022 (Record Search File Number 21-1411). Full results are provided in Appendix C.

The CHRIS Record Searches generally review file information based on results of Class III pedestrian reconnaissance surveys of project sites conducted by qualified individuals or consultant firms which are required to be submitted, along with official state forms properly completed for each identified resource, to the Regional Archaeological Information Center. Guidelines for the format and content of all types of archaeological reports have been developed by the California Office of Historic Preservation, and reports will be reviewed by the regional information centers to determine whether they meet those requirements.

The results of the SJJIC CHRIS Record Search indicate:

(1) There were no previous cultural resource studies conducted within the project area.

(2) There are no recorded archaeological resources or historical buildings and structures within the project area.

(3) The State Office of Historic Preservation Built Environment Resources Directory (OHP BERD), which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places, lists no previously recorded buildings or structures within or adjacent to the proposed project area.

Further, the NWIC provided the following comments and recommendations:

(1) Prior to any future development and ground disturbance activities, a qualified, professional consultant should conduct a field survey to determine if cultural resources are present.

(2) Contact the NAHC for a list of Native American tribes that can assist with information regarding traditional, cultural, and religious heritage values.

(3) If the proposed project area contains buildings or structures that meet the minimum age requirement (45 years of age or older), prior to commencement of project activities, it is recommended that the unrecorded building or structure be documented on Office of Historic Preservation's DPR 523 resource recordation forms by a professional familiar with the architecture and history of Monterey County.

(4) Mitigate for archaeological resources that could potentially be encountered during construction.

### *California Native American Heritage Commission (NAHC)*

A consultation list of tribes with traditional lands or cultural places located within Monterey County was requested and received from the California Native American Heritage Commission (NAHC) on April 8, 2022. The listed tribes include Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Esselen Tribe of Monterey County, Indian Canyon Mutsun Band of Costanoan, Ohlone/Costanoan-Esselen Nation, Wuksache Indian Tribe/Eshom Valley Band, Xolon-Salinan Tribe, and Runsen Am:a Tur:ataj Ohlone. The NAHC also conducted a Sacred Lands File (SFL) check which received positive results. Correspondence is provided in Appendix D.

### *AB 52 and SB 18 Tribal Consultation*

The City of Salinas conducted formal tribal consultation pursuant to AB 52 (Chapter 532, Statutes 2014) and SB 18 (Chapter 905, Statutes 2004) on June 14, 2022, utilizing the consultation list of tribes received from the NAHC. The same nine (9) tribes listed above were included in the formal consultation. Consultation for AB 52 ended on July 14, 2022, and consultation for SB 18 ended on September 12, 2022. Chairperson Louise Miranda-Ramirez of the Ohlone/Costanoan-Esselen Nation requested formal consultation on September 13, 2022. Formal consultation was held by telephone on June 21, 2023. Nine (9) mitigation measures were requested through formal consultation, as incorporated in Section 4.5 and Section 4.18. No response was received from the other tribes.

### *General Plan*

The Salinas General Plan Conservation/Open Space Element identifies the following policies related to historic and cultural resources.

> ***Policy COS-13 California Environmental Quality Act.*** *Continue to assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).*

*a. For structures that potentially have historic significance, require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible.*

*b. For all development proposals within the Carr Lake/Natividad Creek corridor, require a study to be conducted by a professional archaeologist. The objective of the study is to determine if significant archaeological resources are potentially present and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.*

***Policy COS-14 Historic/Architectural Preservation.*** *Consider implementing a historic/architectural preservation program and a historic/architectural preservation ordinance that encourages public/private partnerships to preserve and enhance historically significant buildings in the community.*

The General Plan also identifies the Carr Lake/Natividad Creek corridor and the northwest portion of the city's planning area on either side of Highway 101 as areas having high potential of containing archeological sites. Monterey County requires archeological field inspections prior to all proposed development in high sensitivity zones. The Project site is not within a high sensitivity zone (see Figure 4-6).

### *City of Salinas Historic Resources Board*

The Historic Resources Board (HRB) was created on April 27, 2010, by the City Council's adoption of Ordinance # 2505. The HRB was tasked by the Council to protect Salinas' architectural heritage assets for education, community revitalization and the promotion of heritage tourism. [18] *SMC Chapter 3 Article 2 – Historic Resources Board* codifies the operations of the HRB. For instance, *Section 3-02.05 – Designation process* allows the board to recommend the promotion, preservation, restoration, and protection of historic resources to the City Council. Other sections regulate designation amendment, powers of City Council, maintenance and repair, enforcement, and incentives for historic preservation.

[18] City of Salinas. Historic Resources Board. Accessed on October 24, 2022, https://www.cityofsalinas.org/our-government/boards-commissions/historic-resources-board

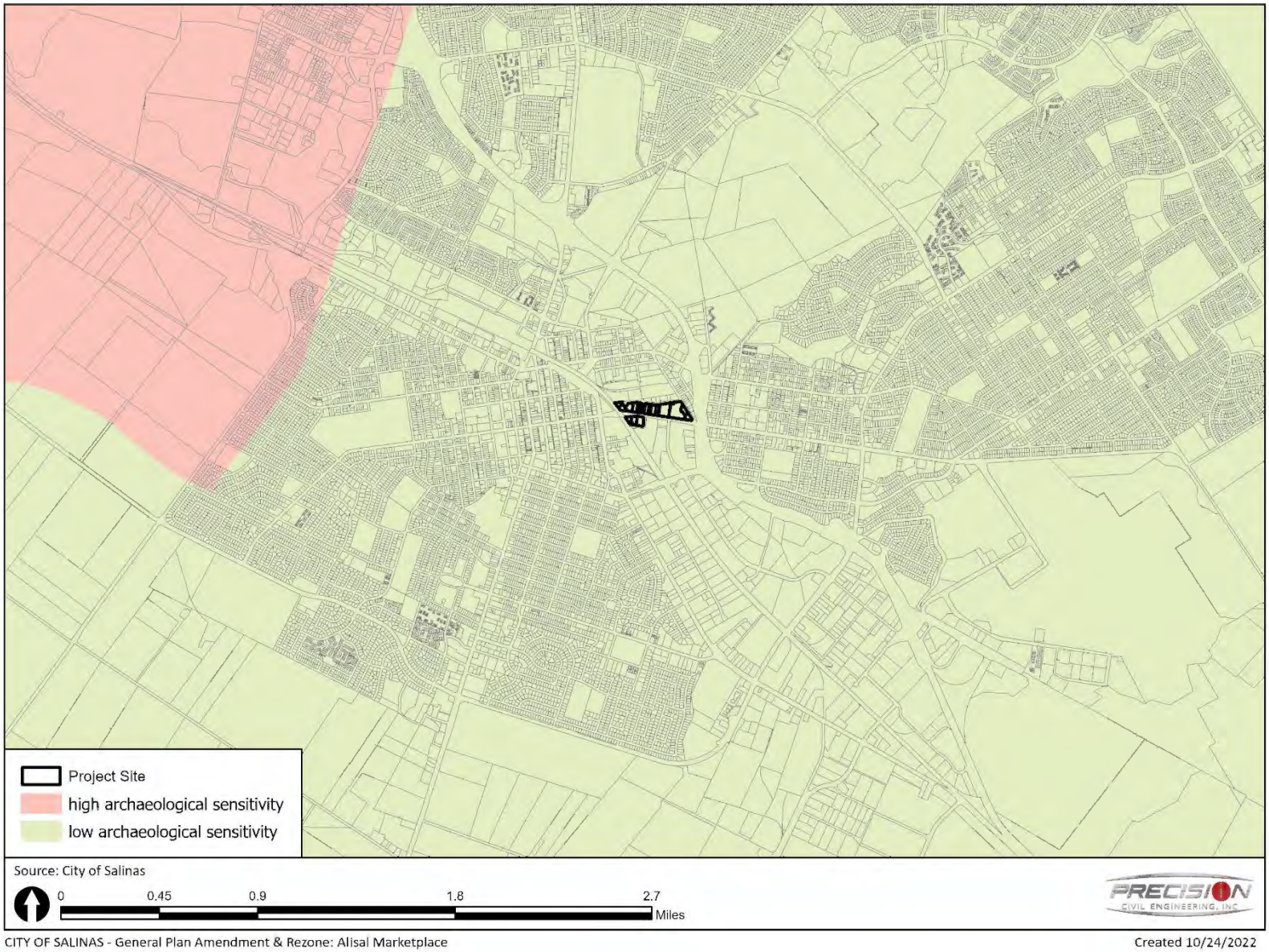



Figure 4-6 County of Monterey Archeological Sensitivity Map

### *4.5.2 Impact Assessment*

*Would the project:*

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

Less than Significant with Mitigation Incorporated. Based on the CHRIS Records Search conducted on April 14, 2022, there are no known local, state, or federal designated historical resources pursuant to Section 15064.5 on the Project site. While there is no evidence that historical resources exist on the Project site, there is some possibility that existing structures qualify as historical resources or hidden, and buried resources may exist with no surface evidence that may be impacted by future physical development of the site. While the Project does not propose development, future redevelopment may include typical construction activities such as demolition of existing buildings, grading, trenching, excavation, etc. In order to ensure that the existing structures are not of historical significance at the time of demolition, the Project shall incorporate ***Mitigation Measure CUL-1*** to mitigate the destruction or alternation of any potential historical structures. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

*Mitigation Measure CUL-1 Historical Resources Identification and Treatment Plan*

*Prior to permit approval for development on the Project site, a historical resources evaluation shall be completed for that individual site to confirm if existing buildings and/or structures withing these sites qualify as historical resources as defined by Section 15064.5(a) of CEQA Guidelines. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. All properties 45 years of age or older shall be evaluated within their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and concurrence.*

*Any relocation, rehabilitation, or alteration of the resource shall be implemented consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR Section 15126.4[b][1]). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence, in addition to the historical resources evaluation.*

*If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not feasible, the applicant or developer shall provide a report explaining why compliance with the Standards and or avoidance is not feasible for the City's review and approval. Site-specific mitigation measures shall be established and undertaken, including, but not limited to, documentation of the historical resource in the form of*

*a Historic American Buildings Survey-Like report. The report shall be commissioned by the project applicant or their consultant to comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the Historic American Buildings Survey Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the PQS and submitted to the City prior to issuance of any permits for demolition or alteration of the historical resource.*

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

Less than Significant Impact with Mitigation Incorporated. Based on the CHRIS Records Search conducted on April 14, 2022, there are no known archeological resources pursuant to Section 15064.5 on the Project site. While there is no evidence that archeological resources exist on the Project site, there is some possibility that existing structures qualify as historical resources or hidden, and buried resources may exist with no surface evidence that may be impacted by future physical development of the site. In the event of the accidental discovery and recognition of previously unknown historical resources before or during construction activities, the Project shall incorporate *Mitigation Measure CUL-2 through CUL-8* as described below to assure construction activities do not result in significant impacts to any potential archeological resources discovered above or below ground surface. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

*Mitigation Measure CUL-2 Phase I Cultural Resources Study*

*Prior to the issuance of any grading or construction permits for each individual site, a Phase I cultural resources study shall be performed by a qualified professional meeting the Secretary of the Interior's (SOI's) Professional Qualification Standards (PQS) for archaeology (National Park Service 1983). The Phase I cultural resources study shall include a pedestrian survey of the project site when appropriate and sufficient background research and field sampling to determine whether archaeological resources may be present. Archival research shall include a records search of the Northwest Information Center (NWIC) no more than two years old and a Sacred Lands File search with the NAHC. The Phase I technical report documenting the study shall include recommendations that shall be implemented prior to and/or during construction to avoid or reduce impacts to archaeological resources. Recommendations may include, but would not be limited to, archaeological construction monitoring, sensitivity training, or additional testing and mitigation (outlined in Mitigation Measures CUL-3 through CUL-7). The report shall be submitted to the City for review and approval prior to the issuance of any grading or construction permits. The City shall include recommendations in the Phase I technical report as Conditions of Approval to be implemented throughout all ground disturbance activities. The final report shall be submitted to the NWIC.*

*Mitigation Measure CUL-3 Extended Phase I Testing*

*If recommended by the Phase I study for each individual site (Mitigation Measure CUL-2), the project applicant shall retain a qualified archaeologist to conduct an Extended Phase I (XPI) study to determine the presence/absence and extent of archaeological resources on the project site. XPI testing shall include a series of shovel test pits and/or hand augured units and/or mechanical trenching to establish the boundaries of archaeological site(s) on the project site. If the boundaries of the archaeological site are already well understood from previous archaeological work, an XPI will not be required. All archaeological excavation shall be conducted by a qualified archaeologist(s) under the*

*direction of a principal investigator meeting the SOI's PQS for archaeology (National Park Service 1983). If an XPI report is prepared, it shall be submitted to the City for review and approval prior to the issuance of a grading or construction permit. Recommendations therein shall be implemented for all ground disturbance activities. Recommendations may include, but would not be limited to, site avoidance, Phase II Site Evaluation, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-4, CUL-5, CUL-7, and CUL-8). The final report shall be submitted to the NWIC.*

*Mitigation Measure CUL-4 Archaeological Site Avoidance*

*Any identified archaeological sites (determined after implementing Mitigation Measures CUL-2 and/or CUL-3) or archaeological resources encountered during ground-disturbing activities shall be avoided by project-related construction activities, where feasible. A barrier (temporary fencing) and flagging shall be placed between the work location and any resources within 60 feet of a work location to minimize the potential for inadvertent impacts. If the resource cannot be avoided, Mitigation Measure CUL-5 shall be implemented.*

*Mitigation Measure CUL-5 Phase II Site Evaluation*

*If the results of any Phase I and/or XPI for each individual site (Mitigation Measures CUL-2 and/or CUL-3) indicate the presence of archaeological resources that cannot be avoided by the project (Mitigation Measure CUL-4) and that have not been adequately evaluated for the NRHP or CRHR listing at the project site, the qualified archaeologist shall conduct a Phase II investigation to determine if intact deposits remain and if they may be eligible for the CRHR or qualify as unique archaeological resources. If the archaeological resource(s) of concern are Native American in origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s).*

*A Phase I evaluation shall include any necessary archival research to identify significant historical associations and mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit. The sample excavation would be carried out to characterize the nature of the site(s), define the artifact and feature contents, determine horizontal and vertical boundaries, and retrieve representative samples of artifacts and other remains.*

*If the archaeologist and, if applicable, a Native American monitor or other interested tribal representative determine it is appropriate, cultural materials collected from the site shall be processed and analyzed in a laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the site(s) shall be evaluated according to the criteria of the CRHR and if applicable, NRHP. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)." Recommendations in the Phase II report shall be implemented for all ground disturbance activities. Recommendations may include, but would not be limited to, Phase III Data Recovery, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-6 through CUL-8). The report shall be submitted to the City for review and approval prior to the issuance of any grading or construction permits. The final report shall be submitted to the NWIC.*

*Mitigation Measure CUL-6 Phase III Data Recovery*

*Should the results of the Phase II site evaluation for each individual site (Mitigation Measure CUL-5) yield resources that meet CRHR significance standards and if the resource cannot be avoided by project construction in accordance with CUL-4, the project applicant shall ensure that all feasible recommendations for mitigation of archaeological impacts are incorporated into the final design and approved by the City prior to construction. Any necessary Phase III data recovery excavation, conducted to exhaust the data potential of significant archaeological sites, shall be carried out by a qualified archaeologist meeting the SOI's PQS for archeology (National Park Service 1983). Data recovery shall be conducted in accordance with a research design reviewed and approved by the City, prepared in advance of fieldwork, and using the appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. If the archaeological resource(s) of concern are Native American in origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s).*

*As applicable, the final Phase III Data Recovery reports shall be submitted to the City prior to issuance of any grading or construction permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities. Recommendations may include, but would not be limited to, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-7 and CUL-8). The final report shall be submitted to the NWIC upon completion.*

*Mitigation Measure CUL-7 Cultural Resources Monitoring*

*If recommended by Phase I, XPI, Phase II, or Phase III studies for each individual site (Mitigation Measures CUL-2, CUL-3, CUL-5, and/or CUL-6), the project applicant shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities which may include the following but not limited to: grubbing, vegetation removal, trenching, grading, and/or excavations. The archaeological monitor shall coordinate with any Native American monitor as required. Monitoring logs must be completed by the archaeologist daily. Cultural resources monitoring may be reduced for the project if the qualified archaeologist finds it appropriate to reduce the monitoring efforts. Upon completion of ground disturbance for the project, a final report must be submitted to the City for review and approval documenting the monitoring efforts, cultural resources finding, and resource disposition. The final report shall be submitted to the NWIC.*

*Mitigation Measure CUL-8 Unanticipated Discovery of Cultural Resources*

*If archaeological resources are encountered during ground-disturbing activities, work within 50 feet shall be halted and the project archaeologist meeting the SOI's PQS for archeology (National Park Service 1983) shall immediately to evaluate the find pursuant to Public Resources Code Section 21083.2. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery excavation, to mitigate any significant impacts to significant resources. If the resource is of Native American origin, implementation of Mitigation Measures TCR-1 may be required. Any reports required to document and/or evaluate unanticipated discoveries shall be submitted to the City for review and approval and submitted to the NWIC after completion. Recommendations contained therein shall be implemented throughout the remainder of ground disturbance activities.*

*c) Disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant Impact. There is no evidence that human remains exist on the Project site. Nevertheless, there is some possibility that a non-visible buried site may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. If any human remains are discovered during construction, then the Project would be subject to CCR Section 15064.5(e), PRC Section 5097.98, and California Health and Safety Code Section 7050.5. Regulations contained in these sections address and protect human burial remains. Compliance with these regulations would ensure impacts to human remains, including those interred outside of formal cemeteries, are less than significant.

### *4.5.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Cultural Resources related mitigation measures CUL-1 through CUL-8 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.6 ENERGY

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | X | |
| *b)* | Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | X | |

### *4.6.1 Environmental Setting*

The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years as part of the California Code of Regulations. The standards were established in 1978 in an effort to reduce the state's energy consumption. They apply to new construction of, and additions and alterations to, residential and nonresidential buildings and relate to various energy efficiencies including but not limited to ventilation, air conditioning, and lighting.[19] The California Green Building Standards Code (CALGreen), Part 11, Title 24, California Code of Regulations, was developed in 2007 to meet the state goals for reducing Greenhouse Gas emissions pursuant to AB32. CALGreen covers five (5) categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.[20] The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. Additionally, the California Air Resources Board (CARB) oversees air pollution control efforts, regulations, and programs that contribute to reduction of energy consumption. Compliance with these energy efficiency regulations and programs ensures that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources. Lastly, the Energy Action Plan (EAP) for California was approved in 2003 by the California Public Utilities Commission (PUC). The EAP established goals and next steps to integrate and coordinate energy efficiency demand and response programs and actions.[21]

#### *General Plan*

The Salinas General Plan Conservation/Open Space Element identifies the following goal and policies for energy conservation to sustain existing and future economic and population growth.

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[19] California Energy Commission. 2019 Building Energy Efficiency Standards. Accessed on September 12, 2022, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

[20] California Department of General Services. (2020). 2019 California Green Building Standards Code. Accessed on September 12, 2022, https://codes.iccsafe.org/content/CGBC2019P3

[21] State of California. (2008). Energy Action Plan 2008 Update. Accessed on September 14, 2022, https://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf

*Goal COS-8: Encourage energy conservation.*

*Policy COS-8.1: Enforce State Title 24 building construction requirements.*

*Policy COS-8.2: Apply standards that promote energy conservation in new and existing development.*

*Policy COS-8.5: Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.*

*Policy COS-8.6: Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.*

### *4.6.2 Impact Assessment*

*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?*

Less than Significant Impact. Although no development is currently proposed, future development that results from Project implementation would consume energy resources. Energy would be consumed through future construction and operations. Construction activities typically include demolition, site preparation, grading, paving, architectural coating, and trenching. The primary sources of energy for construction activities are diesel and gasoline, from the transportation of building materials and equipment and construction worker trips. Operations would involve heating, cooling, equipment, and vehicle trips. Energy consumption related to operations would be associated with natural gas, electricity, and fuel.

All construction equipment and operational activities shall conform to current emissions standards and related fuel efficiencies, including applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards that include a broad set of energy conservation requirements (e.g., Lighting Power Density requirements). Compliance with such regulations would ensure that the short-term, temporary construction activities and long-term operational activities do not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Energy outputs for short-term construction and long-term operations were estimated using CalEEMod (Appendix A) and Project assumptions. Traffic impacts related to vehicle trips were considered through a Vehicle Miles Traveled (VMT) analysis contained in Section 4.17. Results are summarized as follows.

The Project site would be served by Pacific Gas and Electric Company (PG&E) for both electricity and natural gas. Monterey County consumed approximately 2,434 GWh of electricity, or 0.87 percent of electricity generated in California in 2020 (279,510 GWh) and approximately 10,998,356 MMBtu, or 0.89 percent of natural gas generated in California in 2020 (1,232,858,652 MMBtu).[22]

[22] California Energy Commission. "Electricity Consumption by County." Accessed on September 7, 2022, http://ecdms.energy.ca.gov/elecbycounty.aspx

Table 4-6 shows the estimated electricity and natural gas consumption for the Project based on output from CalEEMod. The Project would consume less than one (1) percent of the total electricity used in Monterey County in 2020 and less than one (1) percent of the total natural gas use in Monterey County in 2020. These results do not rise to a level of significance.

Table 4-6 Project Energy Consumption

| Energy Consumption | Electricity (GWh per year) | Natural Gas (MMBtu per year) |
|---|---|---|
| Project | 3.2714 | 4,439.65 |
| Monterey County | 2,434.2729 | 10,998,356.15 |
| **Project Percentage (%)** | **0.1344** | **0.04** |

Regarding energy consumed through vehicle trips, development of the Project site to the maximum permitted density/intensity (i.e., 515 dwelling units and 131,414-square foot commercial space) would generate approximately 1,771 daily trips (See Section 4.17). The anticipated trips do not rise to a level of significance under VMT thresholds as described under Section 4.17 because the site is located along a High-Quality transit corridor, within 0.5-miles of an existing major transit stop that maintains a service interval frequency of 14 minutes or less during peak commute. In addition, the Project site would facilitate the redevelopment of a site within an urbanized area that is surrounded by existing urban uses, which has the potential to further reduce travel miles due to the proximity to existing uses. Mixed use development and development near existing bus stops also encourages the use of transit and alternative transportation modes such as walking and biking.

Overall, energy consumption for the Project does not rise to a level of significance. In addition, through compliance with applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards, it can be determined that the proposed Project would not consume energy in a manner that is wasteful, inefficient, or unnecessary. For these reasons, the Project would result in a less than significant impact.

*b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

**Less than Significant Impact.** As discussed under criterion a), the construction and operations of the Project would be subject to compliance with applicable energy efficiency regulations. Thus, applicable state and local regulations and programs would be implemented to reduce energy waste from construction and operations. Table 4-7 demonstrates that the Project does not conflict with or obstruct with the energy conservation/efficiency policies identified in the General Plan.

Table 4-7 Consistency with General Plan Energy Conservation Policies

| General Plan Energy Conservation Policies | Consistency/Applicability Determination |
|---|---|
| ***Policy COS-8.1:*** *Enforce State Title 24 building construction requirements.* | **Consistent.** Future development facilitated by the Project would be subject to Title 24 requirements and conditioned for compliance during the entitlement review and approval process. |
| ***Policy COS-8.2:*** *Apply standards that promote energy conservation in new and existing development.* | **Consistent.** Future development facilitated by the Project would be required to comply with the Title 24 and CalGreen standards, which include energy conservation measures. Compliance would be ensured through the entitlement review and approval process. |

| | |
|---|---|
| ***Policy COS-8.5:*** *Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.* | **Consistent.** The Project would introduce higher density, mixed use development, including commercial and residential uses, in an area that is in close proximity to transit. |
| ***Policy COS-8.6:*** *Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.* | **Consistent.** The Project would introduce higher density, mixed use development, including commercial and residential uses, in an area that is in close proximity to transit. |

Therefore, through compliance, the Project would not conflict with or obstruct any state or local plan for energy efficiency and a less than significant impact would occur because of the Project.

### *4.6.3 Mitigation Measures*

None required.

## 4.7 GEOLOGY AND SOILS

| Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *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.* | | | X | |
| *ii. Strong seismic ground shaking?* | | | X | |
| *iii. Seismic-related ground failure, including liquefaction?* | | | X | |
| *iv. Landslides?* | | | | X |
| *b)* Result in substantial soil erosion or the loss of topsoil? | | | X | |
| *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? | | | X | |
| *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? | | | X | |
| *e)* Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? | | | | X |
| *f)* Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | X | |

### *4.7.1 Environmental Setting*

The City of Salinas is located at the northern opening of the Salinas Valley and is situated 10 miles west of Monterey Bay and the Pacific Ocean, approximately mid-way between Santa Cruz and the Monterey Peninsula. Geographically, the city inclusive of the Project site is in a seismically active region that is subject to various natural hazards such as earthquakes, liquefaction, flooding, landslides, and erosion. A brief discussion of the likelihood of such activities occurring in or affecting the city is provided below. The discussion is based on the 2022 County of Monterey Multi-Jurisdictional Hazard Mitigation Plan (HMP) adopted in September 2022 as well as the Salinas General Plan Safety Element. [23]

#### *Faulting*

There are no known active faults in the city. [24] No Alquist-Priolo Earthquake Fault zoning has been established for the city. There are two (2) potentially active faults within the city. These potentially active faults include King City Fault and Gabilan Creek Fault, both of which have not been active within the past 11,000 years. The nearest active fault and Alquist-Priolo Fault zoning to the city is the San Andreas Fault, which is located 13 miles northeast of the Project site. [25] Due to the distance from an active fault, there is low potential for ground rupture in the city.

#### *Ground Shaking*

The City of Salinas is in Seismic Risk Zone IV, the highest potential risk category due to the frequency and magnitude of earthquake activity nationwide. Therefore, the entire population is potentially exposed to direct and indirect impacts from earthquakes. As shown in Figure 4-7, the Project site is in a zone with moderately high seismic risk. Earthquake-related damage is often the result of liquefaction.

#### *Liquefaction*

Liquefaction primarily occurs in areas of recently deposited sands and silts and in areas of high groundwater levels. Susceptible areas include sloughs and marshes that have been filled in and developed over. The city has former wetland areas that have been drained, filled, and developed. As shown in Figure 4-8, the Project site is in an area with high susceptibility to liquefaction.

#### *Erosion*

The primary types of erosion identified by the HMP are coastal cliff and shoreline erosion. The city is not susceptible to these erosion types in all sea level rise scenarios (i.e., sea level rise at 25 cm, 75 cm, 200 cm).

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[23] County of Monterey. 2022 Monterey County Multi-Jurisdictional Hazard Mitigation Plan. Accessed on April 27, 2022, https://www.co.monterey.ca.us/home/showpublisheddocument/109180/637800072369600000

[24] According to the California Department of Conservation, *"An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years."*

[25] California Department of Conservation. "CGS Seismic Hazard Program: Alquist-Priolo Fault Hazard Zones." Accessed on October 25, 2022, https://gis.data.ca.gov/maps/ee92a5f9f4ee4ec5aa731d3245ed9f53/explore?location=37.213952%2C-117.946341%2C7.19

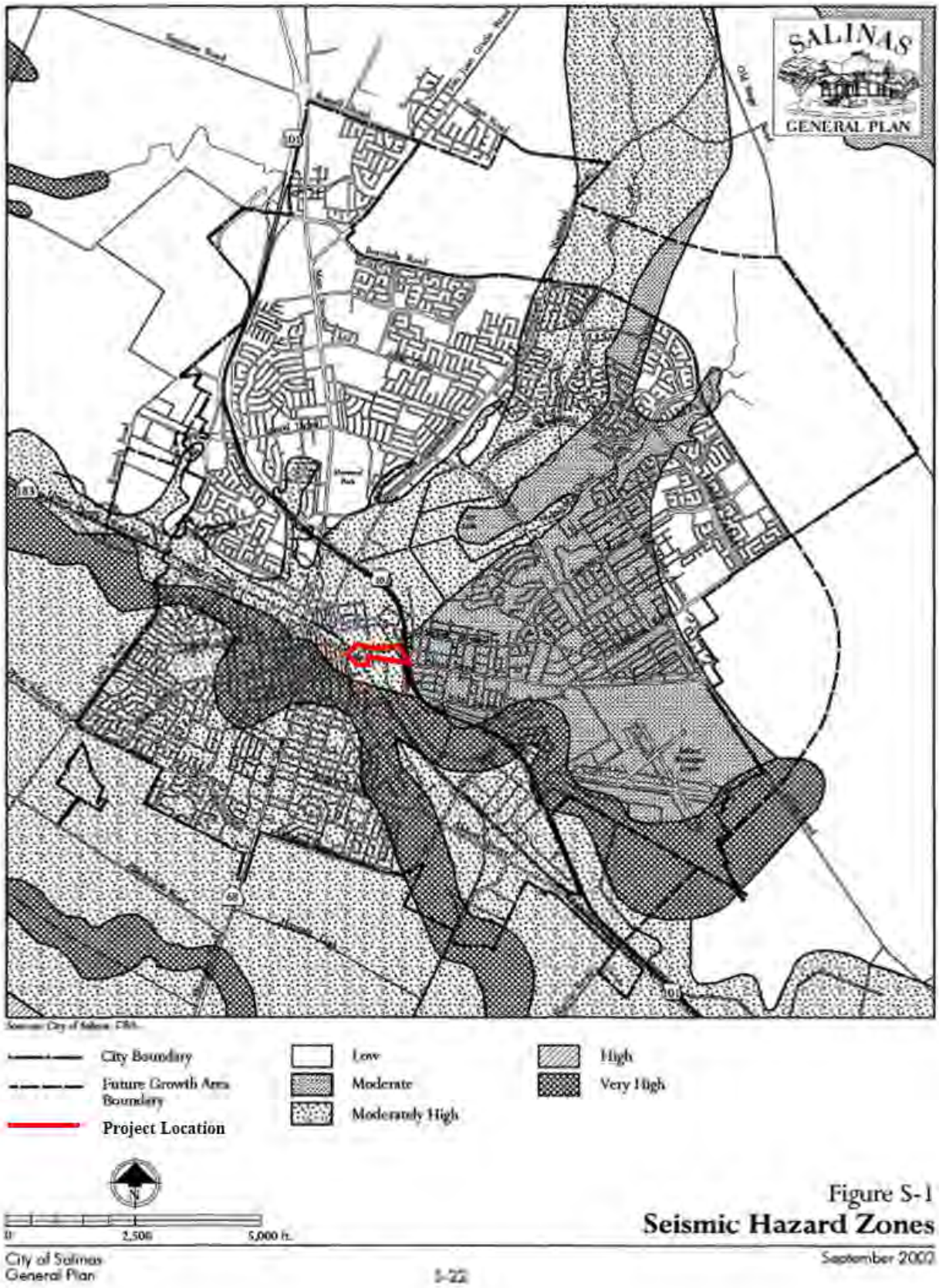
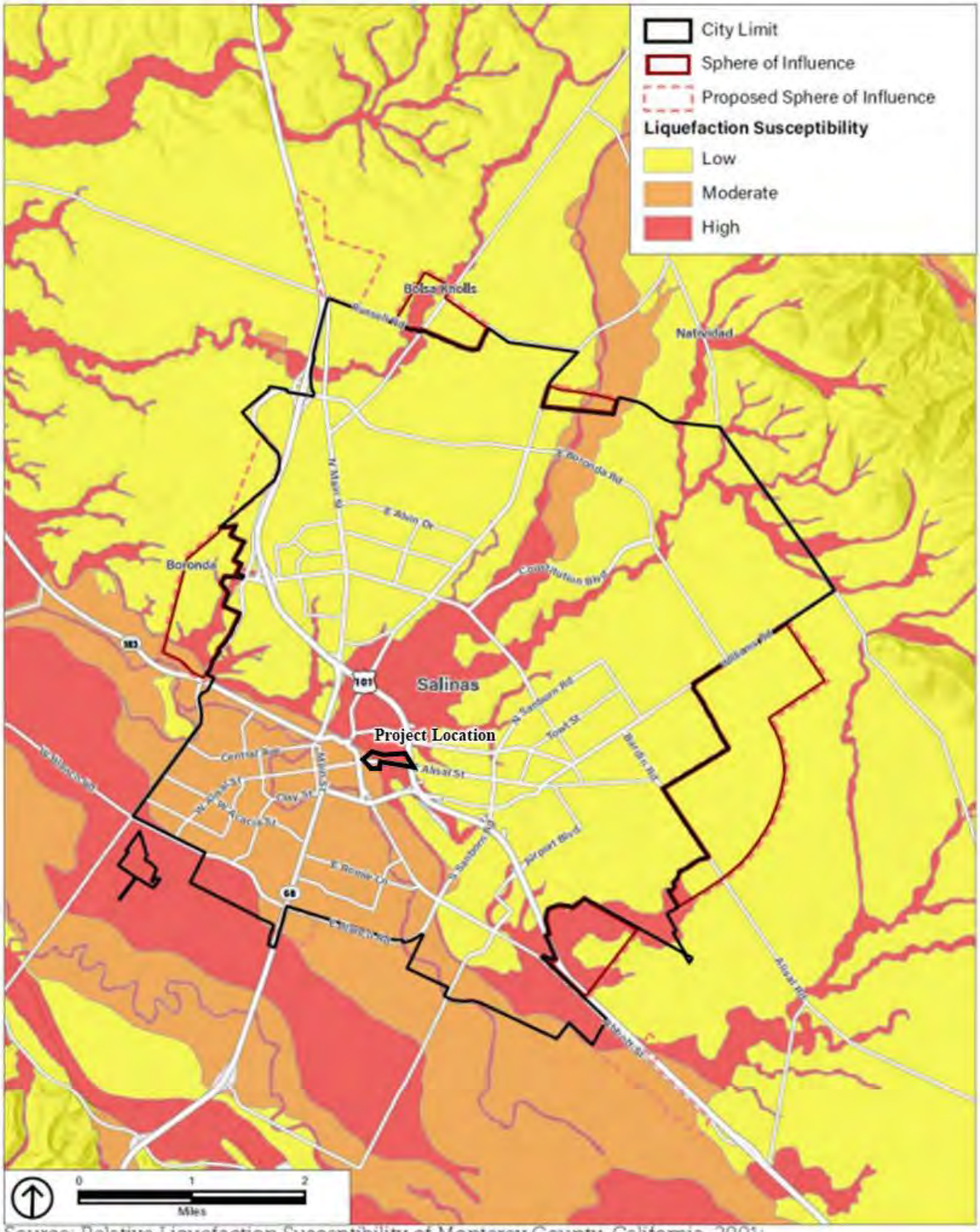



Figure 4-7 City of Salinas, General Plan, Seismic Hazard Zones




Source: Relative Liquefaction Susceptibility of Monterey County, California, 2001; Monterey County Planning Department.

Figure 4-8 Monterey County HMP, Liquefaction Susceptibility in the City of Salinas

### *Ground Subsidence*

Ground subsidence is the settling or sinking of surface soil deposits with little or no horizontal motion. Soils with high silt or clay content are subject to subsidence. According to the HMP, the City of Salinas is not exposed to earthquake induced landslide risk.

### *Subsurface Soils*

A search of the Web Soil Survey by the USDA Natural Resources Conservation Service indicates that the following soils comprise the Project site (Figure 4-9): [26]

> ***CnA:*** Cropley silty clay, 0 to 2 percent slopes, well drained, and high runoff. The depth to water table is more than 80 inches. The CnA soils account for 79.9% of the project site.
>
> ***CnC:*** Cropley silty clay, 2 to 9 percent slopes, MLRA 14, well drained, and very high runoff. The depth to water table is more than 80 inches. The CnC soils account for 5.6% of the project site.
>
> ***SbA:*** Salinas clay loam, 0 to 2 percent slopes, MLRA 14, well drained, and low runoff. The depth to water table is more than 80 inches. The SbA soils account for 14.4% of the project site.

### *California Building Code*

The California Code of Regulations (CCR) Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The California Building Code incorporates by reference the International Building Code with necessary California amendments. About one-third of the text within the California Building Standards Code has been tailored for California earthquake conditions. Construction within the City of Salinas is governed by the seismic safety standards of Chapter 16 of the Code. These standards are applicable to all new buildings and are required to provide the necessary safety from earthquake related effected emanating from fault activity.

### *General Plan*

The General Plan includes objectives and policies relevant to natural hazards in the Safety Element since Salinas is subject to earthquakes, liquefaction, flooding, landslides, and erosion:

> ***Policy S-4.1:*** *During the review of development proposals, investigate and mitigate geologic and seismic hazards, or require that development be located away from such hazards, in order to preserve life and protect property.*
>
> ***Policy S-4.2:*** *Locate development outside flood-prone areas unless flood risk is mitigated without decreasing retention capacity.*
>
> ***Policy S-4.6:*** *Ensure that all development and reuse/revitalization projects are developed in accordance with the most recent Uniform Fire Code requirements.*

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[26] United States Department of Agriculture Natural Resources Conservation Service. "Web Soil Survey." Accessed on April 27, 2022, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

CITY OF SALINAS – General Plan Amendment & Rezone: Alisal Marketplace Created 12/22/2022

Figure 4-9 Web Soil Survey Soil Map for Project Site

### *4.7.2 Impact Assessment*

*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.*

Less than Significant Impact. There are no known active earthquake faults in Salinas inclusive of the Project site, nor is Salinas within an Alquist-Priolo earthquake fault zone as established by the Alquist-Priolo Fault Zoning Act. There are two (2) potentially active faults within the city, both of which have not been active within the past 11,000 years. The nearest active fault to the city is the San Andreas Fault, which is located 13 miles northeast of the Project site. Due to the distance from an active fault, there is low potential for ground rupture in the city. The likelihood of the Project rupturing due to an earthquake would be reduced through compliance with current seismic protection standards in the CBC which would significantly limit potential seismic-related hazards such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Compliance with the CBC would ensure a less than significant impact.

*ii. Strong seismic ground shaking?*

Less than Significant Impact. The Project site is in a zone with moderately high seismic risk. Future development of the Project site would be required to comply with current seismic protection standards in the CBC which would significantly limit potential damage to structures and thereby reduce potential impacts including the risk of loss, injury, or death. Compliance with the California Building Code would ensure a less than significant impact.

*iii. Seismic-related ground failure, including liquefaction?*

Less than Significant Impact. While the Project site is in an area with high susceptibility to liquefaction, there are no known geologic hazards or unstable soil conditions. Due to the distance from an active fault, there is low potential for ground rupture. Further, the site is primarily made up of silty clay soils that are well drained, which are less susceptible to liquefaction than silt or sands. Future development of the site would require compliance with the city's grading and drainage standards that would reduce the likelihood of settlement or bearing loss. In addition, future development would be required to comply with CBC and specific requirements that address liquefaction. For these reasons, the Project does not have any aspect that could result in seismic-related ground failure including liquefaction and a less than significant impact would occur because of the Project.

*iv. Landslides?*

No Impact. The topography of the Project site is relatively flat with stable, native soils, and the site is not in the immediate vicinity of rivers or creeks that would be more susceptible to landslides. Therefore, no impact would occur because of the Project.

*b) Result in substantial soil erosion or the loss of topsoil?*

Less than Significant Impact. Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity. The Project site is relatively flat and mostly paved, which limits the potential for

substantial soil erosion. Although no development is proposed, future development of the Project site would require typical site preparation activities such as grading and trenching which may result in the potential for short-term soil disturbance or erosion impacts. Soil disturbance during construction is largely caused by the use of water. Excessive soil erosion could cause damage to existing structures and roadways.

The likelihood of erosion occurring during construction would be reduced through site grading and surfacing, which would be subject to review and approval by the City for compliance with applicable standards. Future development of the Project site would be required to comply with SMC *Section 29-15(d) - Best Management Practices for Construction Sites*, which requires all construction to *"comply with the City of Salinas Standards to Control Excavations, Cuts, Fills, Clearing, Grading, Erosion and Sediments"* and to keep debris and dirt out of the city's storm drain system.

The likelihood of erosion would be further reduced through compliance with regulations set by the State Water Resources Control Board (SWRCB). Namely, the SWRCB requires sites larger than one (1) acre to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity (i.e., General Permit Order No. 2009-0009-DWQ). The General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in substantial soil erosion or loss of topsoil. With these provisions in place, impacts to soil and topsoil by the Project would be considered less than significant.

c) ***Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

Less than Significant Impact. Ground subsidence is the settling or sinking of surface soil deposits with little or no horizontal motion. Soils with high silt or clay content are subject to subsidence. Subsidence typically occurs in areas with groundwater withdrawal or oil or natural gas extraction. The topography of the site is relatively flat with stable, native soils and no apparent unique or significant landforms. Future development of the Project site would be required to comply with current seismic protection standards in the CBC which would significantly limit potential seismic-related hazards such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Compliance with the CBC would ensure a less than significant impact.

d) ***Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?***

Less than Significant Impact. The Project site is relatively flat with native soils of silty clay and clay loam, which are moderately expansive. Future development would be required to submit a soils report pursuant to SMC *Section 31-402.5 (b) – Soils Report* which would investigate the expansion potential of the underlying soils and recommend corrective action. Project construction would also be subject to the 2018 International Building Code (IBC) design standards, specifically *Section 1808.6 Design for expansive soils*, and the CBC. Compliance with the SMC, IBC, and CBC would ensure a less than significant impact.

*e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**No Impact.** The Project site is within city limits and is currently connected to city utility services. Future development would also connect to City wastewater services. Thus, no permanent septic tanks or alternative wastewater disposal systems would be installed, and no impact would occur.

*f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less than Significant Impact.** As discussed in the Cultural Resources section above, there are no known paleontological resources or unique geological features known to the city on this site. In addition, the Project site is heavily disturbed as it has been previously developed. Nevertheless, there is some possibility that a non-visible, buried resource, site. or feature may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. To further assure future development does not result in significant impacts to any potential resources, the Project shall incorporate *Mitigation Measures CUL-2* as described in Section 4.5. Therefore, if any paleontological resources or geologic features were discovered, implementation of *CUL-2* would reduce the Project's impact to less than significant.

### *4.7.3 Mitigation Measures*

None required.

## 4.8 GREENHOUSE GAS EMISSIONS

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | |
| *b)* | Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | X | | |

### *4.8.1 Environmental Setting*

In assessing the significance of impacts from GHG emissions, Section 15064.4(b) of the CEQA Guidelines states that a lead agency may consider the following:

- *The extent to which the 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 greenhouse gas emissions.*

The California Air Resources Board (CARB) 2022 Climate Change Scoping Plan, guidance from the MBUAPCD, Monterey County Municipal Climate Action Plan, and Metropolitan Transportation Plan/Sustainable Communities Strategy are discussed below and are utilized as thresholds of significance.

#### *2022 Climate Change Scoping Plan*

The CARB 2022 Climate Change Scoping Plan is the adopted statewide plan for reduction and mitigation of GHGs to implement Assembly Bill (AB) 1279. AB 1279 was issued on August 12, 2022 to require California to achieve "net zero greenhouse gas emissions" as soon as possible and to further reduce anthropogenic GHG emissions thereafter. It sets a statewide goal to reduce emissions 85% below 1990 levels no later than 2045.

Consequently, the Scoping Plan involves several measures for cost-effective reduction of GHG emissions, including continuing existing programs such as Renewable Portfolio Standard, Advanced Clean Cars, Low Carbon Fuel Standard, etc., and achieving new mandates to decarbonize several sectors. Along with reducing emissions, environmental justice policies are included to address the ongoing air quality disparities.

Appendix D of the 2022 Scoping Plan include recommendations to build momentum for local government actions to align with State goals, including through CEQA review. The Appendix outlines the priority GHG reduction

strategies for local governments, including transportation electrification, VMT reduction, and building decarbonization. [27]

### *2008 MBUAPCD CEQA Air Quality Guidelines*

MBUAPCD adopted CEQA thresholds of significance for air quality, including criteria pollutants. However, the guidelines do not specify a threshold for GHG emissions.

### *2013 Monterey County Municipal Climate Action Plan (MCAP)* [28]

The MCAP does not identify the threshold of significance on GHG emissions for CEQA purposes. It only identifies actions calling for local governments to complete community-wide CAPs, incorporating MCAP, and adopt for purposes of CEQA tiering.

### *2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)* [29]

The Association of Monterey Bay Area Governments (AMBAG) is the Metropolitan Planning Organization (MPO) for the Monterey Bay Area. As required by SB 375, all MPOs should develop a Sustainable Communities Strategy (SCS) to establish actions to reduce GHG emissions. The SCS identifies implementation strategies, including encouraging infill development, supporting projects along high quality transit corridors, construction of complete streets, conducting studies to identify opportunities, etc.

### *General Plan*

The City of Salinas General Plan does not include any context or policies on GHG reduction; however, it does include policies that encourage high density development and energy conservation (See Section 4.6). The City of Salinas is currently in the process of drafting a Climate Action Plan.

## *4.8.2 Impact Assessment*

***Would the project:***

a) ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

**Less than Significant Impact.** The 2023 CEQA Guidelines do not establish a quantitative threshold of significance for GHG impacts, leaving lead agencies the discretion to establish such thresholds for their respective jurisdictions. Since the MBARD does not have established GHG significance emissions thresholds and the City of Salinas does not have an adopted CAP for CEQA tiering purposes, the following analysis utilizes emissions thresholds from other air districts.

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[27] California Air Resources Board. (2022). 2022 Scoping Plan Appendix D. Accessed on March 1, 2023, https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf

[28] Monterey County. (2013). Monterey County Municipal Climate Action Plan. Accessed on March 24, 2022, https://www.co.monterey.ca.us/Home/ShowDocument?id=48122

[29] Association of Monterey Bay Area Governments. (2022). 2045 Metropolitan Transportation Plan & the Sustainable Communities Strategy. Accessed on October 25, 2022, https://www.ambag.org/plans/2045-metropolitan-transportation-plan-sustainable-communities-strategy#:~:text=AMBAG%20is%20developing%20the%202045,transportation%20plan%20every%20four%20years.

Although no specific project is currently proposed, short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEMod™ (v.2020.4.0). (See Appendix A for output files and Section 4.3 for CalEEMod Assumptions). Emissions are expressed in annual metric tons of $CO_2$ equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants.

Construction Emissions

The Sacramento Metropolitan Air Quality Management District (SMAQMD) and Bay Area Air Quality Management District (BAAQMD) have concluded that construction emissions should be assessed for impacts since they may remain in the atmosphere for years after construction is complete. The SMAQMD and BAAQMD both established quantitative significance thresholds of 1,100 MT $CO_2e$ per year for the construction phases of land use projects. As such, annual construction emissions below the 1,100 MT $CO_2e$ would have a less than significant cumulative impact on GHGs. The maximum annual construction emission of GHG associated with development of the project is estimated to be 792.3655 MT $CO_2e$ based on the CalEEMod run. This is less than the 1,100 $MTCO_2e$ threshold of the SMAQMD and BAAQMD.

Operational Emissions

Regarding the long-term operational related GHG emissions, the estimated operational emissions for buildout of the Project incorporates the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. The South Coast Air Quality Management District (SCAQMD) adopted the staff proposal for an interim GHG significance threshold of 10,000 MT CO2e per year for GHG for construction and operational emissions. The BAAQMD also adopted the 10,000 MT CO2e per year threshold. Utilizing this as the threshold, annual operational emissions below 10,000 MTCO2e would have a less than significant cumulative impact on GHGs. The annual operational GHG emissions associated with buildout of the Project is 6,404.6150 MT $CO_2e$ based on the CalEEMod run. This is less than the 10,000 MTCO2e threshold of the SCAQMD and BAAQMD.

Further, the Project would not exceed the thresholds of significance for construction or operational emissions as discussed in Section 4.3. Cumulatively, these emissions would not generate a significant contribution to global climate change over the lifetime of the proposed Project. As such, it can be determined that the Project would not occur at a scale or scope with potential to contribute substantially or cumulatively to the generation of GHG emissions and therefore the impact would be less than significant.

b) ***Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

**Less than Significant Impact with Mitigation Incorporated.** The compatibility of the Project with the 2022 Scoping Plan and MCAP, and MTP/SCS is evaluated below.

Consistency with the 2022 Climate Change Scoping Plan

Based on the evaluation shown in Table 4-8, the Project is consistent with the reduction measures identified in the 2022 Scoping Plan. The reduction measures are derived from the 2022 Scoping Plan Appendix D *Section 3.2.1 – Project Attributes for Residential and Mixed-Use Projects to Qualitatively Determine Consistency with the Scoping Plan*. As stated in the section, *"Residential and mixed-use projects that have all of the key project attributes in [Table 4-8] should accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals."*

Table 4-8 Scoping Plan Reduction Measures Consistency Analysis

| Priority Areas | Key Project Attribute | Consistency/Applicability Determination |
|---|---|---|
| Transportation Electrification | Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval. | **Consistent with Mitigation.** New development projects are currently subject to residential and/or non-residential mandatory measures as specified in Chapter 4 and 5 of the 2022 CalGreen Code. However, the mandatory standards for EV charging infrastructure is less than the voluntary standards as described in Appendix A4 of the 2022 CalGreen Code. Thus, the Project incorporates Mitigation Measure GHG-1 to ensure that future development resulting from the Project would be subject to EV charging infrastructure per the CalGreen Residential Voluntary Standards Code. As such, the Project would be consistent with mitigation incorporated. |
| VMT Reduction | Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer) | **Consistent.** The Project is on an infill site that is currently developed with commercial uses. In addition, it is currently served by existing utilities, street improvements, sidewalks, and six (6) bus stops within 1,000 feet of the site. |
| | Does not result in the loss or conversion of natural and working lands. | **Consistent.** Natural and working lands include forests, rangelands, urban green spaces, wetlands, and farms. The Project is currently developed with urbanized uses and does not include forests, rangelands, green spaces, wetlands, or farms. As such, redevelopment of the Project site will not result in the loss or conversion of natural and working lands. |
| | • *Consists of transit-supportive densities (minimum of 20 residential*<br>• *dwelling units per acre), or*<br>• *Is in proximity to existing transit stops (within a half mile), or*<br>• *Satisfies more detailed and stringent criteria specified in the region's SCS.* | **Consistent.** While no development is proposed at this time, the Project aims to increase residential density. According to Project assumptions as described in Section 2.9, the Project could be built to a maximum of 42.7 dwelling units per acre. In addition, there are six (6) bus stops within 1,000 feet of the Project site , providing proximity to existing transit. |
| | Reduces parking requirements by:<br>• *Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking* | **Consistent with Mitigation.** The City of Salinas does not currently have a maximum allowable parking ratio. As such, *Mitigation Measure GHG-2* is incorporated to ensure that the future developments as a result of Project implementation have a maximum allowable |

| | | |
|---|---|---|
| | *spaces to residential units or square feet); or*<br>• *Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or*<br>• *For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.* | parking ratio or that parking costs be unbundled from costs to rent/own a residential unit. |
| | At least 20 percent of units included are affordable to lower-income residents. [30] | **Consistent.** The City of Salinas has an inclusionary zoning ordinance that requires that residential projects include some level of affordable housing. Specifically, SMC Chapter 17 Article III – Inclusionary Housing requires inclusionary units be built as part of residential development for both for-sale and rental units. The ordinance requires a choice of 20%, 15%, and 12% of affordability for a mix of income, including workforce income, moderate income, lower income, and very low income households. |
| | Results in no net loss of existing affordable units. | **Consistent.** The Project site is currently developed with commercial uses. There are no existing residential units on site. As such, future redevelopment of the Project site would not result in loss of existing affordable units. |
| **Building Decarbonization** | Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking. | **Consistent.** Future development on the site will comply with applicable building codes at the time of development. Current state building code requires new residential development to be all electric. |

According to the analysis in Table 4-8, mitigation measures are incorporated to ensure that future development that occurs as a result of the Project would comply with the 2022 Scoping Plan. With mitigation measures incorporated, future development resulting from the implementation of the Project incorporates all of the key project attributes that are aligned with the State's priority GHG reduction strategies for local climate action. Per the 2022 Scoping Plan, this is considered to be consistent with the Scoping Plan and therefore, would result in a less than significant GHG impact under CEQA.

***Mitigation Measure GHG-1:*** *Future development shall install EV charging infrastructure according to the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.*

[30] Newmark, G. and Haas, P. (2015). Income, Location Efficiency, and VMT: Affordable Housing as a Climate Strategy. Accessed March 2, 2023, https://chpc.net/wp-content/uploads/2016/05/CNT-Working-Paper-revised-2015-12-18.pdf

***Mitigation Measure GHG-2:*** *Future development shall provide no more parking spaces than the off-street parking requirements established in the City of Salinas Municipal Code. Alternatively, multi-family residential development can choose to unbundle parking costs with costs to rent or own a residential unit instead of meeting the maximum off-parking requirement.*

Policies and actions established in the MCAP and RTP/SCS do not directly apply to development projects. For instance, the MCAP calls for local governments to complete community-wide CAPs. The City of Salinas is currently developing a Climate Action Plan. The RTP/SCS identifies strategies related to land use patterns, transportation planning, research, and education that promote the reduction of GHG emissions in local jurisdictions. The Project complies with SCS implementation strategies, including encouraging infill housing and promoting increased development in a high-quality transit corridor.

In conclusion, the Project contains features that would reduce GHG emissions in compliance with California Air Resources Board (CARB) 2017 Climate Change Scoping Plan, goals from the MCAP, and implementation strategies from the RTP/SCS. As such, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and therefore the impact would be less than significant.

### *4.8.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Greenhouse Gas Emissions related Mitigation Measures GHG-1 and GHG-2 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.9 HAZARDS AND HAZARDOUS MATERIAL

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | X | |
| *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? | | | X | |
| *c)* | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| *d)* | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | X | | |
| *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? | | | | X |
| *f)* | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | X | |
| *g)* | Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | X | |

### *4.9.1 Environmental Setting*

For the purposes of this section, the term “hazardous materials” refers to "injurious substances," which include flammable liquids and gases, poisons, corrosives, explosives, oxidizers, radioactive materials, and medical supplies and waste. These materials are either generated or used in various commercial and industrial activities. Hazardous

wastes are injurious substances that have been or will be disposed of. Potential hazards arise from the transport of hazardous materials, including leakage and accidents involving transporting vehicles. There also are hazards associated with the use and storage of these materials and waste. Hazardous materials are grouped into the following four categories based on their properties:

- Toxic: causes human health effect
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials
- Reactive: causes explosions or generates toxic gases

"Hazardous wastes" are defined in California Health and Safety Code *Section 25141(b)* as wastes that: "…because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause or significantly contribute to an increase in mortality or an increase in serious illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed." A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous waste generators may include industries, businesses, public and private institutions, and households. Federal, state, and local agencies maintain comprehensive databases that identify the location of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require risk management plans to protect surrounding land uses. The release of hazardous materials would be subject to existing federal, State, and local regulations and is similar to the transport, use, and disposal of hazard materials.

### *Regulatory Setting*

The California Environmental Protection Agency (CalEPA) was established in 1991 to protect the environment. CalEPA oversees the Unified Program through Certified Unified Program Agencies (CUPAs), which consolidates six (6) environmental programs to ensure the handling of hazardous waste and materials in California. The local CUPA in Monterey County, Hazardous Materials Management Services (HMMS), is responsible for administering the following six (6) CUPA programs: [31]

- *Hazardous Materials Business Plan Requirements*
- *Hazardous Waste Generator Requirements*
- *California Accidental Release Prevention Program (CalARP)*
- *Aboveground Storage Petroleum Storage*

[31] County of Monterey. CUPA Programs. Accessed on November 21, 2022, https://www.co.monterey.ca.us/government/departments-a-h/health/environmental-health/hazardous-materials-management/cupa-programs

- *Underground Storage of Hazardous Substances*
- *Uniform Fire Code Hazardous Materials Management Plan*

The Department of Toxic Substances Control (DTSC) is another agency in California that regulates hazardous waste, conducts inspections, provide emergency response for hazardous materials-related emergencies, protect water resources from contamination, removing wastes, etc. DTSC acts under the authority of Resource Conservation and Recovery Act (RCRA) and California Health and Safety Code. The DTSC implements California Code of Regulations (CCR) Title 22 Division 4.5 to manage hazardous waste. Government Code Section 65962.5 requires that DTSC shall compile and update at least annually a list of:

> *(1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code ("HSC").*
>
> *(2) All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.*
>
> *(3) All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.*
>
> *(4) All sites listed pursuant to Section 25356 of the Health and Safety Code.*
>
> *(5) All sites included in the Abandoned Site Assessment Program.*

This list of hazardous waste sites in California, referred to as the Cortese List, is then distributed to each city and county. According to the CCR Title 22, soils excavated from a site containing hazardous materials is considered hazardous waste, and remediation actions should be performed accordingly. Cleanup requirements are determined case-by-case by the jurisdiction.

### *Record Search*

The United States Environmental Protection Agency (EPA) Superfund National Priorities List (NPL)[32], California Department of Toxic Substance Control's EnviroStor database[33] , and the State Water Resources Control Board's GeoTracker database [34] include hazardous release and contamination sites. A search of each database was conducted on March 24, 2022. The searches revealed one (1) open and three (3) completed - case closed hazardous material release sites on the Project site (see Figure 4-10). The one (1) site that is open is eligible for closure and is a LUST cleanup site at 250 Rianda Circle, Salinas, CA 93901. Corrective action at the site has been completed and any remaining petroleum constituents from the release are considered to be low threat to Human Health, Safety, and the Environment. The case in GeoTracker is going through the process of being closed.

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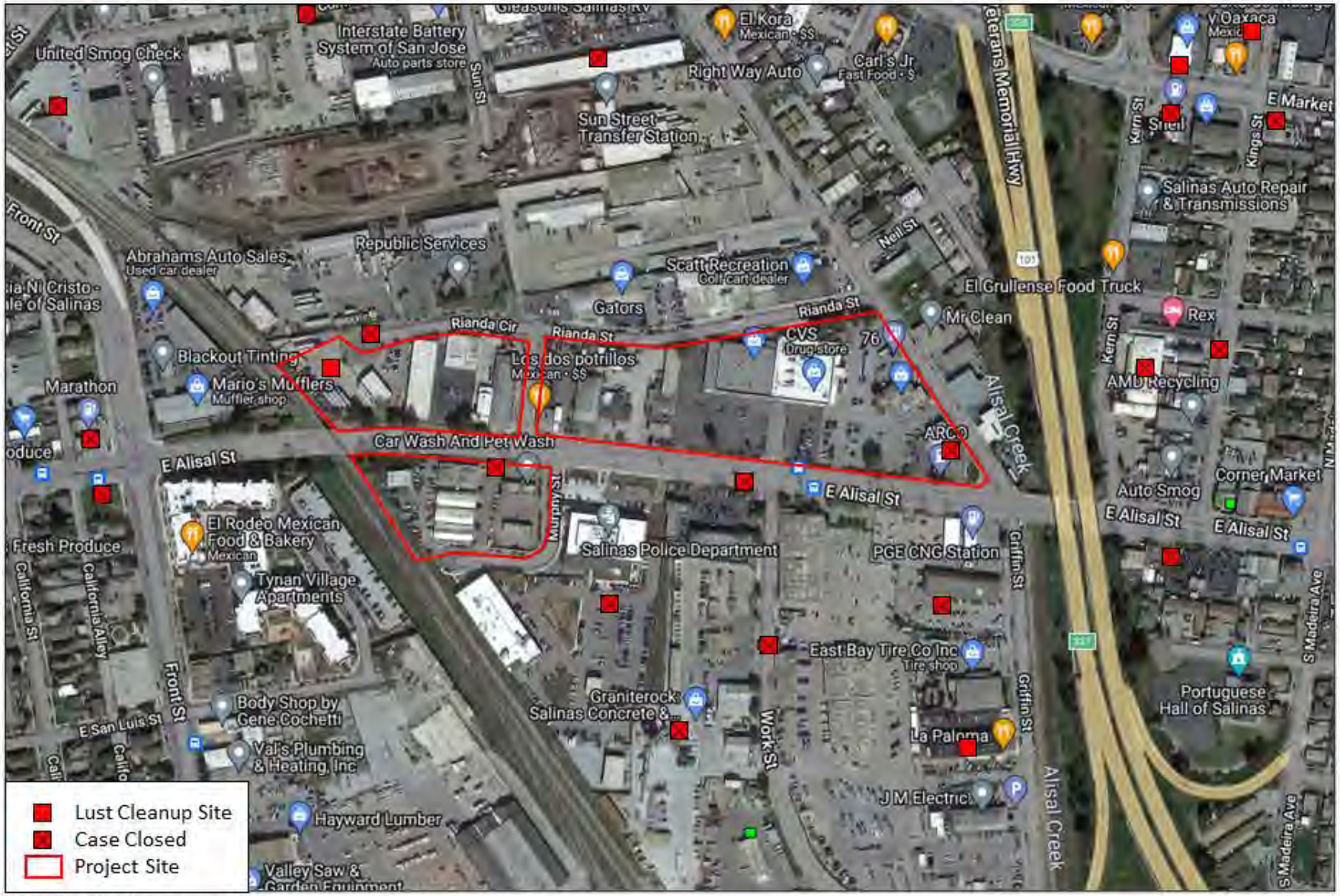
[32] United States Environmental Protection Agency. Superfund National Priorities List. Accessed October 26, 2022 https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1

[33] California Department of Toxic Substances Control. Envirostor. Accessed October 26, 2022, https://www.envirostor.dtsc.ca.gov/public/

[34] California State Water Resources Control Board. GeoTracker. Accessed October 26, 2022, https://geotracker.waterboards.ca.gov/




CITY OF SALINAS – General Plan Amendment & Rezone: Alisal Marketplace

Created 12/22/2022

Figure 4-10 Hazardous Sites

### *4.9.2 Impact Assessment*

*Would the project:*

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less than Significant Impact. Although no development is proposed, future development of the Project site resulting from Project implementation would result in mixed-use development that would include residential and commercial uses. Uses common to mixed-use development typically do not include production or services that would require the routine transport, use, or disposal of hazardous materials. Further, operations that are likely to routinely transport, use, or dispose of hazardous materials would not otherwise be permitted in the proposed MX zone district (i.e., industrial uses, warehousing and storage, and vehicle sales, services, repair, storage, and washing). While demolition and construction activities may include the temporary transport, storage, use or disposal of potentially hazardous materials (e.g., fuels, lubricating fluids, cleaners, solvents, etc.), such activities would be regulated by the Department of Toxic Substances Control through the California Hazardous Waste Control Law and Hazardous Waste Control Regulations as well as by MBARD through Rule 424 (i.e., asbestos-containing materials). Compliance would ensure that construction-related impacts would be less than significant. For these reasons, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and a less than significant impact would occur.

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?*

Less than Significant Impact. As described under criterion a), the Project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, the Project would not 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. Therefore, a less than significant impact would occur.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

No Impact. As described under criteria a) and b), the Project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and would not create upset and accident conditions involving the release of hazardous materials into the environment. Further there are no schools within one-quarter mile of the Project site. Therefore, no impact would occur.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Less than Significant Impact with Mitigation Incorporated. According to NPL, EnviroStor, and GeoTracker, the Project site includes one (1) hazardous materials site that is considered an open case and three (3) completed "case closed" hazardous material release sites. According to GeoTracker, corrective action at the site with an open case has been determined to be completed and any remaining petroleum constituents from the release are low threat to health, safety, and the environment. However, to further ensure that residual contamination does not exist from

any of the open or closed cases, thereby creating a significant hazard to the public or environment, the Project shall incorporate ***Mitigation Measure HAZ-1***. Incorporation of ***Mitigation Measure HAZ-1*** would reduce impacts to less than significant with mitigation incorporated.

***Mitigation Measure HAZ-1:*** *Prior to the obtaining grading permits or starting other ground disturbing work for each individual parcel, the City shall hire a qualified environmental professional to conduct a Phase I environmental assessment (ESA), consistent with the American Society for Testing Materials standards (ASTM E1527). The Phase I ESA shall evaluate the likelihood that hazardous chemicals are present and whether soil sampling is necessary. If the Phase I ESA indicates that contamination is unlikely, no further mitigation is necessary other than any recommendations identified in the Phase I ESA (such as stopping work if stained soil is encountered). If the Phase I ESA indicates that additional soil sampling or other further evaluation is necessary, the City and/or future developer shall hire a qualified environmental professional to conduct a Phase II ESA to determine the presence and extent of contamination. If the results indicate that contamination exists at levels above regulatory action standards, then the site shall be remediated in accordance with recommendations made by applicable regulatory agencies, including RWQCB and DTSC. The agencies involved shall depend on the type and extent of contamination. If remediation is necessary, the City shall hire a qualified environmental professional prior to obtaining grading permits or ground disturbance to prepare a work plan that identifies necessary remediation activities, including excavation and removal of on-site contaminated soils, appropriate dust control measures, and redistribution of clean fill material on the project site. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil removed from the site. The plan shall also identify when and where soil disturbing construction activities may safely commence. The City shall review and approve the work plan prior to issuance of demolition or grading permits. The City shall require individual projects to comply with the work plan as a condition of approval.*

*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 nearest public airport or public use airport is the Salinas Municipal Airport located approximately 1.8 miles southeast of the Project site. The airport occupies 763 acres with two (2) runways, measuring 4,825 feet long and 150 feet wide and 6,004 feet long and 150 feet wide. The air traffic control tower is in operation 12 hours a day, seven (7) days a week. The applicable airport land use plan is the 1982 Salinas Municipal Airport Land Use Plan (Plan) adopted by the Monterey County Airport Land Use Commission on May 17, 1982.[35] According to the Plan, the Project site is not located within the Airport Influence Area (AIA) or Runway Protection Zone (RPZ) of the Salinas Municipal Airport. Since the Project site is not located within the AIA and RPZ, the Project would not result in a safety hazard for people residing or working in the Project Area and no impact would occur.

[35] Monterey County Airport Land Use Commission. (1982). Salinas Municipal Airport Land Use Plan. Accessed on October 26, 2022, https://www.cityofsalinas.org/sites/default/files/departments_files/public_works_files/airport_files/salinas_clup_reduced_size_adopted_05-17-1982_0.pdf

*f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less than Significant Impact. The Project site is currently fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping. There are approximately 23 existing structures on the site that predominately consist of commercial and industrial uses. Street frontage includes East Alisal Street, a four (4)-lane east-west major arterial in addition to several two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. Therefore, future development of the Project site would constitute redevelopment that would be served by the existing roads and infrastructure. Construction may require lane closures, but access would be maintained through standard traffic control as required by an encroachment permit. Furthermore, future development of the Project site would be reviewed and conditioned to compliance with applicable standards for on-site emergency access including turn radii and fire access. For these reasons, it can be determined that Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

*g) 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 in an urbanized area surrounded by urban uses. In addition, the site is not identified by Cal Fire to be in a Moderate, High, or Very High Fire Hazard Severity Zone (FHSZ). Future development of the site would result in the construction of structures and installation of infrastructure that would be reviewed and conditioned by the City for compliance with all applicable standards, specifications, and codes. In addition, any structure to be occupied by humans would be required to be constructed in adherence to the Wildland Urban Interface Codes and Standards of the CBC Chapter 7A. Compliance with such regulations would ensure that the Project meets standards to help prevent loss, injury, or death involving wildland fires. For these reasons, the Project would have a less than significant impact.

### *4.9.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Hazards and Hazardous Material related mitigation measure HAZ-1 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.10 HYDROLOGY AND WATER QUALITY

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | X | |
| *b)* | Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | X | | |
| *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: | | | | |
| | *i. Result in a substantial erosion or siltation on- or off-site;* | | | X | |
| | *ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:* | | | X | |
| | *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* | | | X | |
| | *iv. Impede or redirect flood flows?* | | | X | |
| *d)* | In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | X | |
| *e)* | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | X | |

### *4.10.1 Environmental Setting*

The Project site is within city limits and currently connected to the city's water and stormwater services. The city's water and stormwater services are described as follows.

#### *Water*

Water is provided by two (2) private water companies: Alco Water Service and California Water Service Company (Cal Water). The City of Salinas is served by the Salinas District (District), which also includes communities of Las Lomas, Oak Hills, Salinas Hills, and Country Meadows. Water supply comes from local groundwater. According to the 2020 Urban Water Management Plan (UWMP), the District has 38 wells, 23 storage tanks, and over 300 miles of pipeline, delivering approximately 14 million gallons of local groundwater daily. [36] The Project site is served by the Salinas Public Water System (PWS), see Figure 4-11.

The city's long-term water resource planning for existing and future demand is addressed in the UWMP. According to the UWMP, the District has sufficient production capacity and groundwater supply to meet most demands in the projected future during dry year and multiple dry year conditions. Minor shortfalls (2%) are anticipated in 2040 under single dry year and multiple dry year conditions in the Salinas PWS and will increase slightly in 2045. However, the UWMP expects that shortfalls are alleviated through implementation of the District's Water Shortage Contingency Plan (WSCP) and other supply augmentation measures. According to the UWMP, water quality is not expected to impact water supplies through 2045.

A Water Supply Assessment (WSA) was not prepared for the proposed project because no development is currently proposed for the project site. Future development, at max residential buildout, could result in development that could trigger the requirements for a WSA. The thresholds are provided below.

Under California Water Code, the following types of developments require a WSA:

*(1) A proposed residential development of more than 500 dwelling units.*
*(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.*
*(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.*
*(4) A proposed hotel or motel, or both, having more than 500 rooms.*
*(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.*
*(6) A mixed-use project that includes one or more of the projects specified in this subdivision.*
*(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.*

[36] California Water Service. (2021). 2020 Urban Water Management Plan. Accessed on October 26, 2022, https://www.calwater.com/docs/uwmp2020/SLN_2020_UWMP_FINAL.pdf

### *Stormwater*

The City of Salinas Urban Watershed Management Program is an integrated effort of the public and public agencies with the goal to protect water resources by reducing or eliminating contaminants from entering local creeks. The City of Salinas Public Works Departments prepared the Stormwater Standard Plans (SWSP) based on Low Impact Development Initiative (LIDI) Standard Details and City of Portland Stormwater Management Manual Typical Details. In conjunction with the City of Salinas Stormwater Development Standards (SWDS) and the City of Salinas Standard Specifications, Design Standards, and Standard Plans, all development projects are required to comply with these provisions to filter stormwater on site and assess needs for liners, subdrains, storm drain connections, etc. [37]

[37] City of Salinas. Stormwater Program. Accessed on October 26, https://www.cityofsalinas.org/our-city-services/public-works/stormwater-program

Figure 4-11 Salinas District Location and PWS Boundaries

### *4.10.2 Impact Assessment*

*Would the project:*

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

**Less than Significant Impact.** Although no development is currently proposed, implementation of the Project would result in future residential and commercial development. If a future development on the Project site is greater than one (1) acre in size, the developer would be required to prepare a SWPPP (Section 4.7) in compliance with the General Permit for Discharges of Storm Water Associated with Construction Activity (i.e., General Permit Order No. 2009-0009-DWQ). The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in substantial soil erosion or loss of topsoil. These provisions minimize the potential for future development of the Project site to violate any waste discharge requirements or otherwise substantially degrade surface or ground water quality. Further, runoff resulting from future development would be managed in compliance with approved grading and drainage plans in addition to the City of Salinas MS4 Permit (Order No. R3-2019-0073, NPDES Permit No. CA0049981). Thus, compliance with regulations including the General Construction Permit, BMPs, approved grading and drainage plans, and MS4 Permit would reduce potential impacts related to water quality and waste discharge to less than significant levels.

b) *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 with Mitigation Incorporated.** The Project includes a GGPA and Rezone pertaining to 18 parcels that total approximately 12.1 acres. The GPA requests a land use change from Retail and General Commercial/Light Industrial to Mixed-Use and the rezone requests a zone change from CR – Commercial Retail and IGC – Industrial General Commercial to MX-Mixed Use. Although no physical development is proposed by the Project, the SMC would allow a maximum of 131,414 sf. of commercial development and 515 multi-family residential units. Future development would be served by Cal Water.

Potable water demands for the existing and proposed land use designation were estimated using water use factors from the WSA Water Factor Tool developed by Cal Water. These factors are based on the expected parameters and characteristics of the existing and proposed development. Calculated water demands are shown in Table 4-9. As shown, existing land uses utilize approximately 11.6-acre feet per year (AFY) compared to an estimated 90.9 AFY under the proposed use at maximum build out. Maximum build out would account for a less than one percent increase above Cal Water's 2020 water demand of 16,497 AFY. In addition, the increase in demand would not exceed available groundwater supplies during a normal year water supply estimate of 23,569 AFY per the UWMP. Therefore, future development of the Project site could be accommodated by existing groundwater supplies and impacts would be less than significant.

Table 4-9 Existing versus Future Potable Water Demand

| Land Use | Unit of Measurement | gpd/unit | gpd | AFY |
|---|---|---|---|---|
| Potable Water Demand of Existing Land Use | | | | |
| Commercial | 159,700 sf. | 0.065 | 10,381 | 11.6 |
| | | **total** | **10,381** | **11.6** |
| Potable Water Demand of Proposed Land Use | | | | |
| Commercial | 131,414 sf. | 0.065 | 8,542 | 81.3 |
| Multi-Family Residential | 515 du | 141 | 72,615 | 9.6 |
| | | **total** | **81,157** | **90.9** |

Furthermore, adherence to connection requirements and recommendations pursuant to the city's water conservation efforts (e.g., compliance with California Plumbing Code, efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. In particular, future development would be built accordance with all mandatory outdoor water use requirements as outlined in the applicable California Green Building Standards Code, Title 24, Part 11, Section 4.304 – Outdoor Water Use and verified through the building permit process. As a mixed-use development that would contain landscaping pursuant to SMC regulations, future development shall comply with the updated Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Chapter 2.7, Division 2), as implemented and enforced through the building permit process. Therefore, through compliance, the potential for the Project to substantially decrease groundwater supplies is limited and impacts would be less than significant.

In addition, development of the Project site would not substantially increase impervious surfaces because the site has been previously developed and paved. Redevelopment of the site would require review and approval for compliance with the city's Standard Specifications, Design Standards, and Standard Plans to filter stormwater on site and assess needs for liners, subdrains, and storm drain connections. Therefore, through compliance, the potential for the Project to interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the basin is limited and impacts would be less than significant.

Finally, although the proposed Project, would increase demand for water use on this specific site compared to the water use currently on the site, as previously discussed in Section 2.9 of this document, the overall projected citywide population would not change because of this Project. In fact, the increase in potential residential units does not constitute a significantly greater water demand because higher density, multi-family residential development generates less water use due to property features including less outdoor irrigation due to shared common areas (and as evidenced in Cal Water demand factors). Thus, if assumed population increases are redirected to higher density multi-family development rather than single-family development, the overall anticipated water demand would be less than anticipated citywide. In addition, the UWMP determined there is enough water capacity to serve the city's projected population. As discussed further in Section 4.14.2, the population and housing units generated by the proposed Project would be within the AMBAG projections for the region and city.

Overall, based on the information collected from the UWMP, the Project would not generate significantly greater water demand as to substantially decrease groundwater supplies. Additionally, adherence to connection requirements and recommendations pursuant to water conservation efforts as well as compliance with applicable

California Green Building Standards Code and MWELO would reduce water demand and reduce the potential for the Project to substantially decrease water supply. Lastly, compliance with the city's stormwater requirements as ensured through the building permit process would reduce the potential for the Project to interfere with groundwater recharge. Although the current project, which does not propose new development would result in a less than significant impacts, a future development project on the site could trigger the threshold for a WSA. In order to address this and ensure the project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such a mitigation measure has been added as follows:

***Mitigation Measure HYD-1:*** *Future Development projects on the subject site that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project are required to prepare a Water Supply Assessment.*

***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:***

***i. Result in substantial erosion or siltation on- or off-site?***

**Less than Significant Impact.** Erosion is a natural process in which soil is moved from place to place by wind or from flowing water. The effects of erosion within the Project Area can be accelerated by ground-disturbing activities associated with development. Siltation is the settling of sediment to the bed of a stream or lake which increases the turbidity of water. Turbid water can have harmful effects to aquatic life by clogging fish gills, reducing spawning habitat, and suppress aquatic vegetation growth.

Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity. The Project site is relatively flat and mostly paved due to previous development, which limits the potential for substantial soil erosion. Although no development is proposed, future development of the Project site would require typical site preparation activities such as grading and trenching which may result in the potential for short-term soil disturbance or erosion impacts. Soil disturbance during construction is largely caused by the use of water. Excessive soil erosion could cause damage to existing structures and roadways.

The likelihood of erosion occurring during construction would be reduced through site grading and surfacing, which would be subject to review and approval by the City for compliance with applicable standards. Future development of the Project site would be required to comply with SMC *Section 29-15(d) - Best Management Practices for Construction Sites*, which requires all construction to *"comply with the City of Salinas Standards to Control Excavations, Cuts, Fills, Clearing, Grading, Erosion and Sediments"* and to keep debris and dirt out of the city's storm drain system. The likelihood of erosion would be further reduced through compliance with regulations including the General Construction Permit, BMPs, approved grading and drainage plans, and MS4 Permit as described under criterion a). With these provisions in place, the impact to soil and topsoil by the Project would be considered less than significant.

***ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?***

**Less than Significant Impact.** Although no development is proposed, future development of the Project site resulting from implementation of the Project would be subject to the entitlement review and approval process through the City of Salinas. Through the entitlement review and approval process, future development would be reviewed and

conditioned for compliance with the General Construction Permit, BMPs, approved grading and drainage plans, and MS4 Permit as described under criteria a) and c)-i. Further, if onsite retention facilities are required to manage surface runoff so as not result in flooding on- or off-site, then the size and capacity of such facilities would be determined through the site design, review, and conditioning of future development. Therefore, the entitlement review and approval process conducted by the City would ensure that surface runoff is controlled in a manner which would not result in flooding on- or off-site. For this reason, a less than significant impact would occur because of the Project.

*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?*

Less than Significant Impact. Although no development is proposed, future development of the Project site resulting from implementation of the Project would be subject to the entitlement review and approval process through the City of Salinas. Through the entitlement review and approval process, future development would be reviewed and conditioned for compliance with the General Construction Permit, BMPs, approved grading and drainage plans, and MS4 Permit as described under criteria a) and c)-ii. Further, if onsite retention facilities are required to manage surface runoff so as not result in exceedance of the capacity of existing or planned stormwater drainage systems or substantial additional sources of polluted runoff. Therefore, the entitlement review and approval process conducted by the City would ensure that surface runoff is controlled in a manner which would not exceed capacity or contribute to additional sources of polluted runoff. For this reason, a less than significant impact would occur because of the Project.

*iv. Impede or redirect flood flows?*

Less than Significant Impact. Because the site is developed and paved, there are existing stormwater drainage systems including curb and gutter along the existing roadways adjacent to the Project site. Given the existing stormwater drainage systems surrounding the site, future development of the site is not expected to substantially change the topography of the site and therefore would not be expected to impede or redirect flood flows. Although no development is proposed, future development of the Project site resulting from implementation of the Project would be subject to the entitlement review and approval process through the City of Salinas. Through the entitlement review and approval process, future development would be reviewed and conditioned for compliance with the General Construction Permit, BMPs, approved grading and drainage plans, and MS4 Permit as described under criteria a) and c)-ii. Further, if onsite retention facilities are required to manage surface runoff so as not to impede or redirect flood flows. Therefore, the entitlement review and approval process conducted by the City would ensure that surface runoff is controlled in a manner which would not impede or redirect flood flows. For this reason, a less than significant impact would occur because of the Project.

*d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Less than Significant Impact. The northeastern portion of the Project site is designated as Zone AH (EL 48) on the most recent Flood Insurance Rate Map (FIRM) No. 06053C0217G dated April 2, 2009 (see Figure 4-12). The parcels within Zone AH include APNs 003-052-018, 003-052-019, 003-052-023, 003-052-032, 003-052-031, 003-052-017. Zone AH (EL 48) is considered a special flood hazard area with a one (1) percent annual chance of shallow flooding, usually in the form of a pond, with flood depths of one (1) to three (3) feet. This portion of the Project site is also within the City of Salinas Flood Zone Overlay. All new development within the Flood Overlay district shall comply

with the requirements and development regulations of SMC *Chapter 9, Article VI: Flood Damage Prevention*. Compliance with such regulations, in addition to the regulations described under criteria a) and c)-ii, would ensure that the Project would not result in flooding or the release of pollutants. Furthermore, the Project site is not in a tsunami or seiche zone (i.e., standing waves on rivers, reservoirs, ponds, and lakes), therefore the risk of inundation is 7unlikely. For these reasons, the Project would have a less than significant impact.

*e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**Less than Significant Impact.** The City of Salinas is a member agency of the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA). The Project site is within the 180/400-Foot Aquifer Subbasin and the East Side Aquifer Subbasin. The SVBGSA adopted the Groundwater Sustainability Plan (GSP) for the 180/400-Foot Aquifer Subbasin in September 2022 and the GSP for the East Side Aquifer Subbasin in January 2022.[38,39] Generally, the GSPs outline how groundwater sustainability will be achieved in 20 years and then maintained for an additional 30 years. According to the GSPs, groundwater is the primary water source for all water use sectors in the subbasins. There are existing monitoring programs for groundwater elevation, groundwater extraction, and groundwater quality carried out by the Monterey County Water Resources Agency (MCWRA) and municipal and community water purveyors in order to fulfill groundwater quality regulatory requirements. As described above, the Project would not substantially deplete groundwater resources. In addition, as mentioned above, although the proposed Project, would increase demand for water use on this specific site compared to the water use currently on the site, the overall city-wide projected population would not change because of this project. For these reasons, a less than significant impact would occur because of the Project.

### *4.10.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Hydrology and Water Quality related mitigation measure HYD-1 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

[38] Salinas Valley Basin Groundwater Sustainability Agency. (2022). Salinas Valley Groundwater Basin 180/400-Foot Aquifer Subbasin 2022 Update. Accessed on December 21, 2022, https://svbgsa.org/wp-content/uploads/2022/09/180400-2022-GSP-09292022.pdf.

[39] Salinas Valley Basin Groundwater Sustainability Agency (2022). Salinas Valley Groundwater Basin East Side Aquifer Subbasin Groundwater Sustainability Plan. Accessed on December 21, 2022, https://svbgsa.org/wp-content/uploads/2022/04/Eastside-Whole-GSP-Report-Only-20220414.pdf.

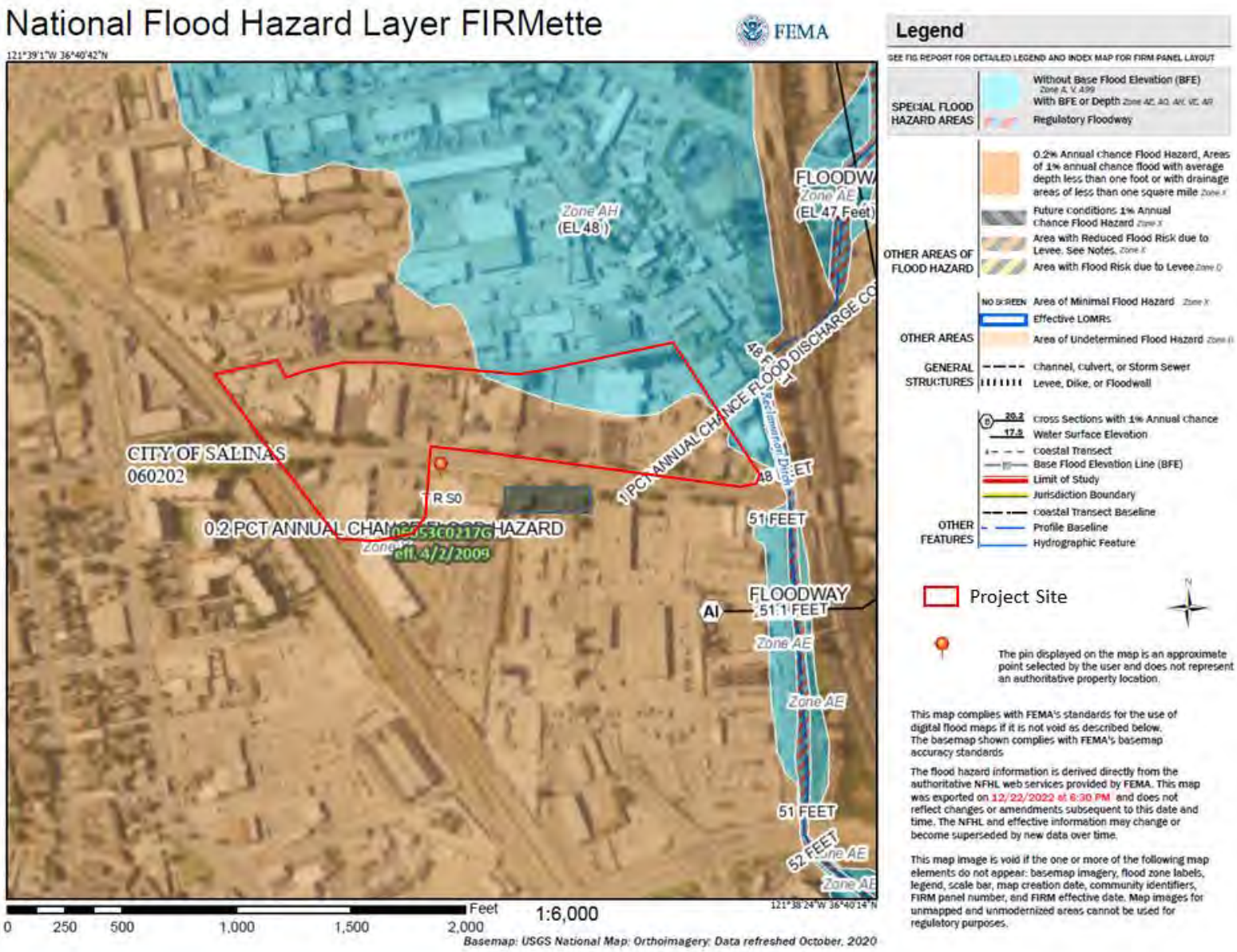



Figure 4-12 Flood Zone Map

## 4.11 LAND USE PLANNING

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Physically divide an established community? | | | X | |
| *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? | | | X | |

### *4.11.1 Environmental Setting*

The Project site is currently fully developed and is within Salinas city limits.

### *4.11.2 Impact Assessment*

*Would the project:*

*a) Physically divide an established community?*

Less than Significant Impact. Typically, physical division of an established community would occur if a project introduced new incompatible uses inconsistent with the planned or existing land uses or created a physical barrier that impeded access within the community. Typical examples of physical barriers include the introduction of new, intersecting roadways, roadway closures, and construction of new major utility infrastructure (e.g., transmission lines, storm channels, etc.).

*Surrounding Land Uses*

This Project is funded by SB 2 grant funding for the purpose of providing additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. Currently, the site is occupied by mostly light-industrial uses and big-box retail buildings collectively identified as "Alisal Marketplace." A 2010 proposal envisioned a transformation of Alisal Marketplace into a new mixed-use neighborhood integrating housing and services with public open space and educational and civic buildings, including a new police station that was ultimately built in 2020. The City considers the Project site to have significant redevelopment potential and proposes to change the land use designation and zone district to facilitate future mixed-use development. Implementation of the Project would thereby facilitate future development in line with the envisioned transformation of Alisal Marketplace.

*Circulation System*

No new streets are proposed that would result in a physical barrier. Street frontage includes East Alisal Street, a four (4)-lane east-west major arterial in addition to several two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. Four (4) to five (5)-foot sidewalks are on both sides of the roadways. There are two (2) controlled crosswalks at East Alisal/Work Street and East Alisal/Griffith Street. A segment of Union Pacific Railroad is located adjacent to the Project site to the west. There is one (1) bus stop adjacent to the site

("East Alisal/Work" Stop ID: 3467) on East Alisal Street and Work Street for Route 41 – Salinas-Alisal-Northridge operated by the Monterey-Salinas Transit (MST) with service every 15 minutes.

While no development is proposed, implementation of the Project would result in future development of the Project site with commercial and residential uses. Future development would be accessible by the existing circulation system, including existing pedestrian, bicycle, and transit systems, and would not require the development of new roadways or permanent roadway closures.

*Utility Infrastructure*

No new major utility infrastructure is proposed that would result in a physical barrier. Since the Project site is within the city limits, future development resulting from Project implementation would be required to connect to the city's water, sewer, stormwater, and wastewater services. Natural gas, electricity, and telecommunications are provided by private companies. Utility systems are described and analyzed in Section 4.10 and Section 4.15. Based on the analysis, implementation of the Project would not result in the construction of new, major utility infrastructure.

Overall, the Project would not result in the physical separation of the established community. For these reasons, a less than significant impact would occur because of the Project.

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?*

Less than Significant Impact. Generally, policy conflicts are environmental impacts when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this document under specific topical sections, such as Biological Resources, Cultural Resources, and Tribal Cultural Resources. The Project includes a General Plan Amendment and Rezone to provide additional opportunities for mixed-use development. Although no development is proposed, future development of the Project site would result in residential and commercial uses. A discussion of land use policies that are applicable to the Project are included in Table 4-10. As discussed below, the Project is generally consistent with the proposed General Plan land use designation of Mixed Use. Specifically, the Project helps the City achieve *Goal LU-1: Develop a balanced land use pattern that provides a wide range of jobs, housing, shopping, services, and recreation* and *Goal CD-3: Create a community that promotes a pedestrian friendly, livable environment.*

Table 4-10 Discussion on Land Use Policies in the General Plan for Mixed Use Development

| General Plan Policy | Project Consistency |
|---|---|
| *Policy LU-1.1: Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community.* | Consistent. The proposed land use and zone district change would diversify the types of land uses permitted on the Project site, including the provision of housing, jobs, and public facilities which would otherwise not be permitted under the current land use and zoning designation. Implementation of the Project would thereby facilitate a greater balance of land uses. |
| *Policy LU-1.2: Provide a plan for land uses that includes the capacity to accommodate growth projected for 2020 and beyond.* | Consistent. As described under Section 4.3 and Section 4.14, the City of Salinas and County of Monterey are expected to experience population growth. In addition, the city's RHNA |

| | |
|---|---|
| | indicates a need for an additional 2,229 housing units. The Project would introduce additional opportunities for housing and mixed-use development that would help the city meet the projected population growth and demand for housing units. Therefore, implementation of the Project would increase the city's capacity to accommodate growth projected for the next decade. |
| ***Policy LU-1.3:*** *Make provision in residential areas for institutional uses that are needed near homes or which benefit from a residential environment, including places of religious assembly, day-care homes, homes for physically or developmentally disabled persons, and care facilities in accordance with the provisions of State law.* | **Consistent.** The Project proposes a land use and zoning change that would allow for future mixed-use development consisting of commercial and residential uses. Under the proposed planned land use designation and zone district, institutional uses including places of religious assembly, day-care homes, homes for physically or developmentally disabled persons, and care facilities would be permitted. Therefore, Project implementation would allow for institutional uses near homes. |
| ***Policy LU-1.4:*** *Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, development should: Provide a balanced mix of housing, workplaces, shopping, recreational opportunities, and institutional uses, including mixed-use structures (combined residential and nonresidential uses), that help to reduce vehicular trips.* | **Consistent.** The proposed land use and zone change would help the city achieve a mix of uses, including housing, workplaces, shopping, recreational opportunities, and institutional uses. Project implementation would facilitate the future development of mixed-use structures on a site with existing pedestrian, bicycle, and transit infrastructure. Therefore, Project implementation would introduce traditional neighborhood development characteristics that help to reduce vehicular trips. |
| ***Policy CD-3.4:*** *Actively encourage mixed-use development in order to provide a greater spectrum of housing near businesses, alternative modes of transportation and other activity areas.* | **Consistent.** The Project proposes a land use and zoning change that would allow for future mixed-use development in an area with existing pedestrian, bicycle, and transit infrastructure. Therefore, Project implementation would encourage mixed-use development including commercial and residential uses near alternative modes of transportation. |

Further, through the entitlement process, future development would be reviewed for compliance with applicable regulations inclusive of those adopted for the purpose of avoiding or mitigating environmental effects. Overall, the entitlement process would ensure that the Project complies with the General Plan, SMC, and any other applicable policies and regulations. As such, a less than significant impact would occur.

### *4.11.3 Mitigation Measures*

None required.

## 4.12 MINERAL RESOURCES

| Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *a)* 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? | | | | X |
| *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? | | | | X |

### *4.12.1 Environmental Setting*

For the purposes of CEQA, mineral resources are land areas or deposits deemed significant by the California Department of Conservation (DOC). Mineral resources include oil, natural gas, and metallic and nonmetallic deposits, including aggregate resources. The California Geological Survey (CGS) classifies and designates areas within California that contain or potentially contain significant mineral resources. Lands are classified into Aggregate and Mineral Resource Zones (MRZs), which identify known or inferred significant mineral resources. According to the California Department of Conservation, CGS's Surface Mining and Reclamation Act (SMARA) Mineral Lands Classification (MLC) data portal, the Project site is in the MRZ-1 zone, indicating little likelihood for the presence of resources. [40] In addition, the City of Salinas, inclusive of the Project site, is not within a CalGEM-recognized oilfield and there are no oil and gas wells on-site.

### *4.12.2 Impact Assessment*

*Would the project:*

*a) 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?*

No Impact. The Project site is not located in an area designated for mineral resource preservation or recovery. Therefore, the Project would not 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. Therefore, no impact would occur as a result of the Project.

*b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. As described above, the Project site is not located in an area designated for mineral resource preservation or recovery and as a result, the Project would not 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. Further, the site is not delineated in

[40] California Department of Conservation. (2009). Mineral Lands Classification. Accessed on October 26, 2022, https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc

the General Plan, a Specific Plan, or other land use plan as a locally important mineral resource recovery site, thus it would not result in the loss of availability of a locally important mineral resource. Therefore, no impact would occur as a result of the Project.

### *4.12.3 Mitigation Measures*

None required.

## 4.13 NOISE

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *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? | | | X | |
| *b)* | Generation of excessive groundborne vibration or groundborne noise levels? | | X | | |
| *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? | | | X | |

### *4.13.1 Environmental Setting*

An Acoustical Analysis of the Project was conducted on February 28, 2023, by WJV Acoustics, Inc. (WJVA). The full report is provided in Appendix E. A summary of the Acoustical Analysis is provided below. Overall, the Acoustical Analysis concludes that future development of the Project site would decrease traffic volumes (and potentially decrease overall noise exposure levels) in the vicinity of the Project site. However, residential development could potentially be exposed to exterior and interior noise levels that exceed the City of Salinas noise standards for residential land uses. Additionally, non-residential land uses associated with future development could result in compatibility concerns with both existing and proposed uses in the vicinity of the Project site. When site-specific uses are proposed, site-specific acoustical analyses may be required if there are potential noise impacts at existing and proposed noise-sensitive land uses. However, because the Project does not propose development, the Project itself would not specifically be expected to result in any significant noise impacts to existing noise-sensitive receptors.

#### *General Plan*

The Salinas General Plan Noise Element outline policies to address negative effects of noise by establishing programs and policies to reduce excessive noise and limit the community's exposure to loud noise. These policies are related to land use planning (Goal N-1), transportation-related noise (Goal N-2), and non-transportation related noise (Goal N-3). In particular, policies in the General Plan that are applicable to the Project include:

***Goal N-1:*** *Minimize the adverse effects of noise through proper land use planning*

> ***Policy N-1.1:*** *Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards and the Noise Contours Map as a guide for future planning and development decisions.*
>
> ***Policy N-1.2:*** *Require the inclusion of noise-reducing design features in development and reuse/revitalization projects to address the impact of noise on residential development.*
>
> ***Policy N-1.4:*** *Ensure proposed development meets Title 24 Noise Insulation Standards for construction.*

***Goal N-2:*** *Minimize transportation-related noise impacts*

> ***Policy N-2.1:*** *Ensure noise impacts generated by vehicular sources are minimized through the use of noise control measures (e.g., earthen berms, landscaped walls, lowered streets).*

***Goal N-3:*** *Minimize non-transportation related noise impacts*

> ***Policy N-3.1:*** *Enforce the City of Salinas Noise Ordinance to ensure stationary noise sources and noise emanating from construction activities, private developments/residences and special events are minimized.*

The General Plan also addresses noise standards and land use compatibility. To ensure that noise producers do not adversely affect sensitive receptors, the City uses land use compatibility standards when planning and making development decisions. Table N-2 of the General Plan (reproduced as Table 4-11 below) summarizes the City noise standards for various types of land uses. The standards represent the maximum acceptable noise level as measured at the property boundary, which is used to determine noise impacts.

Table 4-11 Exterior Noise Standards (General Plan Table N-2)

| Designation/District of Property Receiving Noise | Maximum Noise Level, Ldn or CNEL, dBA |
|---|---|
| Agricultural | 70 |
| Residential | 60 |
| Commercial | 65 |
| Industrial | 70 |
| Public and Semipublic | 70 |

***Source:*** *City of Salinas General Plan, Noise Element, Table N-2 Exterior Noise Standards*

These noise standards are the basis for development of the land use compatibility guidelines presented in Table N-3 of the General Plan (i.e., the Noise/Land Use Compatibility Matrix) (reproduced as Table 4-12 below). If the noise level of a project falls within Zone A or Zone B as identified in the Noise/Land Use Compatibility Matrix, then the project is considered compatible with the noise environment. Zone A implies that no mitigation will be needed. Zone B implies that minor mitigation may be required to meet the city's and Title 24 noise standards. All development project proponents are required to demonstrate that the noise standards will be met prior to human occupation of a building.

The General Plan identifies and projects noise contours and impact areas. Figure N-1 of the General Plan (reproduced as Figure 4-13 below) shows future noise contours and impact areas. The noise contours are used as a guide for land use and development decisions. Contours of 60 dBA or greater define noise impacted areas. When noise sensitive land uses are proposed within these contours, an acoustical analysis must be prepared. For a project to be approved, the analysis must demonstrate that the project is designed to attenuate the noise to meet the city

noise standards identified in Table N-2 (Table 4-11 reproduced above). If a project is not designed to meet the noise standards, mitigation measures should be recommended in the analysis. If the analysis demonstrates that the noise standards can be met with implementation of mitigation measures, the project can be approved with the mitigation measures, which shall be required as conditions of project approval. The proposed Project site is located in a noise contour and impact area greater than 60 dBA.

Lastly, the General Plan incorporates California Noise Insulation Standards (Title 24) which establishes an interior noise standard of 45 dBA for residential space (CNEL or Ldn). For residential structures to be located within noise contours of 60 dBA or greater from freeways, major streets, thoroughfares, rail lines, rapid transit lines, or industrial noise sources, acoustical studies must be prepared. Studies must demonstrate that the building is designed to reduce interior noise to 45 dBA or lower.

Table 4-12 Noise/ Land Use Compatibility Matrix

| Land Use | Community Noise Exposure (Ldn or CNEL) | | | |
|---|---|---|---|---|
| | Zone A Normally Acceptable | Zone B Conditionally Acceptable | Zone C Normally Unacceptable | Zone D Clearly Unacceptable |
| Residential | < 60 | 60 - 70 | 70 - 75 | > 75 |
| Transient Lodging – Motel, Hotel | < 60 | 60 - 75 | 75 - 80 | > 80 |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | < 60 | 60 - 70 | 70 - 80 | > 80 |
| Auditoriums, Concert Halls, Amphitheaters | - | < 70 | - | > 70 |
| Sports Arena, Outdoor Spectator Sports | - | < 75 | - | > 75 |
| Playground, Parks | < 70 | - | 70 - 75 | > 75 |
| Golf Course, Riding Stables, Water Recreation, Cemeteries | < 70 | - | 70 – 80 | > 80 |
| Office Buildings, Business Commercial, and Professional | < 65 | 60 - 75 | > 75 | - |
| Industrial, Manufacturing, Utilities, Agriculture | < 70 | 70 - 80 | > 80 | - |

***Source:*** *City of Salinas General Plan, Modified by CBA from 1998 State of California General Plan Guidelines*
*Zone A - Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.*
*ZONE B - Conditionally Acceptable: New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.*
*Zone C- Normally Unacceptable: New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.*
*ZONE D- Clearly Unacceptable: New construction or development clearly should not be undertaken.*

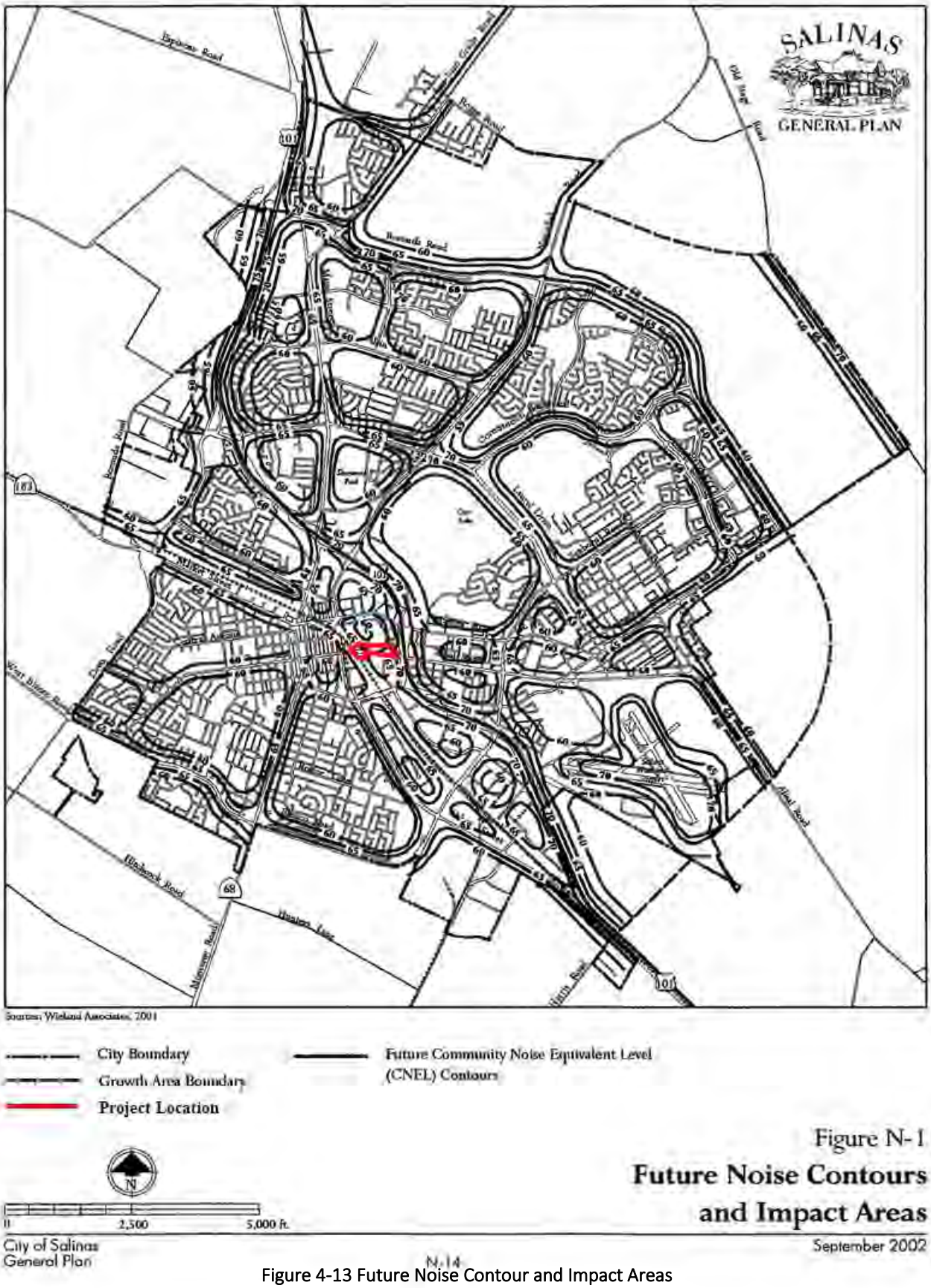



Figure 4-13 Future Noise Contour and Impact Areas

### *California Noise Insulation Standards (Title 24)*

Title 24 established an interior noise standard of 45 dBA for residential space (CNEL or Ldn). The standards regulate that technical noise studies shall be prepared for residential units that are located within noise contours of or over 60 dBA from traffic or industrial noise sources. This is incorporated in General Plan as illustrated above.

### *City of Salinas Municipal Code*

*SMC Section 37-50.180* regulates ambient noise levels measured at the property boundary. The city's noise standards for different types of land uses are listed in Table 4-13.

Table 4-13 Maximum Noise Standards

| Zone of Property Receiving Noise | Maximum Noise Level (CNEL, dBA) |
|---|---|
| Agricultural District | 70 |
| Residential District | 60 ** |
| Commercial District | 65 |
| Industrial District | 70 |
| Mixed Use District | 65 * |
| Parks or Open Space District | 70 |
| Public or Semipublic District | 60 |

***Source:*** *City of Salinas Municipal Code Table 37-50.50*
** The interior noise level in any residential dwelling unit located in a mixed use building or development shall not exceed a maximum of forty-five dBA from exterior ambient noise.*
*** In residential zones, the noise standard shall be 5.0 dBA lower between 9:00 p.m. and 7:00 a.m.*

Other sections of the code provide regulations on operational noise, such as *Section 5-12.03 – Prohibited Noises* provides examples of noise disturbance that are not allowed. These include operational sounds that could bring disturbance across a residential or commercial property line, such as residential devices, speakers, animals, loading and unloading, emergency signaling devices, and domestic power tools or machinery.

### *4.13.2 Impact Assessment*

*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 in other applicable local, state, or federal standards?*

**Less than Significant Impact.** While no development is currently proposed, implementation of the Project would result in future development that would have noise generating activities. It is not anticipated that future development would generate 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 in other applicable local, state, or federal standards, given the type of development that would be permitted in the Project area (i.e., commercial, industrial).

### *Traffic Noise Exposure*

The Project site is exposed to traffic noise associated with vehicles on East Alisal Street and surrounding local streets. The FHWA Traffic Noise Prediction Model (FHWA-RF-77-108) was utilized for modeling traffic noise exposure (Appendix E) based on the estimated trip generation (Appendix F) that would occur under maximum buildout of the Project site. Overall, the modeling indicates a reduction of theoretical noise exposure levels by 7 dB $L_{eq}$ that would occur under maximum buildout. This demonstrates that traffic volumes associated with the Project

would decrease as a result of Project implementation; however, implementation of the Project would likely not result in any significant overall reduction in existing traffic noise exposure levels in proximity to the site.

Existing ambient noise exposure measured in vicinity of the site indicates a 69.1 dB $L_{dn}$ and 70.9 dB $L_{dn}$ which are above the city's 60 dB $L_{dn}$ exterior noise level standard for residential uses. Typically, the exterior noise standard would apply at the outdoor activity areas (e.g., outdoor common areas, balconies, etc.). Additionally, the city's interior noise level standard is 45 dB $L_{dn}$.

A reduction of 7 dB $L_{eq}$ would not meet this standard. With regard to analyzing the exposure of sensitive uses to ambient noise levels in the vicinity in excess of established standards, CEQA case law had concluded that agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents except in specific instances where such conditions could be exacerbated due to implementation of the project (California Building Industry Association v Bay Area Air Quality Management District (S213478, December 17, 2015). As modeled, implementation of the proposed Project would not exacerbate traffic noise. Therefore, impacts would be less than significant.

*Stationary Noise Exposure*

Mixed-use land uses would typically include a variety of land uses including residential, commercial, retail and office uses. A wide variety of noise sources can be associated with commercial and retail land uses. The noise levels produced by such sources can also be highly variable and could potentially impact existing on-site and off-site sensitive receptors. From the perspective of the city's noise standards, noise sources not associated with transportation sources are considered stationary noise sources. Typical examples of stationary noise sources include:

- *Fans and blowers*
- *HVAC/Mechanical equipment*
- *Truck deliveries*
- *Loading Docks*
- *Compactors*
- *Amplified Drive-Thru Menu Board Speakers*
- *Automated Car Wash Operations*

Since no physical development is proposed, noise levels from new stationary noise sources cannot be predicted with certainty at this time since specific uses have not yet been proposed and the locations of stationary noise sources relative to locations of noise sensitive uses are not known. However, under some circumstances, there is a potential for such uses to exceed the city's noise standards for stationary noise sources at the location of sensitive receptors. Future mixed-use development resulting from Project implementation would be required to comply with General Plan Policy N-3.1, requiring that stationary sources are minimized.

In addition, the Project site is within a noise contour and impact area greater than 60 dBA as shown in Figure N-1 of the General Plan (reproduced as Figure 4-13 below). Therefore, future development would be required to prepare a site-specific acoustical analysis that demonstrates the development is designed to attenuate the noise to meet the city's noise standards identified in Table N-2 (Table 4-11 reproduced above). Any mitigation would be required as conditions of project approval. Therefore, the Project would not be expected to result in any significant impacts related to stationary noise. Impacts would be less than significant.

*Construction Noise Exposure*

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) Version 1.0. Construction phases would include demolition, site preparation, grading, building construction, architectural coating, and paving. Of all construction phases, it is anticipated that grading would produce the loudest noise. Consequently, for the purpose of this noise assessment, one of each construction equipment listed in the CalEEMod run (Appendix A) is included in the construction noise modeling. According to existing and anticipated land use within and around the Project site, the baseline and receptors that are analyzed in the RCNM are shown in Appendix A.

Table 4-14 Receptors and Baseline Analyzed in the RCNM

| Location | Land Use | Daytime Baseline (dBA) | Evening Baseline (dBA) | Nighttime Baseline (dBA) ** |
|---|---|---|---|---|
| 50 feet to the north | Commercial | 65 | 65 | 65 |
| 50 feet within site* | Residential | 60 | 60 | 55 |

** Since the site would not be development concurrently, the analysis assumes that future development could happen approximately 50 feet from future developed residential units on site.*
*** Noise Baselines are based on Section 37-50.180 – Performance standards*

Short-term construction noises include traffic noise generated from transporting construction equipment and materials and construction worker commuting. These activities would raise noise levels near the site. According to CalEEMod, construction of the Project site would require 37 offroad equipment and generate a total of 564 worker trips and 77 vendor trips. According to modeling of the FHWA RCNM Version 1.0, construction noise generated from the offroad equipment is estimated to be 89.2 dB $L_{eq}$. Ambient noise from construction activities would cease upon completion of construction. However, to further ensure that potential impacts related to construction noise levels are mitigated to levels that are less than significant, the Project shall incorporate ***Mitigation Measure NOI-1***. Compliance with the mitigation measure and applicable policies and regulations would ensure the Project would have a less than significant impact with mitigation incorporated.

***Mitigation Measure NOI-1:*** *Prior to ground disturbing activities, the City of Salinas shall ensure the following with the Project proponent:*

- *Construction equipment, fixed of mobile, shall be outfitted with properly operating and maintained mufflers.*
- *Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools rather than diesel equipment shall be used.*
- *During construction, stationary construction equipment shall be located so that emitted noise is directed away from or shielded from sensitive noise receivers.*

*b) Generation of excessive groundborne vibration or groundborne noise levels?*

**Less than Significant with Mitigation Incorporated.** While no development is currently proposed, implementation of the Project would result in future development that would have noise generating activities. Ground borne vibration may result from operations and/or construction, depending on the use of equipment (e.g., pile drivers, bulldozers, jackhammers, etc.), distance to affected structures, and soil type. Depending on the method, equipment-generated vibrations could spread through the ground and affect nearby buildings. It is not anticipated

that the Project would generate excessive ground borne vibration or ground borne noise levels, given the type of development that would be permitted in the Project area (i.e., residential, commercial, office). Potential vibration impacts from future construction would be short-term, temporary, and subject to compliance with ***Mitigation Measure NOI-1*** and SMC *Section 37-50.180 – Performance Standards*. However, to further ensure that potential vibration impacts related to construction noise levels are mitigated to levels that are less than significant, the Project shall also incorporate ***Mitigation Measure NOI-2***. As a result, the Project would have a less than significant impact with mitigation incorporated.

***Mitigation Measure NOI-2:*** *The use of heavy construction equipment within 25 feet of existing structures shall be prohibited.*

c) ***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 expose people residing or working in the project area to excessive noise levels?***

**Less than Significant Impact.** The nearest public use airport is the Salinas Municipal Airport (SNS) located approximately 1.8 miles southeast of the Project site. SNS occupies 763 acres with two (2) runways, measuring 4,825 feet long and 150 feet wide and 6,004 feet long and 150 feet wide. The air traffic control tower is in operation 12 hours a day, 7 days a week. The applicable airport land use plan for SNS is the 1982 Salinas Municipal Airport Land Use Plan (Plan) adopted by the Monterey County Airport Land Use Commission on May 17, 1982.[41] According to the Plan, the Project site is not located within the Airport Influence Area (AIA) or Runway Protection Zone (RPZ) of the Salinas Municipal Airport. The Project is also not within the 55, 60, or 65 CNEL contour. Since the Project site not located within the AIA and RPZ, the Project would not result in exposing people residing or working in the Project area to excessive noise levels. Therefore, the impacts would be less than significant.

### *4.13.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Noise related mitigation measures NOI-1 and NOI-2 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

[41] Monterey County Airport Land Use Commission. (1982). Salinas Municipal Airport Land Use Plan. Accessed on October 26, 2022, https://www.cityofsalinas.org/sites/default/files/departments_files/public_works_files/airport_files/salinas_clup_reduced_size_adopted_05-17-1982_0.pdf

## 4.14 POPULATION AND HOUSING

| Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *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)? | | | X | |
| *b)* Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X |

### *4.14.1 Environmental Setting*

CEQA Guidelines Section 15126.2(d) requires that a CEQA document discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines provide an example of a major expansion of a wastewater treatment plant that may allow for more construction within the service area. The CEQA Guidelines also note that the evaluation of growth inducement should consider the characteristics of a project that may encourage or facilitate other activities that could significantly affect the environment. Direct and Indirect Growth Inducement consists of activities that directly facilitate population growth, such as construction of new dwelling units. A key consideration in evaluating growth inducement is whether the activity in question constitutes "planned growth."

#### *Association of Monterey Bay Area Governments (AMBAG)*

The Association of Monterey Bay Area Governments (AMBAG) is the Metropolitan Planning Organization (MPO) for the Monterey Bay Area, inclusive of the City of Salinas. In 2022, AMBAG adopted the long-term transportation planning document, 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) that provides population and employment forecasts for the region between 2015 and 2045.[42] The AMBAG region is projected to grow by 107,500 people, build over 42,200 housing units, and add 65,500 jobs between 2015 and 2045, for a total population of 869,800, 304,900 total housing units, and 442,800 total jobs by 2045. The City of Salinas is projected to grow by 19,069 people, build over 10,149 housing units, and add 12,674 jobs between 2015 and 2045 for a total population of 177,128, 53,150 total housing units, and 85,683 total jobs between 2015 and 2045.

[42] AMBAG. (2022). 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (Appendix A). Accessed November 17, 2022, https://www.ambag.org/sites/default/files/2022-05/PDFAAppendix%20A_2022%20RGF.pdf.

### *U.S. Census Bureau*

According to the U.S. Census Bureau, the current population of the City of Salinas is 163,542 with a total of 44,405 housing units and an average household size of 4.15; there are approximately 68,879 jobs.[43]

### *Housing Element*

The City of Salinas 2015-2023 Housing Element identifies the Regional Housing Needs Allocation (RHNA) for the CCity of Salinas as determined by AMBAG. The RHNA for 2014-2023 is 2,229 units with an estimated 43,001 total units as of 2015. [44] The additional units would increase the total units to 45,230.

### *4.14.2 Impact Assessment*

***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)?***

**Less than Significant Impact.** The Project includes a General Plan Amendment and Rezone. GPA No. 2022-002 requests a land use change from Retail and General Commercial/Light Industrial to Mixed-Use. Rezone No. 2022-002 requests a rezone from CR – Commercial Retail and IGC – Industrial General Commercial to MX – Mixed Use, consistent with the proposed land use designation.

Although no physical development is proposed, the Project would facilitate future mixed-use development containing commercial and residential uses. The proposed Project would allow future buildout of up to 515 multi-family residential units and up to 131,414 sq.ft. of commercial space. Based on an average household size of 4.15, the 515 units could generate approximately 2,137 new residents thereby increasing the city's population from 163,542 to 165,679. The 515 units would also increase the total number of housing units from 44,405 to 44,920. The 131,414 sf. of commercial space could generate approximately 382 employees, increasing the number of employees citywide from 68,879 to 69,261.[45]

Overall, the population, housing units, and employees generated by the proposed Project would be within the AMBAG projections for the region and city. The new units would also assist the city with meeting its RHNA. Therefore, the Project would not induce substantial unplanned population growth and a less than significant impact would occur.

b) ***Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

**No Impact.** There are approximately 23 existing structures on the Project site that predominately consist of commercial and industrial uses. The site does not contain any existing housing or residential uses. Since the site

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[43] U.S. Census Bureau. 2022. Community Profile: Salinas, City, California. Accessed on November 17, 2022, https://data.census.gov/profile/Salinas_city,_California?g=1600000US0664224.

[44] City of Salinas. (2015). 2015-2023 Housing Element. Accessed on October 26, 2022, https://www.cityofsalinas.org/sites/default/files/Departments_Files/Community_Development_Files/General_Plan_Files/Adopted_Salinas_HE_2015-2023_1.pdf

[45] Southern California Association of Governments. (2001). Employment Density Study Summary Report. Accessed on March 1, 2023, https://www.mwcog.org/file.aspx?A=QTTlTR24POOOUIw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D

does not currently provide housing, future development of the Project site would not result in the physical displacement of people or housing. No impact would occur because of the Project.

### *4.14.3 Mitigation Measures*

None required.

## 4.15 PUBLIC SERVICES

| Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *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: | | | | |
| *i.* Fire protection? | | | X | |
| *ii.* Police protection? | | | X | |
| *iii.* Schools? | | | X | |
| *iv.* Parks? | | | X | |
| *v.* Other public facilities? | | | X | |

### *4.15.1 Environmental Setting*

The Project site is located within Salinas city limits and thus, future development would be subject to fees for the construction, acquisition, and improvements for public services and facilities. The City of Salinas implements a Public Facilities Impact Fee program per SMC *Article V-D* whereby any new development occurring within city limits is required to contribute its proportionate share of the costs of new public facilities intended to serve said development. Public services and facilities are further described below.

#### *Fire Protection Services*

Fire Protection Services in the city are provided by the Salinas Fire Department (SFD). The SFD operates a total of six (6) fire stations that serve the city, with Fire Station #1 closest to the Project site at 16 West Alisal Street. Fire Station #1 is located approximately 0.5 miles west of the Project site. The total authorized staffing for SFD is 99 personnel, and the minimum daily staffing is 26. The response time goal for fire protection and emergency services is to *"provide a 6-minute response from receipt of 911 call for arrival of first company 90% of the time."* The General Plan Safety Element includes the following goals and policies to ensure reductions in the potential for fire hazards and fire demand:

> ***Policy LU-4.1:*** *Provide an effective and responsive level of fire protection, public education and emergency response service (including facilities, personnel, and equipment) through the Salinas Fire Department.*

***Policy LU-4.2:*** *Improve the enforcement of regulations, such as zoning codes and building codes, to ensure existing and new development is constructed, occupied, and maintained to minimize potential fire and other hazards.*

***Policy LU-12:*** *Review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service are provided and facilities are maintained.*

***Policy S-4.6:*** *Ensure that all development and reuse/revitalization projects are developed in accordance with the most recent Uniform Fire Code requirements.*

***Policy S-5.2:*** *Ensure that street widths and clearance areas are sufficient to accommodate fire protection equipment and emergency vehicles.*

***Policy S-5.3:*** *Monitor water fire-flow capability throughout the city and work with water providers to improve water pressure availability considered inadequate for fire protection.*

Further, projects are subject to review by the SFD and to regulations and standards such as the California Uniform Fire Code (UFC), which includes regulations on construction, maintenance and building use. The UFC addresses fire department access, fire hydrants, sprinklers, fire alarm system, etc., for new buildings.

### *Police Protection Services*

Police Protection Services in the city are provided by the Salinas Police Department (SPD). The SPD is located at 222 Lincoln Avenue, which is approximately 0.6 miles east of the Project site. According to the SPD 2021 Annual Report, there are 143 sworn officers employed, which provides a ratio of approximately 0.87 officers per thousand residents, a decrease from the ratio of 1.1 assessed in the General Plan.[46] The SPD received a total of 72,565 calls in 2021, and 90% of those instances officers arrives on-scene in four (4) minutes or less. The General Plan identifies policies to provide effective and responsive police protection, including alternative policing methods, youth programs, and crime awareness.

### *Schools*

Educational services within the Project area are primarily served by Salinas City Elementary School District (SCESD) and Salinas Union High School District. Schools within a one (1)-mile radius of the Protect site include Sherwood Elementary, Lincoln Elementary School, Roosevelt Elementary School, Salinas High School, Mount Toro High School, and Salinas Pre-School. In the 2021-2022 school year, the Salinas City Elementary School District had an enrollment of 8,287 students and the Salinas Union High School District had an enrollment of 16,525 students.[47] Funding for schools and school facilities impacts is outlined in Education Code Section 17620 and Government Code Section 65995 et. seq. (State statutes) which govern the amount of fees that can be levied against new development. These fees are used to construct new or expanded school facilities. Payment of fees authorized by the statute is deemed "full and complete mitigation." Pursuant to *SMC Article V-A – School Facilities Fee*, a School Facilities Fee would be

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[46] Police Services of Salinas. (2021). 2021 Annual Report. Accessed on November 1, 2022, https://salinaspd.org/2021-annual-report/

[47] California Department of Education (2022). Data Quest. Accessed on November 17, 2022, https://dq.cde.ca.gov/dataquest/

assessed for future development based on the rates in place at the time payment is due. In addition, the Salinas General Plan Land Use Element includes the following policy for educational facilities:

> ***Policy LU-19:*** *Continue to work with the school districts to the extent allowed by State law to ensure adequate school and recreational facilities are provided and maintained in the community. The City will cooperate in expediting construction of schools. School districts will consult with the City at the earliest possible time.*

### *Parks and Recreation*

Park and Recreation Facilities are overseen by the City of Salinas Recreation and Community Services Department. Currently, there are approximately 593.5 acres of parkland, which provides a parkland to population ratio of 3.64 acres of parkland per 1,000 people.[48] This meets the city's standard of three (3) acres per 1,000 residents. In addition, the City of Salinas General Plan Conservation/Open Space Element includes the following goals and policies related to park and recreational facilities and services:

***Goal COS-7:*** *Provide, develop, and maintain ample park and recreational facilities that offer a variety of recreational activities.*

> ***Policy COS-7 .1:*** *Develop a high-quality public park system that provides adequate space and facilities for a variety of recreational opportunities conveniently accessible to all Salinas residents.*
>
> ***Policy COS-7.2:*** *Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.*
>
> ***Policy COS-7.3:*** *Plan and recreation facilities in cooperation with concerned public and private agencies and organizations, particularly school districts and neighborhood residents.*
>
> ***Policy COS-7.5:*** *Identify the recreation needs of special user groups, such as the disabled and elderly, and address these in park and recreation facility development.*
>
> ***Policy COS-7.7:*** *Encourage development of private commercial recreational facilities (e.g., golf courses, sports centers, bowling alleys, family fun centers, etc.) to expand community recreational opportunities and to fill unmet needs.*
>
> ***Policy COS-7.8:*** *While supporting the development of private recreational facilities, ensure that the supply and maintenance of public parks and recreational opportunities is adequate to ensure permanent availability of parks and recreational facilities for use by the entire community.*
>
> ***Policy COS-7.9:*** *Require new residential development to provide land and/or fees to achieve a minimum of 3.0 acres per additional 1,000 population for developed public parklands for community or neighborhood parks.*

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[48] City of Salinas, Public Works Department, GIS Division. (Modified October 17, 2022). Parks and Recreation. Accessed on November 1, 2022, https://cityofsalinas.opendatasoft.com/explore/dataset/parks-and-recreation/information/?location=13,36.69581,-121.63405

*Policy COS-7 .11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainageways, slopes, and other natural features.*

*Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.*

### *4.15.2 Impact Assessment*

*Would the project:*

a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:***

*i.Fire protection?*

Less than Significant Impact. The Project site is within city limits and is currently served by the Salinas Fire Department (SFD). Therefore, future development of the Project site would be served by the SFD. Although no specific development is proposed by the Project, the Project would facilitate future residential development that would introduce residents to the area and therefore could increase the demand for fire protection services. However, the increase would be incremental and would be within the anticipated growth projections for the city (See Section 4.14).The Project's proximity to the existing station would support adequate service ratios, response times, and other performance objectives for fire protection services. In addition, future development would be reviewed by the SFD for requirements related to water supply, fire hydrants, and fire apparatus access. Further, future development would be subject to proportionate payment of the Public Facilities Impact Fee for construction and acquisition costs for improvements to fire protection services and facilities. For these reasons, it can be determined that the Project would not result in the need for new or altered facilities that could have an environmental impact and a less than significant impact would occur.

*ii.Police protection?*

Less than Significant Impact. The Project site is within the city limits and therefore is currently served by the SPD. Therefore, future development of the Project site would be served by the SPD. Although no specific development is proposed by the Project, the Project would facilitate future residential development that would introduce residents to the area and therefore could increase the demand for police services. However, the increase would be incremental and would be within the anticipated growth projections for the city (See Section 4.14). The Project's proximity to the existing station would support adequate service ratios, response times, and other performance objectives for police protection services. In addition, future development of the Project site would be reviewed by the SPD for requirements related to crime protection. Further, future development would be subject to proportionate payment of the Public Facilities Impact Fee for construction and acquisition costs for improvements to police protection services and facilities. For these reasons, it can be determined that the Project would not result in the need for new or altered facilities that could have an environmental impact and a less than significant impact would occur.

*iii.Schools?*

**Less than Significant Impact.** The Project site is within the SCESD and Salinas Union High School District with several schools within a one-mile radius including Sherwood Elementary, Lincoln Elementary School, Roosevelt Elementary School, Salinas High School, Mount Toro High School, and Salinas Pre-School. In the 2021-2022 school year, SCESD had an enrollment of 8,287 students and the Salinas High School District had an enrollment of 16,525 students. Although no specific development is proposed by the Project, the Project would facilitate future residential development that would introduce residents to the area and therefore could generate new students that would increase the school districts' enrollment. A School Impact Fee would be assessed for future development of the Project site based on the rates in place at the time payment is due. As stated in Government Code Section 65995 et. seq., payment of School Impact Fees is deemed full and complete mitigation for potential impacts to schools caused by development. Therefore, payment of the assessed School Impact Fee would reduce impacts related to new school facilities resulting from implementation of the Project and impacts would be less than significant.

*iv.Parks?*

**Less than Significant Impact.** Park and recreational facilities are typically impacted by an increase in use from residential development. Although no specific development is proposed by the Project, the Project would facilitate future residential development that would introduce residents to the area and therefore could increase the demand for and use of existing neighborhood and regional parks or other recreational facilities. The nearest public parks to the Project site include the Cornell Corner (0.08 acres, 0.2 miles southwest), Bantaan Memorial Park (0.7 acres, 0.4 miles northwest), Exposition Grounds (7.6-acre community park, 0.4 miles north), La Paz Neighborhood Park (1.5 acres, 0.3 miles east), and Cesar Chavez Community Park (33.3 acres, 0.4 miles northeast).

As described in Section 4.16, the city's current parkland to population ratio is 3.64 acres of parkland per 1,000 people, which meets the city's standard of three acres per 1,000 people. The proposed Project would allow future buildout of up to 515 multi-family residential units. Based on an average household size of 4.15, the 515 units could generate approximately 2,137 new residents thereby increasing the city's population from 163,542 to 165,679. The incremental population increase would result in a parkland to population ratio of 3.59, which would still meet the city's standard. Therefore, residential demand associated with future development of the Project site would maintain the city's performance standard.

In addition, future development would be subject to the applicable SMC regulations, including payment of the Public Facilities Impact Fee in order to mitigate any potential impacts to the city's park and recreation facilities generated by the incremental population increase. Compliance with these requirements would reduce any impacts resulting from increased residential demand for park and recreational facilities so as to not cause substantial physical deterioration of the facilities. For these reasons, the Project would have a less than significant impact.

*v.Other public facilities?*

**Less than Significant Impact.** Although no specific development is currently proposed, future development resulting from Project implementation could increase the demand for other public services, such as courts, libraries, hospitals, etc. Increased demand as a result of the continued implementation of the Project could result in development or expansion of public facilities. Typical environmental impacts associated with the development of these facilities include air quality, greenhouse gas emissions, noise, traffic, etc. The expansion of these facilities would be subject to CEQA as they are proposed. In addition, future development would be subject to the payment

of the Public Facilities Impact Fee in order to mitigate any potential impacts to these public facilities. As a result, the Project would have a less than significant impact.

### *4.15.3 Mitigation Measures*

None required.

## 4.16 RECREATION

| Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *a)* Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | X | |
| *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? | | | X | |

### *4.16.1 Environmental Setting*

Park and Recreation Facilities are overseen by the City of Salinas Recreation and Community Services Department. Currently, there are approximately 593.5 acres of parkland, which provides a parkland to population ratio of 3.64 acres of parkland per 1,000 people.[49] This meets the city's standard of three (3) acres per 1,000 residents. The nearest public parks to the Project site include the Cornell Corner (0.08 acres, 0.2 miles southwest), Bantaan Memorial Park (0.7 acres, 0.4 miles northwest), Exposition Grounds (7.6-acre community park, 0.4 miles north), La Paz Neighborhood Park (1.5 acres, 0.3 miles east), and Cesar Chavez Community Park (33.3 acres, 0.4 miles northeast).

*General Plan*

The Salinas General Plan Conservation/Open Space Element includes the following goals and policies related to park and recreational facilities and services:

***Goal COS-7:*** *Provide, develop, and maintain ample park and recreational facilities that offer a variety of recreational activities.*

> ***Policy COS-7 .1:*** *Develop a high-quality public park system that provides adequate space and facilities for a variety of recreational opportunities conveniently accessible to all Salinas residents.*
>
> ***Policy COS-7.2:*** *Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.*

[49] City of Salinas, Public Works Department, GIS Division. (Modified October 17, 2022). Parks and Recreation. Accessed on November 1, 2022, https://cityofsalinas.opendatasoft.com/explore/dataset/parks-and-recreation/information/?location=13,36.69581,-121.63405

*Policy COS-7.3: Plan park and recreation facilities in cooperation with concerned public and private agencies and organizations, particularly school districts and neighborhood residents.*

*Policy COS-7.5: Identify the recreation needs of special user groups, such as the disabled and elderly, and address these in park and recreation facility development.*

*Policy COS-7.7: Encourage development of private commercial recreational facilities (e.g., golf courses, sports centers, bowling alleys, family fun centers, etc.) to expand community recreational opportunities and to fill unmet needs.*

*Policy COS-7.8: While supporting the development of private recreational facilities, ensure that the supply and maintenance of public parks and recreational opportunities is adequate to ensure permanent availability of parks and recreational facilities for use by the entire community.*

*Policy COS-7.9: Require new residential development to provide land and/or fees to achieve a minimum of 3.0 acres per additional 1,000 population for developed public parklands for community or neighborhood parks.*

*Policy COS-7 .11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainageways, slopes, and other natural features.*

*Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.*

### *Salinas Municipal Code*

In addition, the City of Salinas implements a Public Facilities Impact Fee program per SMC Article V-D whereby any new development occurring within city limits is required to contribute its proportionate share of the costs of new public facilities intended to serve said development.

### *4.16.2 Impact Assessment*

***Would the project:***

a) ***Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

**Less than Significant Impact.** Park and recreational facilities are typically impacted by an increase in use from residential development. Although no specific development is proposed by the Project, the Project would facilitate future residential development that would introduce residents to the area and therefore increase the demand for and use of existing neighborhood and regional parks or other recreational facilities. The nearest public parks to the Project site include the Cornell Corner (0.08 acres, 0.2 miles southwest), Bantaan Memorial Park (0.7 acres, 0.4 miles northwest), Exposition Grounds (7.6-acre community park, 0.4 miles north), La Paz Neighborhood Park (1.5 acres, 0.3 miles east), and Cesar Chavez Community Park (33.3 acres, 0.4 miles northeast).

The proposed Project would allow future buildout of up to 515 multi-family residential units. Based on an average household size of 4.15, the 515 units could generate approximately 2,137 new residents thereby increasing the city's population from 163,542 to 165,679. The incremental population increase would result in a parkland to

population ratio of 3.59, which would still meet the city's standard. Therefore, residential demand associated with future development of the Project site would maintain the city's performance standard.

Future development would be subject to the applicable SMC regulations, including payment of the Public Facilities Impact Fee in order to mitigate any potential impacts to the city's park and recreation facilities generated by the incremental population increase. In addition, future development would be subject to open space provisions as required by the SMC. Compliance with these requirements would reduce any impacts resulting from increased residential demand for park and recreational facilities so as to not cause substantial physical deterioration of the facilities. For these reasons, the Project would have a less than significant impact.

*b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

Less than Significant Impact. Future residential development resulting from the Project could include the construction of recreational facilities as required by the SMC. In such cases, development would be subject to compliance with the SMC and would be reviewed and conditioned by the City to ensure that physical effects on the environment are less than significant. Compliance would ensure that the facilities would not be in an area or be built to a scale that would cause an adverse physical effect on the environment. As a result, a less than significant impact would occur.

### *4.16.3 Mitigation Measures*

None required.

## 4.17 TRANSPORTATION

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | X | | |
| *b)* | Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? | | | X | |
| *c)* | Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | |
| *d)* | Result in inadequate emergency access? | | | X | |

### *4.17.1 Environmental Setting*

The Project site is currently fully developed and paved. Street frontage includes East Alisal Street, a four (4)-lane east-west major arterial in addition to several two (2)-lane local streets, Rianda Circle, JD Alvarado Circle, Prader Street, and Griffin Street. Four (4) to five (5)-foot sidewalks are on both sides of the roadways. There are two (2) controlled crosswalks at East Alisal/Work Street and East Alisal/Griffin Street. A segment of Union Pacific Railroad is located adjacent to the Project site to the west. There is one (1) bus stop adjacent to the site ("East Alisal/Work" Stop ID: 3467) on East Alisal Street and Work Street for Route 41 – Salinas-Alisal-Northridge operated by the Monterey-Salinas Transit (MST) with service every 15 minutes.

#### *Monterey County Active Transportation Plan (ATP)*

The Transportation Agency for Monterey County (TAMC) adopted the Monterey County Active Transportation Plan (ATP) in 2018 as an update to the 2011 Bicycle and Pedestrian Master Plan.[50] The ATP identifies gaps in the bicycle and pedestrian network and opportunity areas for innovative bicycle facility design. Chapter 5.10 of the ATP provides a community profile for the City of Salinas. The profile identifies an existing Class II bike lane on East Alisal Street in the vicinity of the Project site. There are no proposed bikeway or pedestrian improvements identified adjacent to the Project site.

[50] Transportation Agency for Monterey County. (2018). 2018 Monterey County Active Transportation Plan. Accessed November 17, 2022, https://www.tamcmonterey.org/files/991071e61/2018-Monterey-County-Active-Transportation-Plan.pdf.

### *General Plan*

The Circulation Element of the Salinas General Plan established goals and policies to maintain the operations of existing roadway systems as new development occurs. These policies aim to prevent negative impacts caused by new developments and ensure that adequate transportation system is provided. The following goals and policies are generally applicable to the proposed Project.

***Goal C-1:*** *Provide and maintain a circulation system that meets the current and future needs of the community.*

> ***Policy C-1.2:*** *Strive to maintain traffic Level of Service (LOS) D or better for all intersections and roadways.*
>
> ***Policy C-1.3:*** *Require that new development and any proposal for an amendment to the Land Use Element of the General Plan demonstrate that traffic service levels meeting established General Plan standards will be maintained on arterial and collector streets.*
>
> ***Policy C-1.4:*** *Continue to require new development to contribute to the financing of street improvements, including formation of roadway maintenance assessment districts, required to meet the demand generated by the project.*
>
> ***Policy C-1.5:*** *Ensure that new development makes provisions for street maintenance through appropriate use of gas tax and formation of maintenance assessment districts.*
>
> ***Policy C-1.8:*** *Whenever possible, in reuse/revitalization projects, reduce the number of existing driveways on arterial streets to improve traffic flow.*
>
> ***Policy C-1.9:*** *Use traffic calming methods within residential areas where necessary to create a pedestrian-friendly circulation system.*
>
> ***Policy C-1.11:*** *Continue to enforce traffic laws, including those addressing bicycle and pedestrian traffic, to ensure a circulation system that is safe for motorized, bicycle, and pedestrian traffic.*

***Goal C-4:*** *Provide an extensive, safe public bicycle network that provides on-street as well as off-street facilities.*

> ***Policy C-4.3:*** *Encourage existing businesses and require new construction to provide on-premise facilities to aid bicycle commuters, such as on-site safe bicycle parking.*
>
> ***Policy C-4.6:*** *Ensure that all pedestrian and bicycle route improvements meet the Americans with Disabilities Act (ADA) standards for accessibility, and Caltrans standards for design.*
>
> ***Policy C-4.7:*** *Encourage parking lot designs that provide for safe and secure bicycle parking.*

General Plan Policies C-1.2 and C-1.3 require a level of service (LOS) evaluation to determine project consistency with the General Plan. However, LOS is no longer required to determine potential transportation impacts under CEQA (See CEQA Guidelines).

### *City of Salinas Vision Zero: Reducing Serious Injuries and Fatalities on Salinas Streets*

The City of Salinas adopted the Vision Zero Policy (Resolution No. 21791) on February 11, 2020, commencing the development of a Vision Zero Action Plan. The "Vision Zero" strategy seeks to eliminate all traffic facilities and serve

injuries, while increasing safe, healthy, equitable mobility for all.[51] The Vision Zero Action Plan was adopted on August 24, 2020.[52]

According to the Action Plan, the Project site is in the vicinity of the highest collision corridors (East Alisal Street from Front Street to North Sanborn Road), highest collision intersections (East Alisal Street at Griffin Street), and highest pedestrian-involved intersections (East Alisal Street at Griffin Street). The Action Plan also identifies a High Injury Network (HIN) (Figure 4-14). The portion of East Alisal Street in the vicinity of the Project site is not in the HIN. The Action Plan identifies implementation actions are identified. Applicable policies for new development, or redevelopment, are as follows.

> ***Action 2.6.*** *Establish internal process for Vision Zero countermeasures to be evaluated and implemented, where feasible, on projects on the HIN.*
>
> ***Action 2.7.*** *Require that new development incorporate Vision Zero principles for any new road construction.*
>
> ***Action 2.8.*** *Require that any redevelopment contributes to street safety improvements required to meet the demand generated by the project.*
>
> ***Action 2.9.*** *Whenever possible, in new or re-development projects, reduce the number of driveways and access points on arterial streets.*

### *CEQA Guidelines*

Under Senate Bill 743 (SB743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual automobile travel (additional miles driven) a proposed Project would create on California roads. If the project adds excessive automobile travel onto roads, then the project may cause a significant transportation impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criteria for transportation impacts.

To implement SB 743, the CEQA Guidelines were amended by adding Section 15064.3. According to Section 15064.3, VMT measures the automobile travel generated from a proposed project (i.e., the additional miles driven). Here, 'automobile' refers to on-road passenger vehicles such as cars and light-duty trucks. If a proposed project adds excessive automobile travel on California roads thereby exceeding an applicable threshold of significance, then the project may cause a significant transportation impact.

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[51] City of Salinas. 2022. Vision Zero: Reducing Serious Injuries and Fatalities on Salinas Streets. Accessed November 22, 2022, https://www.cityofsalinas.org/our-city-services/public-works/traffic-transportation-engineering/vision-zero

[52] City of Salinas. 2020. Vision Zero Action Plan. Accessed November 22, 2022, https://www.cityofsalinas.org/sites/default/files/departments_files/public_works_files/salinas_vision_zero_action_plan.pdf

Figure 4-14 High Injury Network Map

Among its provisions, *Section 15064.3(b)* establishes criteria for analyzing transportation impacts. Specifically, *Section 15064.3(b) (1)* establishes a less than significant presumption for certain land use projects that are proposed within ½-mile of an existing major transit stop or along a high-quality transit corridor. If this presumption does not apply to a land use project, then the VMT can be qualitatively or quantitatively analyzed.

In the case that quantitative models or methods are not available to the lead agency to estimate the VMT for the project being considered, provisions of CEQA Guidelines Section *15064.3(b)(3)* permits the lead agency to conduct a qualitative analysis. The qualitative analysis may evaluate factors including but not limited to the availability of transit, proximity to other destinations, and construction traffic.

Lastly, Section *15064.3(b)(4)* of the CEQA Guidelines states that *"[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."*

### *SB 743 Technical Advisory*

In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) (revised December 2018) to provide technical recommendations regarding VMT, thresholds of significance, and mitigation measures for a variety of land use project types.

The Technical Advisory includes screening thresholds for agencies to use in order to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study.

- *Screening Thresholds for Small Project.* Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact. This threshold is based on a CEQA categorical exemption for existing facilities, including additions to existing structures of up to 10,00 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area.
- *Map-Based Screening Threshold for Residential and Office Projects.* Residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below the threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.
- *Presumption of Less Than Significant Impact Near Transit Thresholds.* Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor will

have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT.

- *Presumption of Less Than Significant Impact for Affordable Residential Development.* Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT.

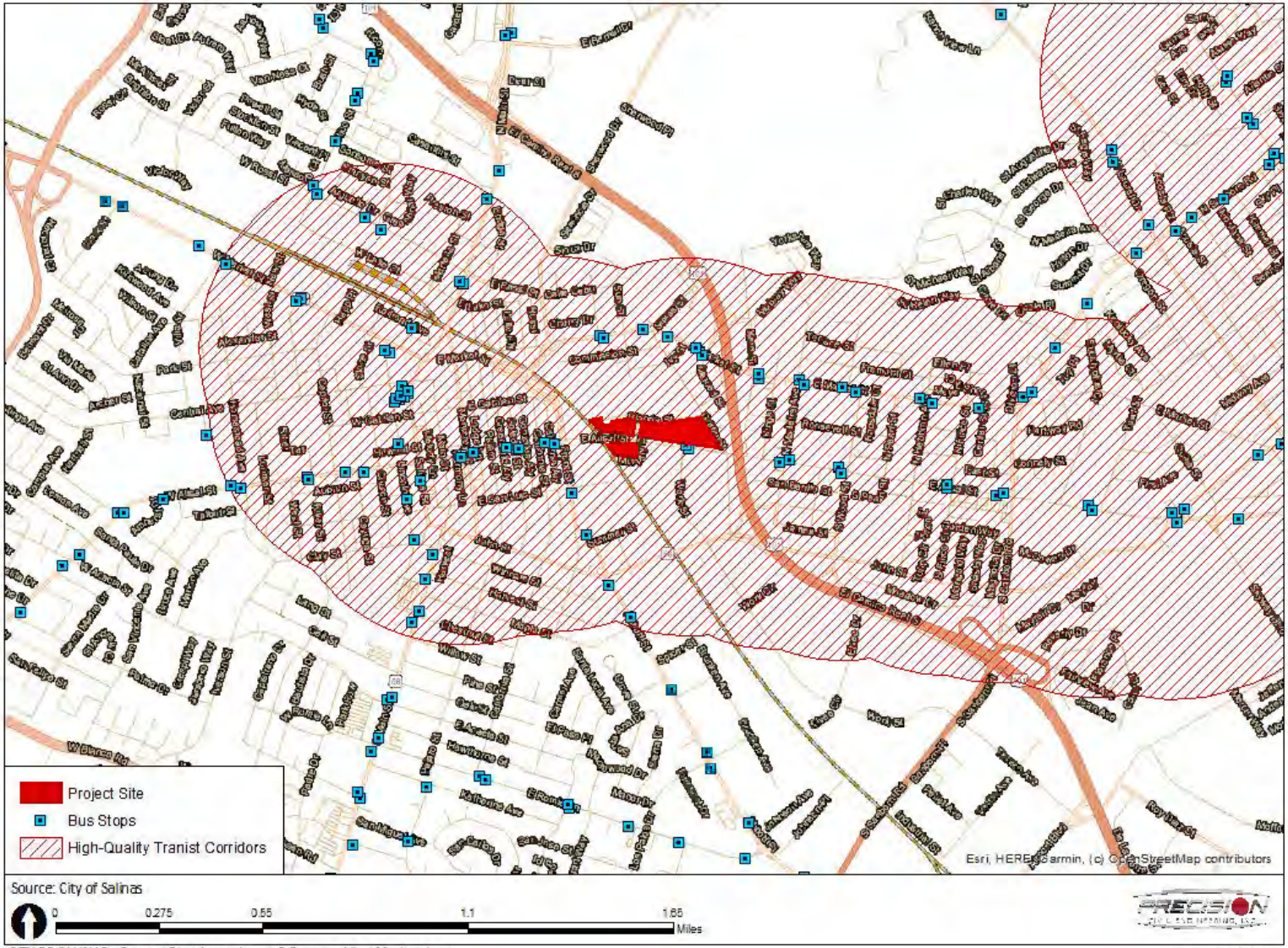
According to the Technical Advisory, lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types.

### *City of Salinas SB 743 VMT Implementation Policy*

The City of Salinas adopted the Interim Vehicle Miles Traveled (VMT) Policy on October 13, 2020, to determine transportation impacts under CEQA.[53] The VMT Policy provides guidance and steps to determine the significance of transportation impacts and identify mitigation measures. The VMT Policy provides seven (7) screening criteria per the OPR guidance, concluding that projects that fall within the thresholds would not cause a significant impact regarding VMT. The screening criteria include:

- *Small Projects: Less than significant impact if the project generates less than 110 trips per day.*
- *Projects Near High Quality Transit: Less than significant impact if the project is 1) within 0.5-miles of an existing major transit stop, 2) maintains a service interval frequency of 15 min or less during peak commute times, 3) has a floor area ratio (FAR) of more than 0.75, and 4) does not include more parking than the municipal code requires.* (See *Figure 4-15)*
- *Local-Serving Retail: Less than significant impact if the project proposes 1) no single store on-site exceed 50,000 sf, and 2) project is local-serving as determined by the City of Salinas.*
- *Affordable Housing: Less than significant impact if the project provides a high percentage of affordable housing as determined by the City of Salinas.*
- *Local Essential Service: Less than significant impact if buildings less than 50,000 sf. with land use of day care center, public K-12 school, police or fire facility, medical office, or government offices.*
- *Map-based Screening: Less than significant impact if the area of development is under the 15 percent County threshold as shown on the City of Salinas VMT screening map. The screening map is limited to residential and office projects. (See Figure 4-16)*
- *Redevelopment Projects: Less than significant impact if project replaces an existing VMT-generating land use and does not result in net overall increase in VMT.*

[53] City of Salinas. (2020). Senate Bill 743 VMT Implementation Policy. Accessed on November 1, 2022, https://www.cityofsalinas.org/sites/default/files/departments_files/community_development_files/final_interim_vmt_policy.pdf




CITY OF SALINAS - General Plan Amendment & Rezone: Alisal Marketplace

Created 11/1/2022

Figure 4-15 City of Salinas High-Quality Transit Corridors

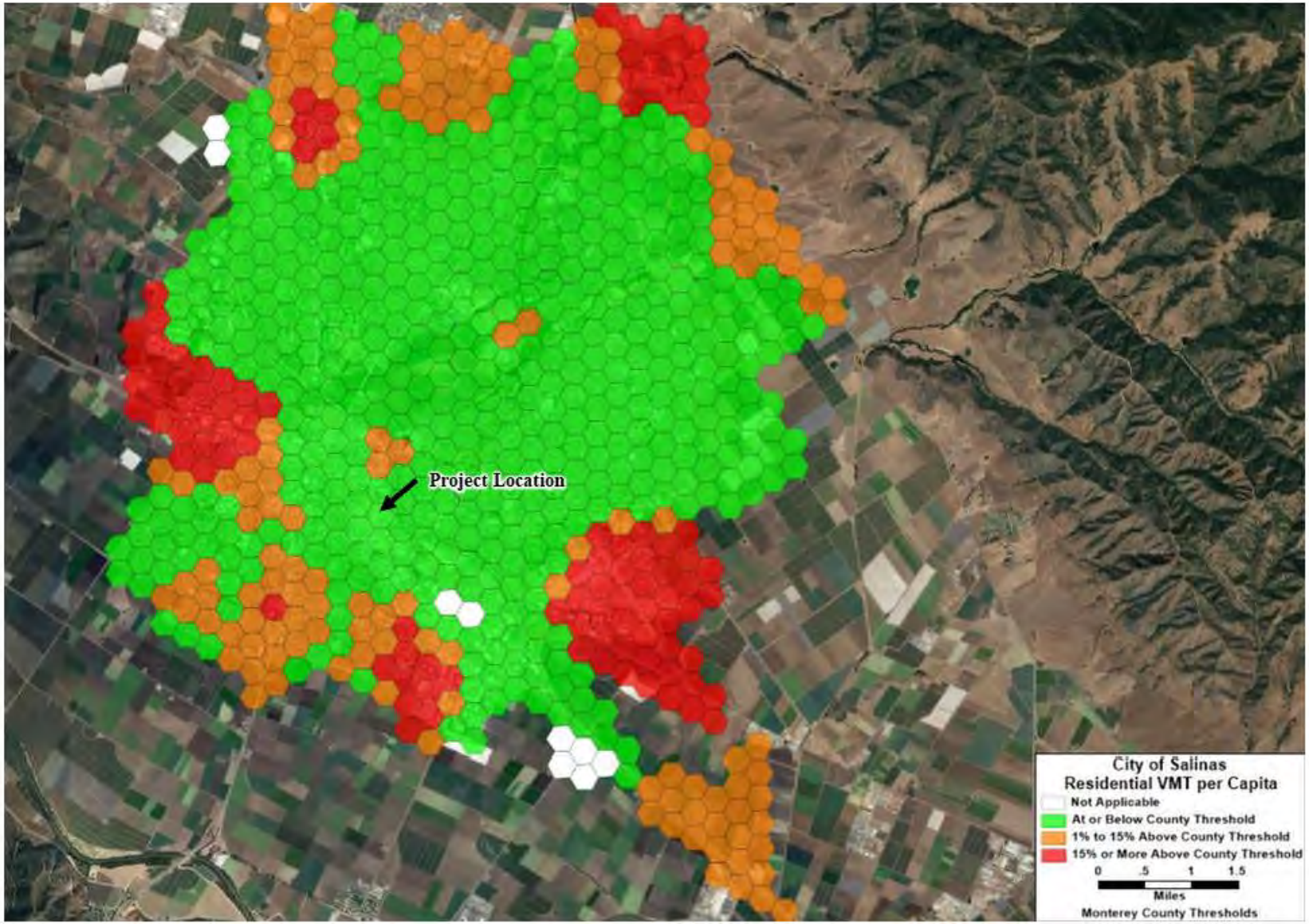



Figure 4-16 City of Salinas VMT Screening Map - Residential VMT per Capita

### *4.17.2 Impact Assessment*

*Would the project:*

a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

**Less Than Significant Impact with Mitigation Incorporated.** Although no development is proposed by the Project, future development of the Project site would be required by the City to comply with all project-level requirements implemented by a program, plan, ordinance, or policy addressing the circulation system, roadway, pedestrian and bicycle, and transit facilities. The Project's consistency for each facility type is addressed below.

*Roadway Facilities*

CEQA Guidelines no longer use motorist delays or level of service (LOS) to measure transportation impacts. However, in evaluating Project consistency with the General Plan, a comparison of LOS is required per General Plan Policies C-1.2 and C-1.3. Therefore, a LOS analysis is provided for informational purposes. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, trip generation rates for mid-rise residential with ground floor commercial (ITE 231), the Project would generate an estimated total average daily trip generation of 1,771 trips.[54] A Trip Generation Memo is provided in Appendix F.

To provide a conservative analysis, Project-generated trips were applied to the intersection with the highest available trip counts in the vicinity of the Project site. The East Alisal Street/Work Street intersection has the highest available trip counts in the vicinity of the Project site with a reported total volume of 9,221 average daily trips.[55] [56] Assuming all Project-generated trips use East Alisal Street, 10,992 average daily trips would be expected on this roadway resulting in a LOS of A (below 22,000 trips) per General Plan Table C-2 for a four (4)-lane divided arterial (with left turn lane).[57] Therefore, the Project would be consistent with General Plan Policies C-1.2 and C-1.3, which aims to maintain LOS D for all roadways in the city. As such, impacts to roadway facilities would be less than significant.

Although no physical development is proposed, future development resulting from Project implementation would be subject to review and approval by the City for compliance with standards for on and off-site improvements. In addition, because the Project site is in the vicinity of the highest collision corridors (East Alisal Street from Front Street to North Sanborn Road), highest collision intersections (East Alisal Street at Griffin Street), and highest pedestrian-involved intersections (East Alisal Street at Griffin Street), future development would be subject to compliance with implementation actions identified in the Vision Zero Action Plan. To ensure compliance with implementation actions identified in the Vision Zero Action Plan and thereby maintain safety standards at all intersections and roadway segments pursuant to the Plan, the Project shall incorporate *Mitigation Measure TRANS-*

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[54] According to ITE 231, an Average Rate of 3.44 multiplied by 515 dwelling units equals 1,771 average daily trips.

[55] City of Salinas. 2022. Traffic Volumes (GIS Data). Accessed November 22, 2022, https://www.cityofsalinas.org/map/traffic-volumes

[56] The next closest intersection is East Alisal Street/Griffin Street with an average daily traffic volume of 5,567 trips.

[57] 9,221 plus 1,771 equals 10,992

*1*. Incorporation of the mitigation measure would reduce potential impacts related to roadway facilities to less than significant.

***Mitigation Measure TRANS-1:*** *To maintain safety standards at all intersections and roadway segments pursuant to implementation actions identified in the Vision Zero Action Plan, a traffic impact study shall be required for all development projects anticipated to generate 110 or more new daily vehicle trips within the Project Area, unless not required by the City. Depending on the results of this study, future developments may be required to construct or contribute to street safety improvements to meet the demand generated by the project. Improvements shall be in accordance with the City of Salinas' Vision Zero Action Plan (i.e. pedestrian-activated crosswalk warning beacon, high visibility crosswalks, pedestrian hybrid beacon, reduced parking at intersection, intersection control, raised median and street trees, protected bike lanes, and lane reduction). These improvements shall be required as conditions of approval.*

***Pedestrian and Bicycle Facilities***

There is an existing Class II bike lane on East Alisal Street in the vicinity of the Project site. There are also four (4) to five (5)-foot sidewalks located on both sides of East Alisal Street. There are two (2) controlled crosswalks at East Alisal Street/Work Street and East Alisal Street/Griffin Street. According to intersection data available for East Alisal Street/Work Street and East Alisal Street/Griffin Street, approximately 267 pedestrians utilize these crosswalks on a daily basis. Although no development is currently proposed, future development of the Project site would result in an incremental increase in residents which could result in an increased demand for pedestrian and bicycle facilities.

Future development would be subject to review and approval by the City to ensure compliance with existing City plans and policies regarding pedestrian and bicycle facilities, including the Vision Zero Action Plan implementation actions and *Mitigation Measure TRANS-1* as identified above. Further, all future development would be subject to the Public Facilities Impact Fee program per SMC *Article V-D* whereby any new development occurring within city limits is required to contribute its proportionate share of the costs of new public facilities intended to serve said development. Through compliance with City plans and policies and payment of the Public Facilities Impact Fee, impacts to pedestrian and bicycle facilities would be less than significant.

***Transit Facilities***

There is one (1) bus stop adjacent to the site ("East Alisal/Work" Stop ID: 3467) on East Alisal Street and Work Street for Route 41 – Salinas-Alisal-Northridge operated by the Monterey-Salinas Transit (MST) with service every 15 minutes. Although no development is currently proposed, future development of the Project site would result in an incremental increase in residents which could result in an increased demand for transit. Increased demand for transit would result in fewer automobile trips, which would not cause an adverse environmental impact. The Project would generate new automobile trips, which could cause a delay for buses utilizing East Alisal Street. However, as discussed above, the projected traffic volumes would not have a significant impact. For these reasons, impacts to transit facilities would be less than significant.

Therefore, through compliance with the programs, plans, ordinances, and policies addressing the circulation system (inclusive of transit, roadway, bicycle, and pedestrian facilities), a less than significant impact would occur because of the Project.

*b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less than Significant Impact. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of LOS. Based on the city's adopted SB 743 VMT Implementation Policy, the Project is eligible to "screen out" from further VMT analysis pursuant to CEQA Guidelines Section 15064.3(b) because the site is located along a High-Quality transit corridor, within 0.5-miles of an existing major transit stop that maintains a service interval frequency of 14 minutes or less during peak commute (Figure 4-15). In addition, the Project can also screen out from further VMT analysis using *Map-based Screening* for residential development and *Redevelopment Projects* for commercial development. As shown in Figure 4-16, the Project site is at or below County threshold for residential VMT per capita. For the commercial development portion, the Project site currently has a 0.3 FAR, which is larger than the proposed 0.25 FAR commercial use assessed in this study. As such, the Project would replace an existing VMT-generating land use and does not result in net overall increase in VMT. For these reasons, it can be determined that the Project would have a less than significant impact.

*c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less than Significant Impact. Although no development is currently proposed, future development of the Project site would be subject to review and approval by the City through the entitlement process. Review by the City would ensure that project design does not include hazardous design features such as sharp curves or dangerous intersections, or incompatible uses. As discussed above, the Project site is in the vicinity of the highest collision corridors (East Alisal Street from Front Street to North Sanborn Road), highest collision intersections (East Alisal Street at Griffin Street), and highest pedestrian-involved intersections (East Alisal Street at Griffin Street). As such, to reduce safety hazards resulting from future development, the Project would be subject to compliance with implementation actions identified in the Vision Zero Action Plan as incorporated through *Mitigation Measure TRANS-1* described under criterion a). Through compliance with the city's standards and Vision Zero Action Plan implementation actions, the Project would not substantially increase hazards due to a geometric design feature or incompatible uses and a less than significant impact would occur.

*d) Result in inadequate emergency access?*

Less than Significant Impact. The Project does not involve a change to any emergency response plan. In addition, although no development is currently proposed, future development of the Project site is subject to review by the city to ensure adequate site access including emergency access. In the case that future construction requires lane closures, access through existing roadways would be maintained through standard traffic control and therefore, potential lane closures would not affect emergency evacuation plans. Thus, a less than significant impact would occur because of the Project.

### *4.17.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Transportation related mitigation measure TRANS-1 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.18 TRIBAL CULTURAL RESOURCES

| Would the project: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *a)* Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or, | | X | | |
| *b)* 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 PRC section 5024.1. In applying the criteria set forth in subdivision (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | X | | |

### *4.18.1 Environmental Setting*

See Section 4.5.

### *4.18.2 Impact Assessment*

*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) 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*

Less than Significant Impact with Mitigation Incorporated. Based on the CHRIS Records Search conducted on April 14, 2022, there are no known local, state, or federal designated historical resources pursuant to Section 5020.1(k) on the Project site. While there is no evidence that historical resources exist on the Project site, there is some possibility that existing structures qualify as historical resources or hidden, and buried resources may exist with no surface evidence that may be impacted by future physical development of the site. In the event of the accidental discovery and recognition of previously unknown historical resources before or during construction activities, the Project shall incorporate ***Mitigation Measure CUL-1*** through ***Mitigation Measure CUL-8*** to assure construction

activities do not result in significant impacts to any potential historical resources discovered above or below ground surface. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

b) *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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Less than Significant Impact with Mitigation Incorporated. The Project site and its resources have not been determined by the city to be significant pursuant to Section 5024.1. However, as discussed in Section 4.5, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which could constitute a significant impact. Therefore, the Project shall incorporate *Mitigation Measure TCR-1* to assure construction activities do not result in significant impacts to any potential resources of significance to a California Native American tribe discovered above or below ground surface. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

*Mitigation Measure TCR-1 Inadvertent Discoveries During Construction*

*In the event that cultural resources of Native American origin are identified during grading or construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find; an appropriate Native American representative, based on the nature of the find, is consulted; and mitigation measures are put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American group(s) prior to continuation of any earth disturbing work within the vicinity of the find. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.*

### *4.18.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Tribal Cultural Resources related mitigation measures CUL-1 through CUL-8 and TCR-1 identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

## 4.19 UTILITIES AND SERVICE SYSTEMS

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *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 effect? | | | X | |
| *b)* | Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | X | |
| *c)* | 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? | | X | | |
| *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? | | | X | |
| *e)* | Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | X | |

### *4.19.1 Environmental Setting*

The Project site is currently fully developed and contains approximately 23 existing structures. The site is connected to water, wastewater, and stormwater services. Natural gas, electricity, and telecommunications are provided by private companies. Each utility system is described below.

#### *Water*

Water supply, usage, and services are described in Section 4.10.

#### *Wastewater*

Monterey One Water (M1W) is the public wastewater treatment agency for the City of Salinas. M1W provides wastewater collection, treatment, and disposal services. Collected wastewater is transported to the Regional Treatment Plan located two (2) miles north of the city of Marina, CA. The RTP's daily capacity is 29.6 million gallons

for primary and secondary treatment and five (5) million gallons for advanced purification for groundwater replenishment.[58] The RTP treats an average 17 million gallons per day with a remaining capacity of 12.6 million gallons per day.

The City of Salinas maintains 292 miles of sanitary sewer collection system pipeline, which vary in diameter from 6-inch to 54-inches, and 11 sanitary sewer lift stations. The city's Wastewater Division of the Public Works Department is responsible for the operation and maintenance of the city's sanitary sewer collection system, including performing infrastructure maintenance, water quality monitoring, illicit discharge prevention, and public education on the city's National Pollutant Discharge Elimination System Permit (NPDES). The City of Salinas Sewer System Master Plan (Updated 2023) addresses the City's long-term wastewater planning. [59]

### *Solid Waste*

The Salinas Valley Solid Waste Authority provides solid waste collection services for residents, commercial, and industrial developments in the city, transporting waste to the Johnson Canyon Landfill. This landfill is permitted to receive a maximum of 1,574 tons per day and has a remaining capacity of 6,923,297 cubic yards, with an estimated closure date of 2055. Of note, to comply with the California Integrated Waste Management Act of 1989 (AB 939), Monterey County is required to divert at least 50 percent of solid waste from landfills. The City of Salinas mandates recycling for businesses and multifamily complexes, including both Business Recycling and Organic Recycling, as required by the city's ordinance and State law (i.e., AB 341, Mandatory Commercial Recycling Law). The City also implements a Household Hazardous Waste Program to ensure that hazardous waste produced in homes is safely used, transported, and disposed of.

### *Stormwater*

Stormwater services are described in Section 4.10.

### *Natural Gas and Electricity*

The Central Coast Community Energy (CCCE) would provide electricity supply to new development at the Project site. Pacific Gas and Electric Company (PG&E) would provide electricity transmission and natural gas. According to the PG&E Distribution Investment Deferral Framework (DIDF) Map, there are PG&E-maintained power lines along the street frontages surrounding the Project site.[60]

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[58] Monterey One Water. (2022). Regional Treatment Plant. Accessed on November 23, 2022, https://www.montereyonewater.org/280/Regional-Treatment-Plant

[59] City of Salinas (2023). Sanitary Sewer Master Plan Update. Accessed July 31, 2023, https://www.cityofsalinas.org/files/sharedassets/city/public-works/documents/salinas-sanitary-sewer-master-plan-update-2023.pdf

[60] PG&E. (2022). Distribution Investment Deferral Framework (DIDF) Map. Accessed on November 23, 2022, https://www.pge.com/b2b/distribution-resource-planning/grid-needs-assessment-map.html

### *Telecommunications*

Accordingly, telecommunications providers in the area incrementally expand and update their service systems in response to usage and demand. Upon request, the site would be connected to existing broadband infrastructure and subject to applicable connection and service fees.

### *4.19.2 Impact Assessment*

***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?***

**Less than Significant Impact.** The Project site is within city limits and thus, future development of the Project site would be required to connect to water, stormwater, and wastewater services, and utilize solid waste, collection services. Natural gas, electricity, and telecommunications would be provided by private companies. In general, the Project site is an infill site within an area of the city that is predominantly developed with commercial uses. Because the Project site is largely developed, there is existing utility infrastructure available to serve the site which would not 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. Through the entitlement review process for future development, the city and responsible agencies would review the Project to ensure compliance with applicable connection requirements. Compliance would ensure that future development would not cause significant environmental effects related to utilities and service systems. For these reasons, a less than significant impact would occur because of the Project.

b) ***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 discussed in detail in Section 4.10, the city's long-term water resource planning is addressed in the city's UWMP. As concluded in Section 4.10, it can be presumed that existing and planned water supplies should be adequate to serve the Project's anticipated demand at maximum buildout. Regarding water supply availability for the Project and future development, the UWMP indicates that Cal Water has sufficient production capacity and groundwater supply to meet most demands in the future during normal, dry, and multiple dry years. Minor shortfalls (two percent) are anticipated in 2040 under single dry year and multiple dry year conditions in the Salinas PWS and is expected to increase slightly in 2045. However, the UWMP expects for shortfalls to be alleviated through implementation of the Water Shortage Contingency Plan (WSCP) and other supply augmentation measures as discussed in Chapter 8 – Water Shortage Contingency Planning in the UWMP.

Furthermore, as discussed under Section 4.10, adherence to connection requirements and recommendations pursuant to the city's and Cal Water's water conservation efforts (e.g., compliance with California Plumbing Code, efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. In particular, future development would be built accordance with all mandatory outdoor water use requirements as outlined in the applicable California Green Building Standards Code, Title 24, Part 11, Section 4.304 – Outdoor Water Use and verified through the building permit process. As a mixed-use development that would contain landscaping pursuant to SMC regulations, future development shall comply with the updated Model Water

Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Chapter 2.7, Division 2), as implemented and enforced through the building permit process. Therefore, through compliance, the potential for the Project to substantially decrease groundwater supplies is limited and impacts would be less than significant.

Finally, although the proposed Project, would increase demand for water use on this specific site compared to the water use currently on the site, as previously discussed in Section 2.9 of this document, the overall projected citywide population would not change because of this Project. In fact, the increase in potential residential units does not constitute a significantly greater water demand because higher density, multi-family residential development generates less water use due to property features including less outdoor irrigation due to shared common areas. Thus, if assumed population increases are redirected to higher density multi-family development rather than single-family development, the overall anticipated water demand would be less than anticipated citywide. In addition, the UWMP determined that there is enough water capacity to serve the city's projected population. As discussed further in Section 4.14.2, the population and housing units generated by the proposed Project would be within the AMBAG projections for the region and city.

Overall, based on the information collected from the UWMP, the Project would not generate significantly greater water demand as to substantially decrease groundwater supplies. Additionally, adherence to connection requirements and recommendations pursuant to water conservation efforts as well as compliance with applicable California Green Building Standards Code and MWELO would reduce water demand and reduce the potential for the Project to substantially decrease water supply available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. For these reasons, the Project would have a less than significant impact.

c) *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 with Mitigation Incorporated. The City's long-term wastewater planning is addressed in the City's Sanitary Sewer Master Plan Update (Master Plan).[61] Land use types are important to determine projected demand and adequate sizing and capacity for pipes and facilities to maintain effective sanitary sewer system facilities. The land use assumptions in the Master Plan were based on the General Plan Land Use Map and the City's GIS database.

The Master Plan also uses the General Plan to forecast the wastewater flows that will be contributed by growth areas in the future, both within and outside City limits, for buildout in the Year 2045. For the purposes of the Master Plan, 213,063 persons was used for the City's buildout population. Although it is assumed that water conservation measures will be taken, such as low flow plumbing fixtures for future developments, the future flows are determined by using the existing flow factors identified in the Master Plan. The total estimated future flow is estimated to 17,715,200 gallons per day (GPD).

[61] City of Salinas (2023). Sanitary Sewer Master Plan Update. Accessed July 31, 2023, https://www.cityofsalinas.org/files/sharedassets/city/public-works/documents/salinas-sanitary-sewer-master-plan-update-2023.pdf

To analyze capacity of the collection system, the Master Plan utilizes the City's Public Works Department's Standard Specifications and Design Standards (2017) and the City's Sewer System Management Plan (2019). One of the performance criteria for gravity sewer lines is the maximum allowable flow depth (i.e., d/D ratio). The variables used in this ratio include the depth of flow in a pipe, d, divided by the diameter of the pipe, D. The maximum d/D criteria defined in the Sewer System Management Plan is 0.90 for all existing pipes and 0.75 for new developments. The maximum allowable flow depth criteria is based on pipe diameter ranges, consistent with industry standards that typically have varying levels of d/D ratios for various pipe sizes.

According to the Master Plan, the Project site is in the existing sewer service area with existing 8-inch, 10-inch, and 12-inch pipes serving the site, in addition to an existing sewer main located in Alisal Street. The Project site is not within a future growth area, nor is the site in an area with existing or future sewer upgrade projects planned due to pipeline deficiencies and flow conditions.

The Project proposes to change the planned land use from Retail and General Commercial/Light Industrial to Mixed Use. As shown in Table 4-4 of the Master Plan, the Residential land use type is projected to generate a wastewater flow factor of 54.5 GPD per person and the Commercial land use type is projected to generate a wastewater flow factor of 0.08 GPD per square feet. Table 4-15 summarizes the total wastewater flows to be expected for future buildout of the Project site compared to the existing wastewater flows estimated for the existing use. The estimated wastewater flows for future buildout of the Project site account for approximately 0.72 percent of the total estimated future flow for buildout in the Year 2045 (126,958 GPD divided by 17,715,200 GPD equals 0.72 percent). Therefore, the wastewater treatment plant would have the capacity to meet the wastewater demands resulting from maximum buildout of the site.

Table 4-15 Estimated Wastewater Flow by Land Use

| Land Use | Unit | Flow Factor (GPD/Unit) | Existing Average Flow | Future Average Flow |
|---|---|---|---|---|
| Residential | Persons | 54.5 | None | 116,446[62] |
| Commercial | Square Feet | 0.08 | 12,000[63] | 10,512[64] |
| | | Total | 12,000 | 126,958 |

However, given the potential increase in future average flow resulting from Project implementation, there is a potential for flows to exceed the allowable flow depth for gravity sewer lines that could cause insufficient capacity to meet the City's performance standards while conveying existing population wastewater flows. Insufficient pipeline capacity would necessitate upgrades and improvements. As discussed above, the maximum d/D criteria defined in the Sewer System Management Plan is 0.75 for new developments; exceedance of 0.75 d/D would constitute a significant impact. Therefore, to mitigate any impacts to gravity sewer lines to a less than significant level, the Project shall incorporate ***Mitigation Measure UTL-1***

[62] Future population of the Project site was estimated in Section 4.14, finding that a 515-unit residential development could generate 2,137 residents.

[63] The square footage of existing commercial buildings was estimated using property data and aerial imagery. Based on this data, there is approximately 150,000 square feet of existing building area.

[64] As detailed in the Project Description, build out of the Project site could result in a commercial building area of 131,406 square feet.

***Mitigation Measure UTL-1:*** *New development generating wastewater flows that results in a downstream exceedance of 0.75 d/D shall construct system upgrades for those found to be insufficient in capacity per the requirements of the Public Works Department. The flow shall be verified through a sewer modeling program during the planning and design phase, prior to entitlement approval. The model shall evaluate pipeline capacity, flow velocity, and maximum d/D ratio for normal, dry, and wet weather conditions.*

In addition, future development would be reviewed and conditioned by the City to install new branches or laterals and pay all required connection charges and ongoing user charges to serve the development. This, in addition to compliance with ***Mitigation Measure UTL-1***, would ensure that the Project's impacts on wastewater facilities are adequately offset (i.e., ensuring that sufficient capacity is available). Compliance with these requirements would be ensured through the building permit process.

In summary, maximum buildout of the Project site is anticipated to generate additional wastewater beyond existing conditions. However, the estimated generation would be within the remaining capacity of the wastewater treatment plant. In addition, future development of the Project site resulting in downstream exceedance of pipeline capacity would be required to comply with ***Mitigation Measure UTL-1***. Future development would be reviewed and conditioned by the City to install new branches or laterals and pay applicable fees to adequately offset any impacts. This would ensure that sufficient capacity is maintained and therefore impacts would be less than significant with mitigation incorporated.

*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?*

**Less than Significant Impact.** Although no development is currently proposed, future development that results from the implementation of the Project would generate solid waste and recycling. The future development would be served by the Salinas Valley Solid Waste Authority and would be required to comply with local and state law regarding solid waste and recycling. According to CalEEMod (Appendix A), buildout of the Project site is expected to generate approximately 374.9 tons per year or 2,054 pounds per day of solid waste. Assuming a 50 percent diversion from landfills pursuant to AB 939, the Project would send approximately 187.4 tons per year or 1,027 pounds per day of solid waste to the Johnson Canyon Landfill, which would account for less than 0.1 percent of the landfill's receiving maximum.

In addition, through the entitlement review process, future development would be required to comply with requirements outlined in SMC *Sec. 37-50.200. - Recycling and solid waste disposal regulations.* Compliance with these requirements would ensure regular collection and recycling of materials based on the capacity of local infrastructure. Through compliance, future development would not 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. For these reasons, the Project would have a less than significant impact.

*e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**Less than Significant Impact.** As described under criterion d), future development would be required to comply with state and local law which include management and reduction statutes and regulations to ensure that solid waste is handled, transported, and disposed accordingly. Through compliance with local and state law, it can be determined

that future development would also comply with federal, state, and local management and reduction statutes and regulations related to solid waste. As a result, a less than significant impact would occur because of the Project.

### *4.19.3 Mitigation Measures*

The Project shall implement and incorporate, as applicable, the Utilities and Service System related mitigation measure UTL-1 as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

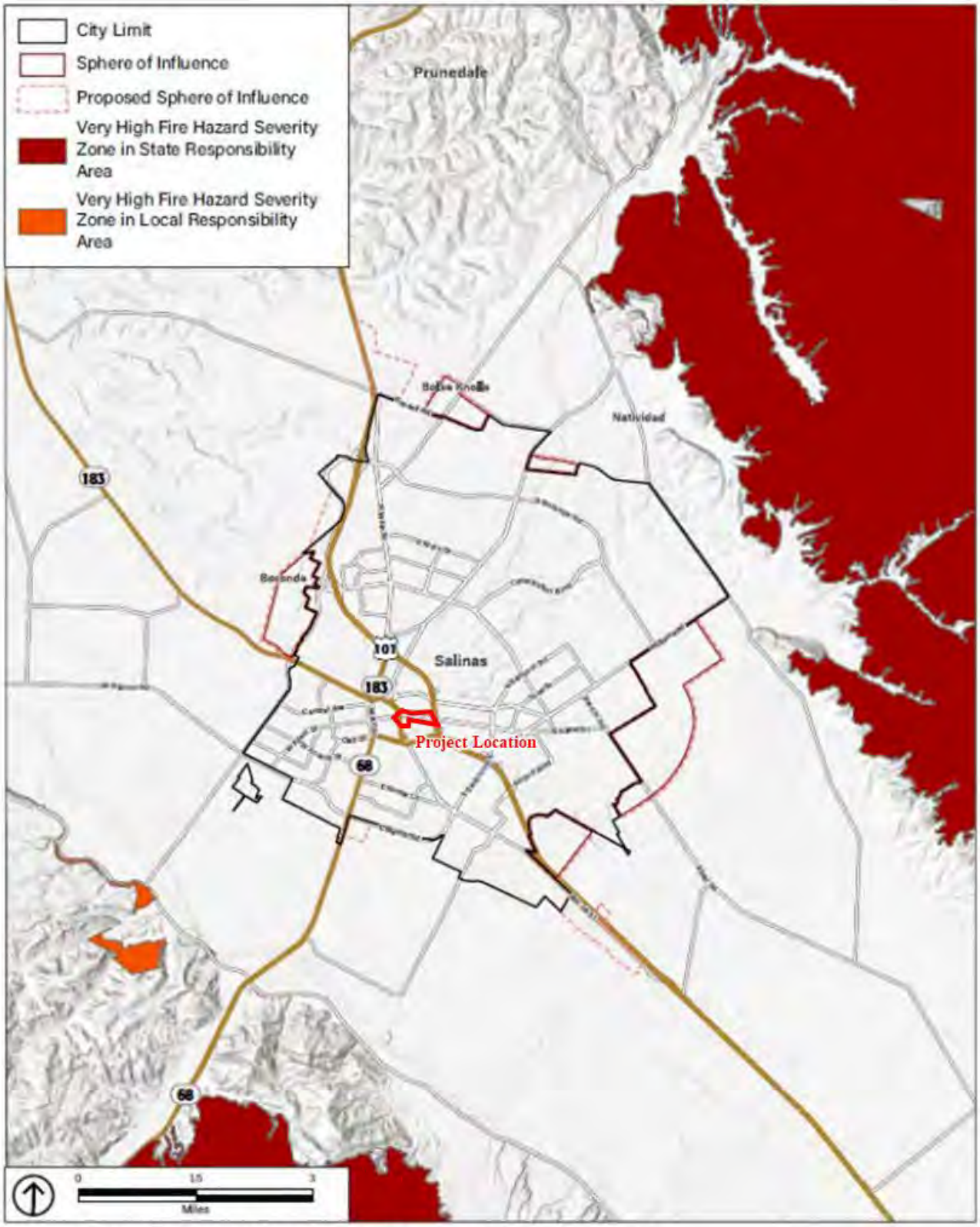
## 4.20 WILDFIRE

| If located in or near state responsibility or lands classified as very high fire hazard severity zones, **Would the project:** | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| *a)* Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | | X |
| *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? | | | | X |
| *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? | | | | X |
| *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? | | | | X |

### *4.20.1 Environmental Setting*

The City of Salinas is an urbanized community that is surrounded by agricultural lands. The risk of wildland fires increases in the rangelands on the hillsides surrounding the city. The Project site is centrally located within the city limits and sphere of influence and is not in proximity to the rangelands or hillsides. As such, the greatest fire risk is urban fires. The city, inclusive of the Project site, is not located in or near state responsibility or lands classified as moderate, high, or very high fire hazard severity zones as identified by CAL FIRE.[65] Rather, the city, inclusive of the Project site, is within an "area of local responsibility" that is an area of low fire risk. As an area of local responsibility, the Salinas Fire Department is responsible for providing fire protection services (See Section 4.15).

[65] California Department of Forestry and Fire Protection. FHSZ Viewer. Accessed on August 29, 2022, https://egis.fire.ca.gov/FHSZ/.




Source: State of California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, 2007; City of Salinas, 2021.

Figure 4-17 Very High Fire Hazard Severity Zones Surrounding the City of Salinas

### *4.20.2 Impact Assessment*

If located in or near state responsibility 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?***

No Impact. The city inclusive of the Project site is not located in or near state responsibility or lands classified as very high fire hazard severity zones. The Project site is fully developed and paved, containing existing structures and on- and off-site improvements including drive approaches, curb, gutter, sidewalk, streetlights, utilities, and landscaping. As discussed in Section 4.15, the Salinas Fire Department provides emergency response and public safety services for sites within city limits including the Project site. Future development would be reviewed and conditioned by the City for adequate provision of vehicular and pedestrian circulation and emergency access. Review and approval by the City would ensure that future development does not substantially impair the adopted emergency response plan or emergency evacuation plan. For these reasons, no impact would occur because of the Project.

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?***

No Impact. The city inclusive of the Project site is not located in or near state responsibility or lands classified as very high fire hazard severity zones. The Project site is fully developed and paved, is located on a relatively flat property with minimal slope and is not in an area that is subject to strong prevailing winds or other factors that would exacerbate wildfire risks. For these reasons, no impact would occur.

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?***

No Impact. The city inclusive of the Project site is not located in or near state responsibility or lands classified as very high fire hazard severity zones. The Project site is fully developed and paved. As such, the site is served by existing infrastructure such as roads, fuel breaks, emergency water sources, power lines, and other utilities. Future development of the site would be reviewed and conditioned by the City for compliance with applicable standards, specifications, and codes related to the installation and maintenance of infrastructure. Such infrastructure would be typical for urban uses and would not exacerbate fire risks or result in temporary or ongoing impacts to the environment. Therefore, no impact would occur.

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?***

No Impact. The city inclusive of the Project site is not located in or near state responsibility or lands classified as very high fire hazard severity zones. The topography of the Project site is relatively flat with stable, native soils, and the site is not in the immediate vicinity of rivers or creeks that would be more susceptible to landslides. Therefore, no impact would occur because of the Project.

### *4.20.3 Mitigation Measures*

None required.

## 4.21 MANDATORY FINDINGS OF SIGNIFICANCE

| | Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *a)* | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | X | | |
| *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)? | | X | | |
| *c)* | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | X | | |

### *4.21.1 Impact Assessment*

*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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?*

Less than Significant Impact with Mitigation Incorporated. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Standard requirements that will be implemented through the entitlement process and the attached mitigation monitoring and reporting program have been incorporated in the project to

reduce all potentially significant impacts to less than significant. Therefore, the Project would have a less than significant impact.

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.)*

Less than Significant Impact with Mitigation Incorporated. CEQA Guidelines *Section 15064(i)* states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. All Project-related impacts were determined to be less than significant in compliance with all applicable standards, policies, and mitigation measures. The Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc.). In addition to the proposed Project, four (4) other General Plan Amendments and Rezones (GPA/RZ) are proposed within the City of Salinas. All these GPA/RZ projects are funded by SB 2 for the purpose of providing additional opportunities for housing and mixed-use development, in line with the goals contained in the General Plan and Housing Element. This indicates that the anticipated growth and impacts from the GPA/RZs are, to an extent, compliant and previously analyzed within the General Plan and Housing Element. In addition, no development is proposed or mandated as part of these GPA/RZs, and there is no guarantee of future development or the timing that development could happen. In addition, as mentioned above, it has been shown in previous studies that upzoning property doesn't typically result in overall population increases. As such, Project impacts are not considered to be cumulatively considerable given the insignificance of project induced impacts. The impact is therefore less than significant with mitigation incorporated.

c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

Less than Significant Impact with Mitigation Incorporated The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Standard requirements and conditions in addition to mitigation measures have been incorporated in the project to reduce all potentially significant impacts to less than significant. Therefore, the Project would have a less than significant impact with mitigation incorporated.

# 5 MITIGATION MONITORING AND REPORTING PROGRAM

This mitigation measure monitoring and reporting checklist was prepared pursuant to California Environmental Quality Act (CEQA) Guidelines *Section 15097* and *Section 21081.6* of the PRC (PRC). The timing of implementing each mitigation measure is identified in in the checklist, as well as identifies the entity responsible for verifying that the mitigation measures applied to a project are performed. Project applicants are responsible for providing evidence that mitigation measures are implemented. As lead agency, the City of Salinas is responsible for verifying that mitigation is performed/completed.

| Mitigation Measures | Timing of Verification | Responsible for Verification | Verification of Completion | |
|---|---|---|---|---|
| | | | Date | Initials |
| Air Quality | | | | |
| ***Mitigation Measure AQ-1:*** *Construction Air Quality. During construction, the applicant or successor in interest for each individual site shall:*<br>• *Limit grading to 8.1 acres per day, and limit grading and excavation to 2.2 acres per day.*<br>• *Provide watering trucks on site to maintain adequate soil moisture during grading and water graded/excavated areas at least twice daily, thus minimizing dust generation. In addition, the water trucks shall be used to wash down trucks and tractors, including earth loads, prior to entering public roadways.*<br>• *Prohibit all grading activities whenever wind speeds exceed 15 miles per hour (mph).*<br>• *Maintain a minimum of two feet for freeboard for all haul trucks.*<br>• *Cover all trucks hauling dirt, sand, or loose materials.*<br>• *Cover inactive storage piles.*<br>• *Enforce a 15-mph speed limit for all unpaved surfaces when visible dust clouds are formed by vehicle movement.* | During construction. | Development and Engineering Services Department – Plan Check Service | | |

| | | | | |
|---|---|---|---|---|
| • *Place gravel base near site entrances to clean tires prior to entering public roadways.* | | | | |
| ***Mitigation Measure AQ-2:*** *MBARD Health Risk Consultation. Prior to issuance of any grading permit and/or building permit for each individual site, the applicant or successor in interest shall consult with MBARD regarding the potential need for a diesel health risk assessment (HRA). If required, the applicant or successor in interest shall prepare a diesel HRA and shall implement the measures contained therein to ensure that project-specific emissions are below MBARD's established health risk thresholds: hazard index greater than 1 for acute or chronic impacts, and cancer risk greater than 10 in one million for long-term operational emissions or 1 per 100,000 population for temporary construction-related emissions. Measures may include, but would not be limited to:*<br>• *Use of diesel-fueled equipment equipped with Tier 4 (or Tier 3 if the Tier 4 standard is unavailable) USEPA engine standards. The USEPA estimates that Tier 4 engines would reduce PM emissions by approximately 90 percent compared to the USEPA Tier 2 standards (USEPA 2008).*<br>• *Retrofit off-road diesel equipment with Verified Diesel Emissions Control Strategy (VDECS) like Diesel Particulate Filters (DPF). Particulate Matter level 3 VDECS can provide at least an 85 percent reduction (CARB 2015).*<br>• *Use alternatively fueled (e.g., natural gas) diesel construction equipment, including all off-road and portable diesel-powered equipment.*<br>• *Use electrically driven equipment that is not powered by a portable generator set.*<br>• *Limit the hours of operation for heavy-duty equipment and/or limit the quantity of heavy-duty equipment operating at the same time.* | Prior to issuance of any grading permit and/or building permit; during construction. | Development and Engineering Services Department – Plan Check Services; MBARD | | |
| Biological Resources | | | | |
| ***Mitigation Measure BIO-1:*** *Nesting Bird Surveys and Avoidance. The Project shall implement the following measures to mitigate for loss of nesting habitat of the Project in compliance with the federal Migratory Bird Treaty Act and relevant Fish and Game Codes:* | Not more than 14 days prior to | Development and Engineering Services Department – Community | | |

| | | | | |
|---|---|---|---|---|
| • ***Avoidance.*** *In order to avoid impacts to nesting raptors and migratory birds, the Project will be constructed, if feasible, from September 16th and January 31st, which is outside the avian nesting season.*<br>• ***Preconstruction Surveys.*** *If Project activities must occur during the nesting season (February 1-September 15), a qualified biologist will conduct preconstruction surveys for active raptor and migratory bird nests within 10 days prior to the start of these activities. The survey will include the proposed work area(s) and surrounding lands within 500 feet, where accessible, for all nesting raptors and migratory birds. If no active nests are found within the survey area, no further mitigation is required.*<br>• ***Establish Buffers.*** *Should any active nests be discovered near proposed work areas, no disturbance buffers of 250 feet around active nests of non-listed bird species and 500 feet around active nests of non-listed raptors will be established. If work needs to occur within these no disturbance buffers, a qualified biologist will monitor the nest daily for one week, and thereafter once a week, throughout the duration of construction activity. Should the nature of construction activity significantly change, such that a higher level of disturbance will be generated, monitoring will occur daily for one week and then resume the once-a-week regime. If, at any time, the biologist determines that construction activity may be compromising nesting success, construction activity within the designated buffer will be altered or suspended until the biologist determines that the nest site is no longer susceptible to deleterious disturbance.* | vegetation clearance. | Development Department | | |
| Cultural Resources | | | | |
| ***CUL-1 Historical Resources Identification and Treatment Plan***<br>*Prior to permit approval for development on the Project site, a historical resources evaluation shall be completed for that individual site to confirm if existing buildings and/or structures withing these sites qualify as historical resources as defined by Section 15064.5(a) of CEQA Guidelines. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in architectural history or history. The qualified* | Prior to permit approval. | Development and Engineering Services Department – Community Development Department | | |

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|---|---|---|---|---|
| *architectural historian or historian shall conduct an intensive-level evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. All properties 45 years of age or older shall be evaluated within their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and concurrence.*<br>*Any relocation, rehabilitation, or alteration of the resource shall be implemented consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR Section 15126.4[b][1]). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence, in addition to the historical resources evaluation.*<br>*If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not feasible, the applicant or developer shall provide a report explaining why compliance with the Standards and or avoidance is not feasible for the City's review and approval. Site-specific mitigation measures shall be established and undertaken, including, but not limited to, documentation of the historical resource in the form of a Historic American Buildings Survey-Like report. The report shall be commissioned by the project applicant or their consultant to comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the Historic American Buildings Survey Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified* | | | | |

| | | | | |
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| *architectural historian or historian who meets the PQS and submitted to the City prior to issuance of any permits for demolition or alteration of the historical resource.* | | | | |
| *Mitigation Measure CUL-2 Phase I Cultural Resources Study*<br>*Prior to the issuance of any grading or construction permits for each individual site, a Phase I cultural resources study shall be performed by a qualified professional meeting the Secretary of the Interior's (SOI's) Professional Qualification Standards (PQS) for archaeology (National Park Service 1983). The Phase I cultural resources study shall include a pedestrian survey of the project site when appropriate and sufficient background research and field sampling to determine whether archaeological resources may be present. Archival research shall include a records search of the Northwest Information Center (NWIC) no more than two years old and a Sacred Lands File search with the NAHC. The Phase I technical report documenting the study shall include recommendations that shall be implemented prior to and/or during construction to avoid or reduce impacts to archaeological resources. Recommendations may include, but would not be limited to, archaeological construction monitoring, sensitivity training, or additional testing and mitigation (outlined in Mitigation Measures CUL-3 through CUL-7). The report shall be submitted to the City for review and approval prior to the issuance of any grading or construction permits. The City shall include recommendations in the Phase I technical report as Conditions of Approval to be implemented throughout all ground disturbance activities. The final report shall be submitted to the NWIC.* | Prior to issuance of grading or construction permits. | Development and Engineering Services Department – Community Development Department | | |
| *Mitigation Measure CUL-3 Extended Phase I Testing*<br>*If recommended by the Phase I study for each individual site (Mitigation Measure CUL-2), the project applicant shall retain a qualified archaeologist to conduct an Extended Phase I (XPI) study to determine the presence/absence and extent of archaeological resources on the project site. XPI testing shall include a series of shovel test pits and/or hand augured units and/or mechanical trenching to establish the boundaries of archaeological site(s) on the project site. If the boundaries of the archaeological site are already well understood from previous archaeological work, an XPI will not be required. All archaeological excavation shall be conducted by a qualified archaeologist(s) under the direction of a principal investigator meeting the SOI's PQS for archaeology (National* | Prior to the issuance of a grading or construction permit. | Development and Engineering Services Department – Community Development Department | | |

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|---|---|---|---|---|
| *Park Service 1983). If an XPI report is prepared, it shall be submitted to the City for review and approval prior to the issuance of a grading or construction permit. Recommendations therein shall be implemented for all ground disturbance activities. Recommendations may include, but would not be limited to, site avoidance, Phase II Site Evaluation, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-4, CUL-5, CUL-7, and CUL-8). The final report shall be submitted to the NWIC.* | | | | |
| *Mitigation Measure CUL-4 Archaeological Site Avoidance*<br>*Any identified archaeological sites (determined after implementing Mitigation Measures CUL-2 and/or CUL-3) or archaeological resources encountered during ground-disturbing activities shall be avoided by project-related construction activities, where feasible. A barrier (temporary fencing) and flagging shall be placed between the work location and any resources within 60 feet of a work location to minimize the potential for inadvertent impacts. If the resource cannot be avoided, Mitigation Measure CUL-5 shall be implemented.* | During construction. | Development and Engineering Services Department – Community Development Department | | |
| *Mitigation Measure CUL-5 Phase II Site Evaluation*<br>*If the results of any Phase I and/or XPI for each individual site (Mitigation Measures CUL-2 and/or CUL-3) indicate the presence of archaeological resources that cannot be avoided by the project (Mitigation Measure CUL-4) and that have not been adequately evaluated for the NRHP or CRHR listing at the project site, the qualified archaeologist shall conduct a Phase II investigation to determine if intact deposits remain and if they may be eligible for the CRHR or qualify as unique archaeological resources. If the archaeological resource(s) of concern are Native American in origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s).*<br>*A Phase I evaluation shall include any necessary archival research to identify significant historical associations and mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit. The sample excavation would be carried out to characterize the nature of the site(s), define the artifact and feature contents, determine horizontal and vertical boundaries, and retrieve representative samples of artifacts and other remains.* | During construction. | Development and Engineering Services Department – Community Development Department | | |

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| *If the archaeologist and, if applicable, a Native American monitor or other interested tribal representative determine it is appropriate, cultural materials collected from the site shall be processed and analyzed in a laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the site(s) shall be evaluated according to the criteria of the CRHR and if applicable, NRHP. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)." Recommendations in the Phase II report shall be implemented for all ground disturbance activities. Recommendations may include, but would not be limited to, Phase III Data Recovery, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-6 through CUL-8). The report shall be submitted to the City for review and approval prior to the issuance of any grading or construction permits. The final report shall be submitted to the NWIC.* | | | | |
| *Mitigation Measure CUL-6 Phase III Data Recovery*<br>*Should the results of the Phase II site evaluation for each individual site (Mitigation Measure CUL-5) yield resources that meet CRHR significance standards and if the resource cannot be avoided by project construction in accordance with CUL-4, the project applicant shall ensure that all feasible recommendations for mitigation of archaeological impacts are incorporated into the final design and approved by the City prior to construction. Any necessary Phase III data recovery excavation, conducted to exhaust the data potential of significant archaeological sites, shall be carried out by a qualified archaeologist meeting the SOI's PQS for archeology (National Park Service 1983). Data recovery shall be conducted in accordance with a research design reviewed and approved by the City, prepared in advance of fieldwork, and using the appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. If the archaeological resource(s) of concern are Native American in* | During construction. | Development and Engineering Services Department – Community Development Department | | |

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|---|---|---|---|---|
| *origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s).*<br>*As applicable, the final Phase III Data Recovery reports shall be submitted to the City prior to issuance of any grading or construction permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities. Recommendations may include, but would not be limited to, Cultural Resources Monitoring, and/or measures for unanticipated discoveries (outlined in Mitigation Measures CUL-7 and CUL-8). The final report shall be submitted to the NWIC upon completion.* | | | | |
| *Mitigation Measure CUL-7 Cultural Resources Monitoring*<br>*If recommended by Phase I, XPI, Phase II, or Phase III studies for each individual site (Mitigation Measures CUL-2, CUL-3, CUL-5, and/or CUL-6), the project applicant shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities which may include the following but not limited to: grubbing, vegetation removal, trenching, grading, and/or excavations. The archaeological monitor shall coordinate with any Native American monitor as required. Monitoring logs must be completed by the archaeologist daily. Cultural resources monitoring may be reduced for the project if the qualified archaeologist finds it appropriate to reduce the monitoring efforts. Upon completion of ground disturbance for the project, a final report must be submitted to the City for review and approval documenting the monitoring efforts, cultural resources find, and resource disposition. The final report shall be submitted to the NWIC.* | During construction. | Development and Engineering Services Department – Community Development Department | | |
| *Mitigation Measure CUL-8 Unanticipated Discovery of Cultural Resources*<br>*If archaeological resources are encountered during ground-disturbing activities, work within 50 feet shall be halted and the project archaeologist meeting the SOI's PQS for archeology (National Park Service 1983) shall immediately to evaluate the find pursuant to Public Resources Code Section 21083.2. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery excavation, to mitigate any significant impacts to significant resources. If the resource is of Native American origin, implementation of Mitigation Measures TCR-1 may be required. Any reports required to* | During construction. | Development and Engineering Services Department – Community Development Department | | |

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|---|---|---|---|---|
| *document and/or evaluate unanticipated discoveries shall be submitted to the City for review and approval and submitted to the NWIC after completion. Recommendations contained therein shall be implemented throughout the remainder of ground disturbance activities.* | | | | |
| Greenhouse Gas Emissions | | | | |
| ***Mitigation Measure GHG-1:*** *Future development shall install EV charging infrastructure according to the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.* | Prior to permit approval. | Development and Engineering Services Department – Community Development Department | | |
| ***Mitigation Measure GHG-2:*** *Future development shall provide no more parking spaces than the off-street parking requirements established in the City of Salinas Municipal Code. Alternatively, multi-family residential development can choose to unbundle parking costs with costs to rent or own a residential unit instead of meeting the maximum off-parking requirement.* | Prior to permit approval. | Development and Engineering Services Department – Community Development Department | | |
| Hazards and Hazardous Material | | | | |
| ***Mitigation Measure HAZ-1:*** *Prior to the obtaining grading permits or starting other ground disturbing work for each individual parcel, the City shall hire a qualified environmental professional to conduct a Phase I environmental assessment (ESA), consistent with the American Society for Testing Materials standards (ASTM E1527). The Phase I ESA shall evaluate the likelihood that hazardous chemicals are present and whether soil sampling is necessary. If the Phase I ESA indicates that contamination is unlikely, no further mitigation is necessary other than any recommendations identified in the Phase I ESA (such as stopping work if stained soil is encountered). If the Phase I ESA indicates that additional soil sampling or other further evaluation is necessary, the City and/or future developer shall hire a qualified environmental professional to conduct a Phase II ESA to determine the presence and extent of contamination. If the results* | Prior to obtaining grading permits or starting other ground disturbing work for each individual parcel. | Development and Engineering Services Department – Community Development Department. | | |

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|---|---|---|---|---|
| *indicate that contamination exists at levels above regulatory action standards, then the site shall be remediated in accordance with recommendations made by applicable regulatory agencies, including RWQCB and DTSC. The agencies involved shall depend on the type and extent of contamination. If remediation is necessary, the City shall hire a qualified environmental professional prior to obtaining grading permits or ground disturbance to prepare a work plan that identifies necessary remediation activities, including excavation and removal of on-site contaminated soils, appropriate dust control measures, and redistribution of clean fill material on the project site. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil removed from the site. The plan shall also identify when and where soil disturbing construction activities may safely commence. The City shall review and approve the work plan prior to issuance of demolition or grading permits. The City shall require individual projects to comply with the work plan as a condition of approval.* | | | | |
| Hydrology and Water Quality | | | | |
| ***Mitigation Measure HYD-1:*** *Future Development projects on the subject site that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project are required to prepare a Water Supply Assessment.* | Prior to permit approval. | Development and Engineering Services Department – Community Development Department | | |
| Noise | | | | |
| ***Mitigation Measure NOI-1:*** *Prior to ground disturbing activities, the City of Salinas shall ensure the following with the Project proponent:*<br>• *Construction equipment, fixed of mobile, shall be outfitted with properly operating and maintained mufflers.*<br>• *Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas* | During construction. | Development and Engineering Services Department – Community Development Department. | | |

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|---|---|---|---|---|
| *and occupied residential areas, and using electric air compressors and similar power tools rather than diesel equipment shall be used.*<br>• *During construction, stationary construction equipment shall be located so that emitted noise is directed away from or shielded from sensitive noise receivers.* | | | | |
| ***Mitigation Measure NOI-2:*** *The use of heavy construction equipment within 25 feet of existing structures shall be prohibited.* | During construction. | Development and Engineering Services Department – Community Development Department. | | |
| Transportation | | | | |
| ***Mitigation Measure TRANS-1:*** *To maintain safety standards at all intersections and roadway segments pursuant to implementation actions identified in the Vision Zero Action Plan, a traffic impact study shall be required for all development projects anticipated to generate 110 or more new daily vehicle trips within the Project Area, unless not required by the City. Depending on the results of this study, future developments may be required to construct or contribute to street safety improvements to meet the demand generated by the project. Improvements shall be in accordance with the City of Salinas' Vision Zero Action Plan (i.e. pedestrian-activated crosswalk warning beacon, high visibility crosswalks, pedestrian hybrid beacon, reduced parking at intersection, intersection control, raised median and street trees, protected bike lanes, and lane reduction). These improvements shall be required as conditions of approval.* | Prior to permit approval. | Development and Engineering Services Department –Traffic Engineering and Plan Check Services | | |
| Tribal Cultural Resources | | | | |
| ***Mitigation Measure TCR-1 Inadvertent Discoveries During Construction***<br>*In the event that cultural resources of Native American origin are identified during grading or construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find; an appropriate Native American representative, based on the nature of the find, is consulted; and mitigation measures are put in place for the disposition and protection of any find pursuant to Public Resources Code Section* | During construction. | Development and Engineering Services Department – Community Development Department. | | |

| | | | | |
|---|---|---|---|---|
| *21083.2. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American group(s) prior to continuation of any earth disturbing work within the vicinity of the find. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.* | | | | |
| Utilities and Service Systems | | | | |
| ***Mitigation Measure UTL-1:*** *New development generating wastewater flows that results in a downstream exceedance of 0.75 d/D shall construct system upgrades for those found to be insufficient in capacity per the requirements of the Public Works Department. The flow shall be verified through a sewer modeling program during the planning and design phase, prior to entitlement approval. The model shall evaluate pipeline capacity, flow velocity, and maximum d/D ratio for normal, dry, and wet weather conditions.* | Prior to permit approval. | Development and Engineering Services Department | | |

# 6 REPORT PREPARATION

Names of Persons Who Prepared or Participated in the Initial Study:

| Lead Agency | | |
|---|---|---|
| Lead Agency | City of Salinas<br>65 West Alisal Street<br>Salinas, CA 93901 | Lisa Brinton, Director, Community Development Department<br><br>Oscar Resendiz, Associate Planner, Community Development Department |
| **Initial Study Consultant** | | |
| Initial Study | Precision Civil Engineering<br>1234 O Street<br>Fresno, CA 93721<br>(559) 449-4500 | Bonique Emerson, AICP, VP of Planning<br>Jenna Chilingerian, AICP, Senior Planner<br>Shin Tu, AICP Candidate, Associate Planner |
| **Technical Studies** | | |
| Noise Assessment | WJV Acoustics, Inc.<br>113 N Church Street<br>Visalia, CA 93291<br>(559) 627-4923 | Walter J. Van Groningen, President |

# 7 APPENDICES

## 7.1 Appendix A: CalEEMod Output Files

Prepared by Precision Civil Engineering, Inc. dated November 21, 2022.

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# Alisal Marketplace GPA and Rezone

**Monterey Bay Unified APCD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Apartments Mid Rise | 515.00 | Dwelling Unit | 12.10 | 515,000.00 | 2137 |
| Strip Mall | 131.40 | 1000sqft | 0.00 | 131,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.8 | **Precipitation Freq (Days)** | 53 |
| **Climate Zone** | 4 | | | **Operational Year** | 2027 |
| **Utility Company** | Pacific Gas and Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 203.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot acerage: Per the CalEEMod guide, if the project is mixed-use with non-residential and residential use, lot acreage value of the residential area should be retained and non-residential area to be zeroed out.
population: according to average household size

Construction Phase - Lengthen the total days for each phase to assume a 5-year buildout.

Grading -

Mobile Land Use Mitigation -

Area Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 300.00 | 900.00 |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |
| tblConstructionPhase | NumDays | 30.00 | 90.00 |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |
| tblConstructionPhase | NumDays | 10.00 | 30.00 |
| tblConstructionPhase | PhaseEndDate | 7/12/2024 | 12/23/2026 |
| tblConstructionPhase | PhaseEndDate | 5/17/2024 | 9/4/2026 |
| tblConstructionPhase | PhaseEndDate | 1/27/2023 | 3/24/2023 |
| tblConstructionPhase | PhaseEndDate | 3/24/2023 | 6/16/2023 |
| tblConstructionPhase | PhaseEndDate | 6/14/2024 | 10/23/2026 |
| tblConstructionPhase | PhaseEndDate | 2/10/2023 | 3/10/2023 |
| tblConstructionPhase | PhaseStartDate | 6/15/2024 | 10/1/2026 |
| tblConstructionPhase | PhaseStartDate | 5/18/2024 | 8/1/2026 |
| tblLandUse | LotAcreage | 13.55 | 12.10 |
| tblLandUse | LotAcreage | 3.02 | 0.00 |
| tblLandUse | Population | 1,473.00 | 2,137.00 |

## 2.0 Emissions Summary

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.5658 | 4.5484 | 5.0774 | 0.0119 | 1.1013 | 0.1877 | 1.2890 | 0.4214 | 0.1746 | 0.5960 | 0.0000 | 1,069.6639 | 1,069.6639 | 0.1907 | 0.0315 | 1,083.8184 |
| 2024 | 0.3711 | 2.3884 | 3.6761 | 9.3600e-003 | 0.4970 | 0.0862 | 0.5832 | 0.1337 | 0.0811 | 0.2148 | 0.0000 | 854.6731 | 854.6731 | 0.0850 | 0.0395 | 868.5701 |
| 2025 | 0.3453 | 2.2321 | 3.5481 | 9.1700e-003 | 0.4951 | 0.0745 | 0.5696 | 0.1332 | 0.0701 | 0.2033 | 0.0000 | 840.0902 | 840.0902 | 0.0831 | 0.0381 | 853.5255 |
| 2026 | 4.4042 | 1.7974 | 2.9018 | 7.0800e-003 | 0.3591 | 0.0646 | 0.4238 | 0.0965 | 0.0606 | 0.1572 | 0.0000 | 647.5948 | 647.5948 | 0.0761 | 0.0255 | 657.0968 |
| **Maximum** | **4.4042** | **4.5484** | **5.0774** | **0.0119** | **1.1013** | **0.1877** | **1.2890** | **0.4214** | **0.1746** | **0.5960** | **0.0000** | **1,069.6639** | **1,069.6639** | **0.1907** | **0.0395** | **1,083.8184** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.5658 | 4.5484 | 5.0774 | 0.0119 | 1.1013 | 0.1877 | 1.2890 | 0.4214 | 0.1746 | 0.5960 | 0.0000 | 1,069.6632 | 1,069.6632 | 0.1907 | 0.0315 | 1,083.8177 |
| 2024 | 0.3711 | 2.3884 | 3.6761 | 9.3600e-003 | 0.4970 | 0.0862 | 0.5832 | 0.1337 | 0.0811 | 0.2148 | 0.0000 | 854.6728 | 854.6728 | 0.0850 | 0.0395 | 868.5698 |
| 2025 | 0.3453 | 2.2321 | 3.5481 | 9.1700e-003 | 0.4951 | 0.0745 | 0.5696 | 0.1332 | 0.0701 | 0.2033 | 0.0000 | 840.0899 | 840.0899 | 0.0831 | 0.0381 | 853.5251 |
| 2026 | 4.4042 | 1.7974 | 2.9018 | 7.0800e-003 | 0.3591 | 0.0646 | 0.4238 | 0.0965 | 0.0606 | 0.1572 | 0.0000 | 647.5945 | 647.5945 | 0.0761 | 0.0255 | 657.0965 |
| **Maximum** | **4.4042** | **4.5484** | **5.0774** | **0.0119** | **1.1013** | **0.1877** | **1.2890** | **0.4214** | **0.1746** | **0.5960** | **0.0000** | **1,069.6632** | **1,069.6632** | **0.1907** | **0.0395** | **1,083.8177** |

| | ROG | NOx | 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** | **1-1-2023** | **3-31-2023** | 1.8823 | 1.8823 |
| **2** | **4-1-2023** | **6-30-2023** | 1.7625 | 1.7625 |
| **3** | **7-1-2023** | **9-30-2023** | 0.7268 | 0.7268 |
| **4** | **10-1-2023** | **12-31-2023** | 0.7444 | 0.7444 |
| **5** | **1-1-2024** | **3-31-2024** | 0.6933 | 0.6933 |
| **6** | **4-1-2024** | **6-30-2024** | 0.6770 | 0.6770 |
| **7** | **7-1-2024** | **9-30-2024** | 0.6845 | 0.6845 |
| **8** | **10-1-2024** | **12-31-2024** | 0.7010 | 0.7010 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | |
|---|---|---|---|---|
| **9** | **1-1-2025** | **3-31-2025** | 0.6430 | 0.6430 |
| **10** | **4-1-2025** | **6-30-2025** | 0.6347 | 0.6347 |
| **11** | **7-1-2025** | **9-30-2025** | 0.6417 | 0.6417 |
| **12** | **10-1-2025** | **12-31-2025** | 0.6572 | 0.6572 |
| **13** | **1-1-2026** | **3-31-2026** | 0.6354 | 0.6354 |
| **14** | **4-1-2026** | **6-30-2026** | 0.6278 | 0.6278 |
| **15** | **7-1-2026** | **9-30-2026** | 0.6636 | 0.6636 |
| | | **Highest** | 1.8823 | 1.8823 |

## 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 | 3.0976 | 0.0611 | 5.3077 | 2.8000e-004 | | 0.0295 | 0.0295 | | 0.0295 | 0.0295 | 0.0000 | 8.6787 | 8.6787 | 8.3200e-003 | 0.0000 | 8.8866 |
| Energy | 0.0249 | 0.2140 | 0.0973 | 1.3600e-003 | | 0.0172 | 0.0172 | | 0.0172 | 0.0172 | 0.0000 | 557.3086 | 557.3086 | 0.0550 | 0.0106 | 561.8457 |
| Mobile | 3.3698 | 3.9559 | 28.6566 | 0.0554 | 5.9053 | 0.0488 | 5.9541 | 1.5784 | 0.0455 | 1.6239 | 0.0000 | 5,306.2258 | 5,306.2258 | 0.3894 | 0.2732 | 5,397.3873 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 76.0952 | 0.0000 | 76.0952 | 4.4971 | 0.0000 | 188.5227 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 13.7331 | 30.4538 | 44.1869 | 1.4155 | 0.0339 | 89.6762 |
| **Total** | **6.4923** | **4.2310** | **34.0616** | **0.0570** | **5.9053** | **0.0955** | **6.0008** | **1.5784** | **0.0922** | **1.6706** | **89.8283** | **5,902.6669** | **5,992.4953** | **6.3652** | **0.3178** | **6,246.3185** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2.9088 | 0.0611 | 5.3077 | 2.8000e-004 | | 0.0295 | 0.0295 | | 0.0295 | 0.0295 | 0.0000 | 8.6787 | 8.6787 | 8.3200e-003 | 0.0000 | 8.8866 |
| Energy | 0.0249 | 0.2140 | 0.0973 | 1.3600e-003 | | 0.0172 | 0.0172 | | 0.0172 | 0.0172 | 0.0000 | 557.3086 | 557.3086 | 0.0550 | 0.0106 | 561.8457 |
| Mobile | 2.9166 | 3.0398 | 22.2063 | 0.0386 | 4.0511 | 0.0352 | 4.0862 | 1.0828 | 0.0328 | 1.1156 | 0.0000 | 3,702.7098 | 3,702.7098 | 0.3172 | 0.2115 | 3,773.6748 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 76.0952 | 0.0000 | 76.0952 | 4.4971 | 0.0000 | 188.5227 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 13.7331 | 30.4538 | 44.1869 | 1.4155 | 0.0339 | 89.6762 |
| **Total** | **5.8503** | **3.3149** | **27.6112** | **0.0403** | **4.0511** | **0.0818** | **4.1329** | **1.0828** | **0.0795** | **1.1623** | **89.8283** | **4,299.1509** | **4,388.9792** | **6.2930** | **0.2560** | **4,622.6060** |

| | ROG | NOx | 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** | **9.89** | **21.65** | **18.94** | **29.35** | **31.40** | **14.26** | **31.13** | **31.40** | **13.80** | **30.43** | **0.00** | **27.17** | **26.76** | **1.13** | **19.42** | **25.99** |

## 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 | 1/1/2023 | 3/24/2023 | 5 | 60 | |
| 2 | Site Preparation | Site Preparation | 1/28/2023 | 3/10/2023 | 5 | 30 | |
| 3 | Grading | Grading | 2/11/2023 | 6/16/2023 | 5 | 90 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Building Construction | Building Construction | 3/25/2023 | 9/4/2026 | 5 | 900 | |
| 5 | Paving | Paving | 8/1/2026 | 10/23/2026 | 5 | 60 | |
| 6 | Architectural Coating | Architectural Coating | 10/1/2026 | 12/23/2026 | 5 | 60 | |

**Acres of Grading (Site Preparation Phase): 45**

**Acres of Grading (Grading Phase): 270**

**Acres of Paving: 0**

**Residential Indoor: 1,042,875; Residential Outdoor: 347,625; Non-Residential Indoor: 197,100; Non-Residential Outdoor: 65,700; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| 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 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

**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 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 413.00 | 77.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 83.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 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 | 0.0681 | 0.6445 | 0.5893 | 1.1600e-003 | | 0.0299 | 0.0299 | | 0.0278 | 0.0278 | 0.0000 | 101.9762 | 101.9762 | 0.0286 | 0.0000 | 102.6902 |
| **Total** | **0.0681** | **0.6445** | **0.5893** | **1.1600e-003** | | **0.0299** | **0.0299** | | **0.0278** | **0.0278** | **0.0000** | **101.9762** | **101.9762** | **0.0286** | **0.0000** | **102.6902** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Demolition - 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 | 1.4700e-003 | 1.1300e-003 | 0.0126 | 3.0000e-005 | 3.5800e-003 | 2.0000e-005 | 3.6000e-003 | 9.5000e-004 | 2.0000e-005 | 9.7000e-004 | 0.0000 | 3.0109 | 3.0109 | 1.1000e-004 | 9.0000e-005 | 3.0416 |
| **Total** | **1.4700e-003** | **1.1300e-003** | **0.0126** | **3.0000e-005** | **3.5800e-003** | **2.0000e-005** | **3.6000e-003** | **9.5000e-004** | **2.0000e-005** | **9.7000e-004** | **0.0000** | **3.0109** | **3.0109** | **1.1000e-004** | **9.0000e-005** | **3.0416** |

### 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 | 0.0681 | 0.6445 | 0.5893 | 1.1600e-003 | | 0.0299 | 0.0299 | | 0.0278 | 0.0278 | 0.0000 | 101.9761 | 101.9761 | 0.0286 | 0.0000 | 102.6901 |
| **Total** | **0.0681** | **0.6445** | **0.5893** | **1.1600e-003** | | **0.0299** | **0.0299** | | **0.0278** | **0.0278** | **0.0000** | **101.9761** | **101.9761** | **0.0286** | **0.0000** | **102.6901** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Demolition - 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 | 1.4700e-003 | 1.1300e-003 | 0.0126 | 3.0000e-005 | 3.5800e-003 | 2.0000e-005 | 3.6000e-003 | 9.5000e-004 | 2.0000e-005 | 9.7000e-004 | 0.0000 | 3.0109 | 3.0109 | 1.1000e-004 | 9.0000e-005 | 3.0416 |
| **Total** | **1.4700e-003** | **1.1300e-003** | **0.0126** | **3.0000e-005** | **3.5800e-003** | **2.0000e-005** | **3.6000e-003** | **9.5000e-004** | **2.0000e-005** | **9.7000e-004** | **0.0000** | **3.0109** | **3.0109** | **1.1000e-004** | **9.0000e-005** | **3.0416** |

## 3.3 Site Preparation - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.2949 | 0.0000 | 0.2949 | 0.1515 | 0.0000 | 0.1515 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0399 | 0.4129 | 0.2737 | 5.7000e-004 | | 0.0190 | 0.0190 | | 0.0175 | 0.0175 | 0.0000 | 50.1760 | 50.1760 | 0.0162 | 0.0000 | 50.5817 |
| **Total** | **0.0399** | **0.4129** | **0.2737** | **5.7000e-004** | **0.2949** | **0.0190** | **0.3139** | **0.1515** | **0.0175** | **0.1690** | **0.0000** | **50.1760** | **50.1760** | **0.0162** | **0.0000** | **50.5817** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Site Preparation - 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 | 8.8000e-004 | 6.8000e-004 | 7.5800e-003 | 2.0000e-005 | 2.1500e-003 | 1.0000e-005 | 2.1600e-003 | 5.7000e-004 | 1.0000e-005 | 5.8000e-004 | 0.0000 | 1.8065 | 1.8065 | 6.0000e-005 | 6.0000e-005 | 1.8250 |
| **Total** | **8.8000e-004** | **6.8000e-004** | **7.5800e-003** | **2.0000e-005** | **2.1500e-003** | **1.0000e-005** | **2.1600e-003** | **5.7000e-004** | **1.0000e-005** | **5.8000e-004** | **0.0000** | **1.8065** | **1.8065** | **6.0000e-005** | **6.0000e-005** | **1.8250** |

### 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 | | | | | 0.2949 | 0.0000 | 0.2949 | 0.1515 | 0.0000 | 0.1515 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0399 | 0.4129 | 0.2737 | 5.7000e-004 | | 0.0190 | 0.0190 | | 0.0175 | 0.0175 | 0.0000 | 50.1760 | 50.1760 | 0.0162 | 0.0000 | 50.5817 |
| **Total** | **0.0399** | **0.4129** | **0.2737** | **5.7000e-004** | **0.2949** | **0.0190** | **0.3139** | **0.1515** | **0.0175** | **0.1690** | **0.0000** | **50.1760** | **50.1760** | **0.0162** | **0.0000** | **50.5817** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Site Preparation - 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 | 8.8000e-004 | 6.8000e-004 | 7.5800e-003 | 2.0000e-005 | 2.1500e-003 | 1.0000e-005 | 2.1600e-003 | 5.7000e-004 | 1.0000e-005 | 5.8000e-004 | 0.0000 | 1.8065 | 1.8065 | 6.0000e-005 | 6.0000e-005 | 1.8250 |
| **Total** | **8.8000e-004** | **6.8000e-004** | **7.5800e-003** | **2.0000e-005** | **2.1500e-003** | **1.0000e-005** | **2.1600e-003** | **5.7000e-004** | **1.0000e-005** | **5.8000e-004** | **0.0000** | **1.8065** | **1.8065** | **6.0000e-005** | **6.0000e-005** | **1.8250** |

## 3.4 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.4142 | 0.0000 | 0.4142 | 0.1644 | 0.0000 | 0.1644 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1495 | 1.5532 | 1.2623 | 2.7900e-003 | | 0.0641 | 0.0641 | | 0.0590 | 0.0590 | 0.0000 | 245.4084 | 245.4084 | 0.0794 | 0.0000 | 247.3927 |
| **Total** | **0.1495** | **1.5532** | **1.2623** | **2.7900e-003** | **0.4142** | **0.0641** | **0.4783** | **0.1644** | **0.0590** | **0.2234** | **0.0000** | **245.4084** | **245.4084** | **0.0794** | **0.0000** | **247.3927** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Grading - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.9400e-003 | 2.2500e-003 | 0.0253 | 6.0000e-005 | 7.1600e-003 | 5.0000e-005 | 7.2100e-003 | 1.9000e-003 | 4.0000e-005 | 1.9500e-003 | 0.0000 | 6.0217 | 6.0217 | 2.1000e-004 | 1.9000e-004 | 6.0833 |
| **Total** | **2.9400e-003** | **2.2500e-003** | **0.0253** | **6.0000e-005** | **7.1600e-003** | **5.0000e-005** | **7.2100e-003** | **1.9000e-003** | **4.0000e-005** | **1.9500e-003** | **0.0000** | **6.0217** | **6.0217** | **2.1000e-004** | **1.9000e-004** | **6.0833** |

### 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 | | | | | 0.4142 | 0.0000 | 0.4142 | 0.1644 | 0.0000 | 0.1644 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1495 | 1.5532 | 1.2623 | 2.7900e-003 | | 0.0641 | 0.0641 | | 0.0590 | 0.0590 | 0.0000 | 245.4082 | 245.4082 | 0.0794 | 0.0000 | 247.3924 |
| **Total** | **0.1495** | **1.5532** | **1.2623** | **2.7900e-003** | **0.4142** | **0.0641** | **0.4783** | **0.1644** | **0.0590** | **0.2234** | **0.0000** | **245.4082** | **245.4082** | **0.0794** | **0.0000** | **247.3924** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Grading - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 2.9400e-003 | 2.2500e-003 | 0.0253 | 6.0000e-005 | 7.1600e-003 | 5.0000e-005 | 7.2100e-003 | 1.9000e-003 | 4.0000e-005 | 1.9500e-003 | 0.0000 | 6.0217 | 6.0217 | 2.1000e-004 | 1.9000e-004 | 6.0833 |
| **Total** | **2.9400e-003** | **2.2500e-003** | **0.0253** | **6.0000e-005** | **7.1600e-003** | **5.0000e-005** | **7.2100e-003** | **1.9000e-003** | **4.0000e-005** | **1.9500e-003** | **0.0000** | **6.0217** | **6.0217** | **2.1000e-004** | **1.9000e-004** | **6.0833** |

## 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 | 0.1573 | 1.4385 | 1.6244 | 2.6900e-003 | | 0.0700 | 0.0700 | | 0.0658 | 0.0658 | 0.0000 | 231.8048 | 231.8048 | 0.0551 | 0.0000 | 233.1833 |
| **Total** | **0.1573** | **1.4385** | **1.6244** | **2.6900e-003** | | **0.0700** | **0.0700** | | **0.0658** | **0.0658** | **0.0000** | **231.8048** | **231.8048** | **0.0551** | **0.0000** | **233.1833** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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 | 0.0109 | 0.3918 | 0.1236 | 1.5900e-003 | 0.0508 | 2.5000e-003 | 0.0533 | 0.0147 | 2.4000e-003 | 0.0171 | 0.0000 | 153.1301 | 153.1301 | 1.3300e-003 | 0.0225 | 159.8669 |
| Worker | 0.1348 | 0.1034 | 1.1588 | 2.9800e-003 | 0.3286 | 2.1400e-003 | 0.3307 | 0.0874 | 1.9800e-003 | 0.0893 | 0.0000 | 276.3293 | 276.3293 | 9.7200e-003 | 8.6600e-003 | 279.1537 |
| **Total** | **0.1458** | **0.4953** | **1.2823** | **4.5700e-003** | **0.3794** | **4.6400e-003** | **0.3840** | **0.1020** | **4.3800e-003** | **0.1064** | **0.0000** | **429.4594** | **429.4594** | **0.0111** | **0.0312** | **439.0206** |

### 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 | 0.1573 | 1.4385 | 1.6244 | 2.6900e-003 | | 0.0700 | 0.0700 | | 0.0658 | 0.0658 | 0.0000 | 231.8045 | 231.8045 | 0.0551 | 0.0000 | 233.1830 |
| **Total** | **0.1573** | **1.4385** | **1.6244** | **2.6900e-003** | | **0.0700** | **0.0700** | | **0.0658** | **0.0658** | **0.0000** | **231.8045** | **231.8045** | **0.0551** | **0.0000** | **233.1830** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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 | 0.0109 | 0.3918 | 0.1236 | 1.5900e-003 | 0.0508 | 2.5000e-003 | 0.0533 | 0.0147 | 2.4000e-003 | 0.0171 | 0.0000 | 153.1301 | 153.1301 | 1.3300e-003 | 0.0225 | 159.8669 |
| Worker | 0.1348 | 0.1034 | 1.1588 | 2.9800e-003 | 0.3286 | 2.1400e-003 | 0.3307 | 0.0874 | 1.9800e-003 | 0.0893 | 0.0000 | 276.3293 | 276.3293 | 9.7200e-003 | 8.6600e-003 | 279.1537 |
| **Total** | **0.1458** | **0.4953** | **1.2823** | **4.5700e-003** | **0.3794** | **4.6400e-003** | **0.3840** | **0.1020** | **4.3800e-003** | **0.1064** | **0.0000** | **429.4594** | **429.4594** | **0.0111** | **0.0312** | **439.0206** |

## 3.5 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1928 | 1.7611 | 2.1179 | 3.5300e-003 | | 0.0803 | 0.0803 | | 0.0756 | 0.0756 | 0.0000 | 303.7223 | 303.7223 | 0.0718 | 0.0000 | 305.5179 |
| **Total** | **0.1928** | **1.7611** | **2.1179** | **3.5300e-003** | | **0.0803** | **0.0803** | | **0.0756** | **0.0756** | **0.0000** | **303.7223** | **303.7223** | **0.0718** | **0.0000** | **305.5179** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.5071 | 0.1560 | 2.0500e-003 | 0.0666 | 3.2400e-003 | 0.0698 | 0.0192 | 3.1000e-003 | 0.0223 | 0.0000 | 197.4921 | 197.4921 | 1.7000e-003 | 0.0290 | 206.1822 |
| Worker | 0.1647 | 0.1201 | 1.4022 | 3.7800e-003 | 0.4304 | 2.6500e-003 | 0.4331 | 0.1145 | 2.4400e-003 | 0.1169 | 0.0000 | 353.4587 | 353.4587 | 0.0115 | 0.0105 | 356.8701 |
| **Total** | **0.1784** | **0.6272** | **1.5582** | **5.8300e-003** | **0.4970** | **5.8900e-003** | **0.5029** | **0.1337** | **5.5400e-003** | **0.1392** | **0.0000** | **550.9508** | **550.9508** | **0.0132** | **0.0395** | **563.0522** |

### 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 | 0.1928 | 1.7611 | 2.1179 | 3.5300e-003 | | 0.0803 | 0.0803 | | 0.0756 | 0.0756 | 0.0000 | 303.7220 | 303.7220 | 0.0718 | 0.0000 | 305.5175 |
| **Total** | **0.1928** | **1.7611** | **2.1179** | **3.5300e-003** | | **0.0803** | **0.0803** | | **0.0756** | **0.0756** | **0.0000** | **303.7220** | **303.7220** | **0.0718** | **0.0000** | **305.5175** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.5071 | 0.1560 | 2.0500e-003 | 0.0666 | 3.2400e-003 | 0.0698 | 0.0192 | 3.1000e-003 | 0.0223 | 0.0000 | 197.4921 | 197.4921 | 1.7000e-003 | 0.0290 | 206.1822 |
| Worker | 0.1647 | 0.1201 | 1.4022 | 3.7800e-003 | 0.4304 | 2.6500e-003 | 0.4331 | 0.1145 | 2.4400e-003 | 0.1169 | 0.0000 | 353.4587 | 353.4587 | 0.0115 | 0.0105 | 356.8701 |
| **Total** | **0.1784** | **0.6272** | **1.5582** | **5.8300e-003** | **0.4970** | **5.8900e-003** | **0.5029** | **0.1337** | **5.5400e-003** | **0.1392** | **0.0000** | **550.9508** | **550.9508** | **0.0132** | **0.0395** | **563.0522** |

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0131 | 0.4979 | 0.1507 | 2.0100e-003 | 0.0663 | 3.1600e-003 | 0.0695 | 0.0192 | 3.0200e-003 | 0.0222 | 0.0000 | 193.3066 | 193.3066 | 1.6400e-003 | 0.0284 | 201.8118 |
| Worker | 0.1537 | 0.1068 | 1.2984 | 3.6400e-003 | 0.4288 | 2.5200e-003 | 0.4313 | 0.1140 | 2.3200e-003 | 0.1163 | 0.0000 | 344.1288 | 344.1288 | 0.0104 | 9.7100e-003 | 347.2801 |
| **Total** | **0.1668** | **0.6048** | **1.4491** | **5.6500e-003** | **0.4951** | **5.6800e-003** | **0.5008** | **0.1332** | **5.3400e-003** | **0.1385** | **0.0000** | **537.4354** | **537.4354** | **0.0120** | **0.0381** | **549.0920** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0131 | 0.4979 | 0.1507 | 2.0100e-003 | 0.0663 | 3.1600e-003 | 0.0695 | 0.0192 | 3.0200e-003 | 0.0222 | 0.0000 | 193.3066 | 193.3066 | 1.6400e-003 | 0.0284 | 201.8118 |
| Worker | 0.1537 | 0.1068 | 1.2984 | 3.6400e-003 | 0.4288 | 2.5200e-003 | 0.4313 | 0.1140 | 2.3200e-003 | 0.1163 | 0.0000 | 344.1288 | 344.1288 | 0.0104 | 9.7100e-003 | 347.2801 |
| **Total** | **0.1668** | **0.6048** | **1.4491** | **5.6500e-003** | **0.4951** | **5.6800e-003** | **0.5008** | **0.1332** | **5.3400e-003** | **0.1385** | **0.0000** | **537.4354** | **537.4354** | **0.0120** | **0.0381** | **549.0920** |

## 3.5 Building Construction - 2026

**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 | 0.1210 | 1.1036 | 1.4235 | 2.3900e-003 | | 0.0467 | 0.0467 | | 0.0439 | 0.0439 | 0.0000 | 205.2487 | 205.2487 | 0.0483 | 0.0000 | 206.4549 |
| **Total** | **0.1210** | **1.1036** | **1.4235** | **2.3900e-003** | | **0.0467** | **0.0467** | | **0.0439** | **0.0439** | **0.0000** | **205.2487** | **205.2487** | **0.0483** | **0.0000** | **206.4549** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

### 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 | 8.5600e-003 | 0.3316 | 0.0996 | 1.3400e-003 | 0.0450 | 2.1000e-003 | 0.0471 | 0.0130 | 2.0100e-003 | 0.0150 | 0.0000 | 128.4906 | 128.4906 | 1.0900e-003 | 0.0189 | 134.1351 |
| Worker | 0.0981 | 0.0652 | 0.8211 | 2.3900e-003 | 0.2908 | 1.6100e-003 | 0.2924 | 0.0773 | 1.4800e-003 | 0.0788 | 0.0000 | 227.8134 | 227.8134 | 6.3700e-003 | 6.1600e-003 | 229.8082 |
| **Total** | **0.1067** | **0.3967** | **0.9207** | **3.7300e-003** | **0.3358** | **3.7100e-003** | **0.3395** | **0.0903** | **3.4900e-003** | **0.0938** | **0.0000** | **356.3040** | **356.3040** | **7.4600e-003** | **0.0250** | **363.9433** |

### 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 | 0.1210 | 1.1036 | 1.4235 | 2.3900e-003 | | 0.0467 | 0.0467 | | 0.0439 | 0.0439 | 0.0000 | 205.2485 | 205.2485 | 0.0483 | 0.0000 | 206.4547 |
| **Total** | **0.1210** | **1.1036** | **1.4235** | **2.3900e-003** | | **0.0467** | **0.0467** | | **0.0439** | **0.0439** | **0.0000** | **205.2485** | **205.2485** | **0.0483** | **0.0000** | **206.4547** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**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 | 8.5600e-003 | 0.3316 | 0.0996 | 1.3400e-003 | 0.0450 | 2.1000e-003 | 0.0471 | 0.0130 | 2.0100e-003 | 0.0150 | 0.0000 | 128.4906 | 128.4906 | 1.0900e-003 | 0.0189 | 134.1351 |
| Worker | 0.0981 | 0.0652 | 0.8211 | 2.3900e-003 | 0.2908 | 1.6100e-003 | 0.2924 | 0.0773 | 1.4800e-003 | 0.0788 | 0.0000 | 227.8134 | 227.8134 | 6.3700e-003 | 6.1600e-003 | 229.8082 |
| **Total** | **0.1067** | **0.3967** | **0.9207** | **3.7300e-003** | **0.3358** | **3.7100e-003** | **0.3395** | **0.0903** | **3.4900e-003** | **0.0938** | **0.0000** | **356.3040** | **356.3040** | **7.4600e-003** | **0.0250** | **363.9433** |

## 3.6 Paving - 2026

**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 | 0.0275 | 0.2575 | 0.4373 | 6.8000e-004 | | 0.0126 | 0.0126 | | 0.0116 | 0.0116 | 0.0000 | 60.0578 | 60.0578 | 0.0194 | 0.0000 | 60.5434 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0275** | **0.2575** | **0.4373** | **6.8000e-004** | | **0.0126** | **0.0126** | | **0.0116** | **0.0116** | **0.0000** | **60.0578** | **60.0578** | **0.0194** | **0.0000** | **60.5434** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Paving - 2026

### 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 | 1.2100e-003 | 8.0000e-004 | 0.0101 | 3.0000e-005 | 3.5800e-003 | 2.0000e-005 | 3.6000e-003 | 9.5000e-004 | 2.0000e-005 | 9.7000e-004 | 0.0000 | 2.8048 | 2.8048 | 8.0000e-005 | 8.0000e-005 | 2.8293 |
| **Total** | **1.2100e-003** | **8.0000e-004** | **0.0101** | **3.0000e-005** | **3.5800e-003** | **2.0000e-005** | **3.6000e-003** | **9.5000e-004** | **2.0000e-005** | **9.7000e-004** | **0.0000** | **2.8048** | **2.8048** | **8.0000e-005** | **8.0000e-005** | **2.8293** |

### 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 | 0.0275 | 0.2575 | 0.4373 | 6.8000e-004 | | 0.0126 | 0.0126 | | 0.0116 | 0.0116 | 0.0000 | 60.0577 | 60.0577 | 0.0194 | 0.0000 | 60.5433 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0275** | **0.2575** | **0.4373** | **6.8000e-004** | | **0.0126** | **0.0126** | | **0.0116** | **0.0116** | **0.0000** | **60.0577** | **60.0577** | **0.0194** | **0.0000** | **60.5433** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Paving - 2026

**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 | 1.2100e-003 | 8.0000e-004 | 0.0101 | 3.0000e-005 | 3.5800e-003 | 2.0000e-005 | 3.6000e-003 | 9.5000e-004 | 2.0000e-005 | 9.7000e-004 | 0.0000 | 2.8048 | 2.8048 | 8.0000e-005 | 8.0000e-005 | 2.8293 |
| **Total** | **1.2100e-003** | **8.0000e-004** | **0.0101** | **3.0000e-005** | **3.5800e-003** | **2.0000e-005** | **3.6000e-003** | **9.5000e-004** | **2.0000e-005** | **9.7000e-004** | **0.0000** | **2.8048** | **2.8048** | **8.0000e-005** | **8.0000e-005** | **2.8293** |

## 3.7 Architectural Coating - 2026

**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 | 4.1360 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 5.1300e-003 | 0.0344 | 0.0543 | 9.0000e-005 | | 1.5500e-003 | 1.5500e-003 | | 1.5500e-003 | 1.5500e-003 | 0.0000 | 7.6598 | 7.6598 | 4.2000e-004 | 0.0000 | 7.6702 |
| **Total** | **4.1412** | **0.0344** | **0.0543** | **9.0000e-005** | | **1.5500e-003** | **1.5500e-003** | | **1.5500e-003** | **1.5500e-003** | **0.0000** | **7.6598** | **7.6598** | **4.2000e-004** | **0.0000** | **7.6702** |

## 3.7 Architectural Coating - 2026

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.6900e-003 | 4.4400e-003 | 0.0559 | 1.6000e-004 | 0.0198 | 1.1000e-004 | 0.0199 | 5.2700e-003 | 1.0000e-004 | 5.3700e-003 | 0.0000 | 15.5198 | 15.5198 | 4.3000e-004 | 4.2000e-004 | 15.6557 |
| **Total** | **6.6900e-003** | **4.4400e-003** | **0.0559** | **1.6000e-004** | **0.0198** | **1.1000e-004** | **0.0199** | **5.2700e-003** | **1.0000e-004** | **5.3700e-003** | **0.0000** | **15.5198** | **15.5198** | **4.3000e-004** | **4.2000e-004** | **15.6557** |

**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 | 4.1360 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 5.1300e-003 | 0.0344 | 0.0543 | 9.0000e-005 | | 1.5500e-003 | 1.5500e-003 | | 1.5500e-003 | 1.5500e-003 | 0.0000 | 7.6598 | 7.6598 | 4.2000e-004 | 0.0000 | 7.6702 |
| **Total** | **4.1412** | **0.0344** | **0.0543** | **9.0000e-005** | | **1.5500e-003** | **1.5500e-003** | | **1.5500e-003** | **1.5500e-003** | **0.0000** | **7.6598** | **7.6598** | **4.2000e-004** | **0.0000** | **7.6702** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 3.7 Architectural Coating - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.6900e-003 | 4.4400e-003 | 0.0559 | 1.6000e-004 | 0.0198 | 1.1000e-004 | 0.0199 | 5.2700e-003 | 1.0000e-004 | 5.3700e-003 | 0.0000 | 15.5198 | 15.5198 | 4.3000e-004 | 4.2000e-004 | 15.6557 |
| **Total** | **6.6900e-003** | **4.4400e-003** | **0.0559** | **1.6000e-004** | **0.0198** | **1.1000e-004** | **0.0199** | **5.2700e-003** | **1.0000e-004** | **5.3700e-003** | **0.0000** | **15.5198** | **15.5198** | **4.3000e-004** | **4.2000e-004** | **15.6557** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Pedestrian Network

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 2.9166 | 3.0398 | 22.2063 | 0.0386 | 4.0511 | 0.0352 | 4.0862 | 1.0828 | 0.0328 | 1.1156 | 0.0000 | 3,702.7098 | 3,702.7098 | 0.3172 | 0.2115 | 3,773.6748 |
| Unmitigated | 3.3698 | 3.9559 | 28.6566 | 0.0554 | 5.9053 | 0.0488 | 5.9541 | 1.5784 | 0.0455 | 1.6239 | 0.0000 | 5,306.2258 | 5,306.2258 | 0.3894 | 0.2732 | 5,397.3873 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 2,801.60 | 2,528.65 | 2106.35 | 7,672,630 | 5,263,424 |
| Strip Mall | 5,823.65 | 5,524.06 | 2684.50 | 8,212,072 | 5,633,481 |
| Total | 8,625.25 | 8,052.71 | 4,790.85 | 15,884,702 | 10,896,906 |

## 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 Mid Rise | 10.80 | 7.30 | 7.50 | 44.00 | 18.80 | 37.20 | 86 | 11 | 3 |
| Strip Mall | 9.50 | 7.30 | 7.30 | 16.60 | 64.40 | 19.00 | 45 | 40 | 15 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.528356 | 0.053553 | 0.192311 | 0.140981 | 0.025845 | 0.006434 | 0.010672 | 0.009485 | 0.001155 | 0.000563 | 0.026223 | 0.001221 | 0.003200 |
| Strip Mall | 0.528356 | 0.053553 | 0.192311 | 0.140981 | 0.025845 | 0.006434 | 0.010672 | 0.009485 | 0.001155 | 0.000563 | 0.026223 | 0.001221 | 0.003200 |

## 5.0 Energy Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive 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 | 310.5521 | 310.5521 | 0.0502 | 6.0900e-003 | 313.6229 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 310.5521 | 310.5521 | 0.0502 | 6.0900e-003 | 313.6229 |
| NaturalGas Mitigated | 0.0249 | 0.2140 | 0.0973 | 1.3600e-003 | | 0.0172 | 0.0172 | | 0.0172 | 0.0172 | 0.0000 | 246.7565 | 246.7565 | 4.7300e-003 | 4.5200e-003 | 248.2228 |
| NaturalGas Unmitigated | 0.0249 | 0.2140 | 0.0973 | 1.3600e-003 | | 0.0172 | 0.0172 | | 0.0172 | 0.0172 | 0.0000 | 246.7565 | 246.7565 | 4.7300e-003 | 4.5200e-003 | 248.2228 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 4.31657e+006 | 0.0233 | 0.1989 | 0.0846 | 1.2700e-003 | | 0.0161 | 0.0161 | | 0.0161 | 0.0161 | 0.0000 | 230.3484 | 230.3484 | 4.4200e-003 | 4.2200e-003 | 231.7172 |
| Strip Mall | 307476 | 1.6600e-003 | 0.0151 | 0.0127 | 9.0000e-005 | | 1.1500e-003 | 1.1500e-003 | | 1.1500e-003 | 1.1500e-003 | 0.0000 | 16.4081 | 16.4081 | 3.1000e-004 | 3.0000e-004 | 16.5056 |
| **Total** | | **0.0249** | **0.2140** | **0.0973** | **1.3600e-003** | | **0.0172** | **0.0172** | | **0.0172** | **0.0172** | **0.0000** | **246.7565** | **246.7565** | **4.7300e-003** | **4.5200e-003** | **248.2228** |

**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 Mid Rise | 4.31657e+006 | 0.0233 | 0.1989 | 0.0846 | 1.2700e-003 | | 0.0161 | 0.0161 | | 0.0161 | 0.0161 | 0.0000 | 230.3484 | 230.3484 | 4.4200e-003 | 4.2200e-003 | 231.7172 |
| Strip Mall | 307476 | 1.6600e-003 | 0.0151 | 0.0127 | 9.0000e-005 | | 1.1500e-003 | 1.1500e-003 | | 1.1500e-003 | 1.1500e-003 | 0.0000 | 16.4081 | 16.4081 | 3.1000e-004 | 3.0000e-004 | 16.5056 |
| **Total** | | **0.0249** | **0.2140** | **0.0973** | **1.3600e-003** | | **0.0172** | **0.0172** | | **0.0172** | **0.0172** | **0.0000** | **246.7565** | **246.7565** | **4.7300e-003** | **4.5200e-003** | **248.2228** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 1.99121e+006 | 184.2344 | 0.0298 | 3.6100e-003 | 186.0561 |
| Strip Mall | 1.36525e+006 | 126.3177 | 0.0204 | 2.4800e-003 | 127.5668 |
| **Total** | | **310.5521** | **0.0503** | **6.0900e-003** | **313.6229** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 1.99121e+006 | 184.2344 | 0.0298 | 3.6100e-003 | 186.0561 |
| Strip Mall | 1.36525e+006 | 126.3177 | 0.0204 | 2.4800e-003 | 127.5668 |
| **Total** | | **310.5521** | **0.0503** | **6.0900e-003** | **313.6229** |

## 6.0 Area Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

No Hearths Installed

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive 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 | 2.9088 | 0.0611 | 5.3077 | 2.8000e-004 | | 0.0295 | 0.0295 | | 0.0295 | 0.0295 | 0.0000 | 8.6787 | 8.6787 | 8.3200e-003 | 0.0000 | 8.8866 |
| Unmitigated | 3.0976 | 0.0611 | 5.3077 | 2.8000e-004 | | 0.0295 | 0.0295 | | 0.0295 | 0.0295 | 0.0000 | 8.6787 | 8.6787 | 8.3200e-003 | 0.0000 | 8.8866 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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 | 0.4136 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.5245 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.1595 | 0.0611 | 5.3077 | 2.8000e-004 | | 0.0295 | 0.0295 | | 0.0295 | 0.0295 | 0.0000 | 8.6787 | 8.6787 | 8.3200e-003 | 0.0000 | 8.8866 |
| **Total** | **3.0976** | **0.0611** | **5.3077** | **2.8000e-004** | | **0.0295** | **0.0295** | | **0.0295** | **0.0295** | **0.0000** | **8.6787** | **8.6787** | **8.3200e-003** | **0.0000** | **8.8866** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4136 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.3358 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.1595 | 0.0611 | 5.3077 | 2.8000e-004 | | 0.0295 | 0.0295 | | 0.0295 | 0.0295 | 0.0000 | 8.6787 | 8.6787 | 8.3200e-003 | 0.0000 | 8.8866 |
| **Total** | **2.9088** | **0.0611** | **5.3077** | **2.8000e-004** | | **0.0295** | **0.0295** | | **0.0295** | **0.0295** | **0.0000** | **8.6787** | **8.6787** | **8.3200e-003** | **0.0000** | **8.8866** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 44.1869 | 1.4155 | 0.0339 | 89.6762 |
| Unmitigated | 44.1869 | 1.4155 | 0.0339 | 89.6762 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 33.5543 / 21.1538 | 34.2944 | 1.0972 | 0.0263 | 69.5558 |
| Strip Mall | 9.73313 / 5.96547 | 9.8925 | 0.3183 | 7.6200e-003 | 20.1203 |
| **Total** | | **44.1869** | **1.4155** | **0.0339** | **89.6762** |

## 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 33.5543 / 21.1538 | 34.2944 | 1.0972 | 0.0263 | 69.5558 |
| Strip Mall | 9.73313 / 5.96547 | 9.8925 | 0.3183 | 7.6200e-003 | 20.1203 |
| **Total** | | **44.1869** | **1.4155** | **0.0339** | **89.6762** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 76.0952 | 4.4971 | 0.0000 | 188.5227 |
| Unmitigated | 76.0952 | 4.4971 | 0.0000 | 188.5227 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 236.9 | 48.0886 | 2.8420 | 0.0000 | 119.1374 |
| Strip Mall | 137.97 | 28.0067 | 1.6552 | 0.0000 | 69.3853 |
| **Total** | | **76.0952** | **4.4971** | **0.0000** | **188.5227** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 236.9 | 48.0886 | 2.8420 | 0.0000 | 119.1374 |
| Strip Mall | 137.97 | 28.0067 | 1.6552 | 0.0000 | 69.3853 |
| **Total** | | **76.0952** | **4.4971** | **0.0000** | **188.5227** |

## 9.0 Operational Offroad

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| 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

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# Alisal Marketplace GPA and Rezone

**Monterey Bay Unified APCD Air District, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Apartments Mid Rise | 515.00 | Dwelling Unit | 12.10 | 515,000.00 | 2137 |
| Strip Mall | 131.40 | 1000sqft | 0.00 | 131,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.8 | **Precipitation Freq (Days)** | 53 |
| **Climate Zone** | 4 | | | **Operational Year** | 2027 |
| **Utility Company** | Pacific Gas and Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 203.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot acerage: Per the CalEEMod guide, if the project is mixed-use with non-residential and residential use, lot acreage value of the residential area should be retained and non-residential area to be zeroed out.
population: according to average household size

Construction Phase - Lengthen the total days for each phase to assume a 5-year buildout.

Grading -

Mobile Land Use Mitigation -

Area Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 300.00 | 900.00 |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |
| tblConstructionPhase | NumDays | 30.00 | 90.00 |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |
| tblConstructionPhase | NumDays | 10.00 | 30.00 |
| tblConstructionPhase | PhaseEndDate | 7/12/2024 | 12/23/2026 |
| tblConstructionPhase | PhaseEndDate | 5/17/2024 | 9/4/2026 |
| tblConstructionPhase | PhaseEndDate | 1/27/2023 | 3/24/2023 |
| tblConstructionPhase | PhaseEndDate | 3/24/2023 | 6/16/2023 |
| tblConstructionPhase | PhaseEndDate | 6/14/2024 | 10/23/2026 |
| tblConstructionPhase | PhaseEndDate | 2/10/2023 | 3/10/2023 |
| tblConstructionPhase | PhaseStartDate | 6/15/2024 | 10/1/2026 |
| tblConstructionPhase | PhaseStartDate | 5/18/2024 | 8/1/2026 |
| tblLandUse | LotAcreage | 13.55 | 12.10 |
| tblLandUse | LotAcreage | 3.02 | 0.00 |
| tblLandUse | Population | 1,473.00 | 2,137.00 |

## 2.0 Emissions Summary

Alisal Marketplace GPA and Rezone - Monterey Bay Unified APCD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 8.4260 | 83.6406 | 67.5007 | 0.1430 | 29.2960 | 3.6908 | 32.9868 | 13.8717 | 3.4058 | 17.2775 | 0.0000 | 13,857.2587 | 13,857.2587 | 4.1992 | 0.3392 | 13,965.5822 |
| 2024 | 2.8536 | 17.9781 | 28.5573 | 0.0730 | 3.9143 | 0.6583 | 4.5726 | 1.0501 | 0.6192 | 1.6692 | 0.0000 | 7,346.7077 | 7,346.7077 | 0.7099 | 0.3246 | 7,461.1896 |
| 2025 | 2.6641 | 16.8649 | 27.6269 | 0.0717 | 3.9143 | 0.5710 | 4.4853 | 1.0501 | 0.5372 | 1.5872 | 0.0000 | 7,247.1429 | 7,247.1429 | 0.6972 | 0.3147 | 7,358.3499 |
| 2026 | 139.2206 | 25.3317 | 41.8064 | 0.0943 | 4.0376 | 0.9887 | 5.0262 | 1.0828 | 0.9214 | 2.0041 | 0.0000 | 9,456.7078 | 9,456.7078 | 1.4056 | 0.3073 | 9,583.4255 |
| **Maximum** | **139.2206** | **83.6406** | **67.5007** | **0.1430** | **29.2960** | **3.6908** | **32.9868** | **13.8717** | **3.4058** | **17.2775** | **0.0000** | **13,857.2587** | **13,857.2587** | **4.1992** | **0.3392** | **13,965.5822** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 8.4260 | 83.6406 | 67.5007 | 0.1430 | 29.2960 | 3.6908 | 32.9868 | 13.8717 | 3.4058 | 17.2775 | 0.0000 | 13,857.2587 | 13,857.2587 | 4.1992 | 0.3392 | 13,965.5822 |
| 2024 | 2.8536 | 17.9781 | 28.5573 | 0.0730 | 3.9143 | 0.6583 | 4.5726 | 1.0501 | 0.6192 | 1.6692 | 0.0000 | 7,346.7077 | 7,346.7077 | 0.7099 | 0.3246 | 7,461.1896 |
| 2025 | 2.6641 | 16.8649 | 27.6269 | 0.0717 | 3.9143 | 0.5710 | 4.4853 | 1.0501 | 0.5372 | 1.5872 | 0.0000 | 7,247.1429 | 7,247.1429 | 0.6972 | 0.3147 | 7,358.3499 |
| 2026 | 139.2206 | 25.3317 | 41.8064 | 0.0943 | 4.0376 | 0.9887 | 5.0262 | 1.0828 | 0.9214 | 2.0041 | 0.0000 | 9,456.7078 | 9,456.7078 | 1.4056 | 0.3073 | 9,583.4255 |
| **Maximum** | **139.2206** | **83.6406** | **67.5007** | **0.1430** | **29.2960** | **3.6908** | **32.9868** | **13.8717** | **3.4058** | **17.2775** | **0.0000** | **13,857.2587** | **13,857.2587** | **4.1992** | **0.3392** | **13,965.5822** |

| | ROG | NOx | 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** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 17.3750 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |
| Energy | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |
| Mobile | 21.4448 | 21.5250 | 163.6514 | 0.3396 | 35.9294 | 0.2879 | 36.2173 | 9.5786 | 0.2688 | 9.8474 | | 35,882.7181 | 35,882.7181 | 2.3651 | 1.6844 | 36,443.8042 |
| **Total** | **38.9564** | **23.1865** | **206.6458** | **0.3493** | **35.9294** | **0.6179** | **36.5473** | **9.5786** | **0.5988** | **10.1774** | **0.0000** | **37,449.6755** | **37,449.6755** | **2.4670** | **1.7118** | **38,021.4519** |

### 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 | 16.3408 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |
| Energy | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |
| Mobile | 18.8422 | 16.5415 | 124.2608 | 0.2368 | 24.6476 | 0.2076 | 24.8552 | 6.5709 | 0.1937 | 6.7647 | | 25,018.3939 | 25,018.3939 | 1.8978 | 1.3010 | 25,453.5457 |
| **Total** | **35.3196** | **18.2030** | **167.2552** | **0.2465** | **24.6476** | **0.5376** | **25.1852** | **6.5709** | **0.5237** | **7.0946** | **0.0000** | **26,585.3513** | **26,585.3513** | **1.9997** | **1.3284** | **27,031.1934** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 9.34 | 21.49 | 19.06 | 29.44 | 31.40 | 13.00 | 31.09 | 31.40 | 12.54 | 30.29 | 0.00 | 29.01 | 29.01 | 18.94 | 22.40 | 28.91 |

## 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 | 1/1/2023 | 3/24/2023 | 5 | 60 | |
| 2 | Site Preparation | Site Preparation | 1/28/2023 | 3/10/2023 | 5 | 30 | |
| 3 | Grading | Grading | 2/11/2023 | 6/16/2023 | 5 | 90 | |
| 4 | Building Construction | Building Construction | 3/25/2023 | 9/4/2026 | 5 | 900 | |
| 5 | Paving | Paving | 8/1/2026 | 10/23/2026 | 5 | 60 | |
| 6 | Architectural Coating | Architectural Coating | 10/1/2026 | 12/23/2026 | 5 | 60 | |

**Acres of Grading (Site Preparation Phase): 45**

**Acres of Grading (Grading Phase): 270**

**Acres of Paving: 0**

**Residential Indoor: 1,042,875; Residential Outdoor: 347,625; Non-Residential Indoor: 197,100; Non-Residential Outdoor: 65,700; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| 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 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

**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 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 413.00 | 77.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 83.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Demolition - 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 | 2.2691 | 21.4844 | 19.6434 | 0.0388 | | 0.9975 | 0.9975 | | 0.9280 | 0.9280 | | 3,746.9840 | 3,746.9840 | 1.0494 | | 3,773.2183 |
| **Total** | **2.2691** | **21.4844** | **19.6434** | **0.0388** | | **0.9975** | **0.9975** | | **0.9280** | **0.9280** | | **3,746.9840** | **3,746.9840** | **1.0494** | | **3,773.2183** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0498 | 0.0330 | 0.4420 | 1.1400e-003 | 0.1232 | 7.8000e-004 | 0.1240 | 0.0327 | 7.2000e-004 | 0.0334 | | 116.4591 | 116.4591 | 3.6800e-003 | 3.1800e-003 | 117.4977 |
| **Total** | **0.0498** | **0.0330** | **0.4420** | **1.1400e-003** | **0.1232** | **7.8000e-004** | **0.1240** | **0.0327** | **7.2000e-004** | **0.0334** | | **116.4591** | **116.4591** | **3.6800e-003** | **3.1800e-003** | **117.4977** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Demolition - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.2691 | 21.4844 | 19.6434 | 0.0388 | | 0.9975 | 0.9975 | | 0.9280 | 0.9280 | 0.0000 | 3,746.9840 | 3,746.9840 | 1.0494 | | 3,773.2183 |
| **Total** | **2.2691** | **21.4844** | **19.6434** | **0.0388** | | **0.9975** | **0.9975** | | **0.9280** | **0.9280** | **0.0000** | **3,746.9840** | **3,746.9840** | **1.0494** | | **3,773.2183** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0498 | 0.0330 | 0.4420 | 1.1400e-003 | 0.1232 | 7.8000e-004 | 0.1240 | 0.0327 | 7.2000e-004 | 0.0334 | | 116.4591 | 116.4591 | 3.6800e-003 | 3.1800e-003 | 117.4977 |
| **Total** | **0.0498** | **0.0330** | **0.4420** | **1.1400e-003** | **0.1232** | **7.8000e-004** | **0.1240** | **0.0327** | **7.2000e-004** | **0.0334** | | **116.4591** | **116.4591** | **3.6800e-003** | **3.1800e-003** | **117.4977** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0597 | 0.0396 | 0.5304 | 1.3700e-003 | 0.1479 | 9.3000e-004 | 0.1488 | 0.0392 | 8.6000e-004 | 0.0401 | | 139.7509 | 139.7509 | 4.4200e-003 | 3.8100e-003 | 140.9972 |
| **Total** | **0.0597** | **0.0396** | **0.5304** | **1.3700e-003** | **0.1479** | **9.3000e-004** | **0.1488** | **0.0392** | **8.6000e-004** | **0.0401** | | **139.7509** | **139.7509** | **4.4200e-003** | **3.8100e-003** | **140.9972** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Site Preparation - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | 0.0000 | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | **0.0000** | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0597 | 0.0396 | 0.5304 | 1.3700e-003 | 0.1479 | 9.3000e-004 | 0.1488 | 0.0392 | 8.6000e-004 | 0.0401 | | 139.7509 | 139.7509 | 4.4200e-003 | 3.8100e-003 | 140.9972 |
| **Total** | **0.0597** | **0.0396** | **0.5304** | **1.3700e-003** | **0.1479** | **9.3000e-004** | **0.1488** | **0.0392** | **8.6000e-004** | **0.0401** | | **139.7509** | **139.7509** | **4.4200e-003** | **3.8100e-003** | **140.9972** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0663 | 0.0439 | 0.5894 | 1.5200e-003 | 0.1643 | 1.0400e-003 | 0.1653 | 0.0436 | 9.6000e-004 | 0.0445 | | 155.2788 | 155.2788 | 4.9100e-003 | 4.2400e-003 | 156.6636 |
| **Total** | **0.0663** | **0.0439** | **0.5894** | **1.5200e-003** | **0.1643** | **1.0400e-003** | **0.1653** | **0.0436** | **9.6000e-004** | **0.0445** | | **155.2788** | **155.2788** | **4.9100e-003** | **4.2400e-003** | **156.6636** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Grading - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0663 | 0.0439 | 0.5894 | 1.5200e-003 | 0.1643 | 1.0400e-003 | 0.1653 | 0.0436 | 9.6000e-004 | 0.0445 | | 155.2788 | 155.2788 | 4.9100e-003 | 4.2400e-003 | 156.6636 |
| **Total** | **0.0663** | **0.0439** | **0.5894** | **1.5200e-003** | **0.1643** | **1.0400e-003** | **0.1653** | **0.0436** | **9.6000e-004** | **0.0445** | | **155.2788** | **155.2788** | **4.9100e-003** | **4.2400e-003** | **156.6636** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1113 | 3.7745 | 1.2193 | 0.0159 | 0.5216 | 0.0250 | 0.5466 | 0.1502 | 0.0239 | 0.1741 | | 1,686.6944 | 1,686.6944 | 0.0148 | 0.2475 | 1,760.8300 |
| Worker | 1.3697 | 0.9074 | 12.1707 | 0.0313 | 3.3927 | 0.0214 | 3.4141 | 0.8999 | 0.0198 | 0.9197 | | 3,206.5074 | 3,206.5074 | 0.1013 | 0.0875 | 3,235.1029 |
| **Total** | **1.4809** | **4.6819** | **13.3899** | **0.0472** | **3.9143** | **0.0464** | **3.9607** | **1.0501** | **0.0437** | **1.0937** | | **4,893.2018** | **4,893.2018** | **0.1161** | **0.3350** | **4,995.9329** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2023

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1113 | 3.7745 | 1.2193 | 0.0159 | 0.5216 | 0.0250 | 0.5466 | 0.1502 | 0.0239 | 0.1741 | | 1,686.6944 | 1,686.6944 | 0.0148 | 0.2475 | 1,760.8300 |
| Worker | 1.3697 | 0.9074 | 12.1707 | 0.0313 | 3.3927 | 0.0214 | 3.4141 | 0.8999 | 0.0198 | 0.9197 | | 3,206.5074 | 3,206.5074 | 0.1013 | 0.0875 | 3,235.1029 |
| **Total** | **1.4809** | **4.6819** | **13.3899** | **0.0472** | **3.9143** | **0.0464** | **3.9607** | **1.0501** | **0.0437** | **1.0937** | | **4,893.2018** | **4,893.2018** | **0.1161** | **0.3350** | **4,995.9329** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1064 | 3.7300 | 1.1742 | 0.0157 | 0.5216 | 0.0247 | 0.5463 | 0.1502 | 0.0236 | 0.1738 | | 1,660.5322 | 1,660.5322 | 0.0144 | 0.2438 | 1,733.5398 |
| Worker | 1.2756 | 0.8043 | 11.2163 | 0.0304 | 3.3927 | 0.0203 | 3.4130 | 0.8999 | 0.0187 | 0.9186 | | 3,130.4766 | 3,130.4766 | 0.0911 | 0.0808 | 3,156.8421 |
| **Total** | **1.3820** | **4.5343** | **12.3905** | **0.0460** | **3.9143** | **0.0449** | **3.9592** | **1.0501** | **0.0423** | **1.0923** | | **4,791.0088** | **4,791.0088** | **0.1055** | **0.3246** | **4,890.3819** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2024

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1064 | 3.7300 | 1.1742 | 0.0157 | 0.5216 | 0.0247 | 0.5463 | 0.1502 | 0.0236 | 0.1738 | | 1,660.5322 | 1,660.5322 | 0.0144 | 0.2438 | 1,733.5398 |
| Worker | 1.2756 | 0.8043 | 11.2163 | 0.0304 | 3.3927 | 0.0203 | 3.4130 | 0.8999 | 0.0187 | 0.9186 | | 3,130.4766 | 3,130.4766 | 0.0911 | 0.0808 | 3,156.8421 |
| **Total** | **1.3820** | **4.5343** | **12.3905** | **0.0460** | **3.9143** | **0.0449** | **3.9592** | **1.0501** | **0.0423** | **1.0923** | | **4,791.0088** | **4,791.0088** | **0.1055** | **0.3246** | **4,890.3819** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1022 | 3.6768 | 1.1376 | 0.0154 | 0.5216 | 0.0242 | 0.5458 | 0.1502 | 0.0231 | 0.1733 | | 1,631.5456 | 1,631.5456 | 0.0140 | 0.2395 | 1,703.2788 |
| Worker | 1.1946 | 0.7184 | 10.4047 | 0.0294 | 3.3927 | 0.0193 | 3.4120 | 0.8999 | 0.0178 | 0.9177 | | 3,059.1229 | 3,059.1229 | 0.0823 | 0.0751 | 3,083.5730 |
| **Total** | **1.2967** | **4.3952** | **11.5422** | **0.0447** | **3.9143** | **0.0435** | **3.9578** | **1.0501** | **0.0409** | **1.0910** | | **4,690.6686** | **4,690.6686** | **0.0963** | **0.3147** | **4,786.8518** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1022 | 3.6768 | 1.1376 | 0.0154 | 0.5216 | 0.0242 | 0.5458 | 0.1502 | 0.0231 | 0.1733 | | 1,631.5456 | 1,631.5456 | 0.0140 | 0.2395 | 1,703.2788 |
| Worker | 1.1946 | 0.7184 | 10.4047 | 0.0294 | 3.3927 | 0.0193 | 3.4120 | 0.8999 | 0.0178 | 0.9177 | | 3,059.1229 | 3,059.1229 | 0.0823 | 0.0751 | 3,083.5730 |
| **Total** | **1.2967** | **4.3952** | **11.5422** | **0.0447** | **3.9143** | **0.0435** | **3.9578** | **1.0501** | **0.0409** | **1.0910** | | **4,690.6686** | **4,690.6686** | **0.0963** | **0.3147** | **4,786.8518** |

Alisal Marketplace GPA and Rezone - Monterey Bay Unified APCD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

### 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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0987 | 3.6104 | 1.1088 | 0.0151 | 0.5216 | 0.0237 | 0.5454 | 0.1502 | 0.0227 | 0.1729 | | 1,599.1364 | 1,599.1364 | 0.0137 | 0.2344 | 1,669.3376 |
| Worker | 1.1233 | 0.6465 | 9.6832 | 0.0284 | 3.3927 | 0.0182 | 3.4109 | 0.8999 | 0.0168 | 0.9167 | | 2,985.9050 | 2,985.9050 | 0.0745 | 0.0703 | 3,008.7263 |
| **Total** | **1.2220** | **4.2569** | **10.7921** | **0.0435** | **3.9143** | **0.0419** | **3.9562** | **1.0501** | **0.0395** | **1.0895** | | **4,585.0414** | **4,585.0414** | **0.0882** | **0.3048** | **4,678.0639** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0987 | 3.6104 | 1.1088 | 0.0151 | 0.5216 | 0.0237 | 0.5454 | 0.1502 | 0.0227 | 0.1729 | | 1,599.1364 | 1,599.1364 | 0.0137 | 0.2344 | 1,669.3376 |
| Worker | 1.1233 | 0.6465 | 9.6832 | 0.0284 | 3.3927 | 0.0182 | 3.4109 | 0.8999 | 0.0168 | 0.9167 | | 2,985.9050 | 2,985.9050 | 0.0745 | 0.0703 | 3,008.7263 |
| **Total** | **1.2220** | **4.2569** | **10.7921** | **0.0435** | **3.9143** | **0.0419** | **3.9562** | **1.0501** | **0.0395** | **1.0895** | | **4,585.0414** | **4,585.0414** | **0.0882** | **0.3048** | **4,678.0639** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Paving - 2026

### 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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0408 | 0.0235 | 0.3517 | 1.0300e-003 | 0.1232 | 6.6000e-004 | 0.1239 | 0.0327 | 6.1000e-004 | 0.0333 | | 108.4469 | 108.4469 | 2.7000e-003 | 2.5500e-003 | 109.2758 |
| **Total** | **0.0408** | **0.0235** | **0.3517** | **1.0300e-003** | **0.1232** | **6.6000e-004** | **0.1239** | **0.0327** | **6.1000e-004** | **0.0333** | | **108.4469** | **108.4469** | **2.7000e-003** | **2.5500e-003** | **109.2758** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Paving - 2026

### 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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0408 | 0.0235 | 0.3517 | 1.0300e-003 | 0.1232 | 6.6000e-004 | 0.1239 | 0.0327 | 6.1000e-004 | 0.0333 | | 108.4469 | 108.4469 | 2.7000e-003 | 2.5500e-003 | 109.2758 |
| **Total** | **0.0408** | **0.0235** | **0.3517** | **1.0300e-003** | **0.1232** | **6.6000e-004** | **0.1239** | **0.0327** | **6.1000e-004** | **0.0333** | | **108.4469** | **108.4469** | **2.7000e-003** | **2.5500e-003** | **109.2758** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.7 Architectural Coating - 2026

**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 | 137.8681 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **138.0389** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2258 | 0.1299 | 1.9460 | 5.7100e-003 | 0.6818 | 3.6600e-003 | 0.6855 | 0.1809 | 3.3700e-003 | 0.1842 | | 600.0729 | 600.0729 | 0.0150 | 0.0141 | 604.6593 |
| **Total** | **0.2258** | **0.1299** | **1.9460** | **5.7100e-003** | **0.6818** | **3.6600e-003** | **0.6855** | **0.1809** | **3.3700e-003** | **0.1842** | | **600.0729** | **600.0729** | **0.0150** | **0.0141** | **604.6593** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.7 Architectural Coating - 2026

**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 | 137.8681 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **138.0389** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2258 | 0.1299 | 1.9460 | 5.7100e-003 | 0.6818 | 3.6600e-003 | 0.6855 | 0.1809 | 3.3700e-003 | 0.1842 | | 600.0729 | 600.0729 | 0.0150 | 0.0141 | 604.6593 |
| **Total** | **0.2258** | **0.1299** | **1.9460** | **5.7100e-003** | **0.6818** | **3.6600e-003** | **0.6855** | **0.1809** | **3.3700e-003** | **0.1842** | | **600.0729** | **600.0729** | **0.0150** | **0.0141** | **604.6593** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

Increase Density

Improve Pedestrian Network

| | ROG | NOx | CO | SO2 | Fugitive 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 | 18.8422 | 16.5415 | 124.2608 | 0.2368 | 24.6476 | 0.2076 | 24.8552 | 6.5709 | 0.1937 | 6.7647 | | 25,018.3939 | 25,018.3939 | 1.8978 | 1.3010 | 25,453.5457 |
| Unmitigated | 21.4448 | 21.5250 | 163.6514 | 0.3396 | 35.9294 | 0.2879 | 36.2173 | 9.5786 | 0.2688 | 9.8474 | | 35,882.7181 | 35,882.7181 | 2.3651 | 1.6844 | 36,443.8042 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 2,801.60 | 2,528.65 | 2106.35 | 7,672,630 | 5,263,424 |
| Strip Mall | 5,823.65 | 5,524.06 | 2684.50 | 8,212,072 | 5,633,481 |
| Total | 8,625.25 | 8,052.71 | 4,790.85 | 15,884,702 | 10,896,906 |

## 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 Mid Rise | 10.80 | 7.30 | 7.50 | 44.00 | 18.80 | 37.20 | 86 | 11 | 3 |
| Strip Mall | 9.50 | 7.30 | 7.30 | 16.60 | 64.40 | 19.00 | 45 | 40 | 15 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.528356 | 0.053553 | 0.192311 | 0.140981 | 0.025845 | 0.006434 | 0.010672 | 0.009485 | 0.001155 | 0.000563 | 0.026223 | 0.001221 | 0.003200 |
| Strip Mall | 0.528356 | 0.053553 | 0.192311 | 0.140981 | 0.025845 | 0.006434 | 0.010672 | 0.009485 | 0.001155 | 0.000563 | 0.026223 | 0.001221 | 0.003200 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive 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 | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |
| NaturalGas Unmitigated | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 11826.2 | 0.1275 | 1.0899 | 0.4638 | 6.9600e-003 | | 0.0881 | 0.0881 | | 0.0881 | 0.0881 | | 1,391.3184 | 1,391.3184 | 0.0267 | 0.0255 | 1,399.5863 |
| Strip Mall | 842.4 | 9.0800e-003 | 0.0826 | 0.0694 | 5.0000e-004 | | 6.2800e-003 | 6.2800e-003 | | 6.2800e-003 | 6.2800e-003 | | 99.1059 | 99.1059 | 1.9000e-003 | 1.8200e-003 | 99.6948 |
| **Total** | | **0.1366** | **1.1725** | **0.5331** | **7.4600e-003** | | **0.0944** | **0.0944** | | **0.0944** | **0.0944** | | **1,490.4242** | **1,490.4242** | **0.0286** | **0.0273** | **1,499.2811** |

**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 Mid Rise | 11.8262 | 0.1275 | 1.0899 | 0.4638 | 6.9600e-003 | | 0.0881 | 0.0881 | | 0.0881 | 0.0881 | | 1,391.3184 | 1,391.3184 | 0.0267 | 0.0255 | 1,399.5863 |
| Strip Mall | 0.8424 | 9.0800e-003 | 0.0826 | 0.0694 | 5.0000e-004 | | 6.2800e-003 | 6.2800e-003 | | 6.2800e-003 | 6.2800e-003 | | 99.1059 | 99.1059 | 1.9000e-003 | 1.8200e-003 | 99.6948 |
| **Total** | | **0.1366** | **1.1725** | **0.5331** | **7.4600e-003** | | **0.0944** | **0.0944** | | **0.0944** | **0.0944** | | **1,490.4242** | **1,490.4242** | **0.0286** | **0.0273** | **1,499.2811** |

## 6.0 Area Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

No Hearths Installed

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive 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 | 16.3408 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |
| Unmitigated | 17.3750 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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 | 2.2663 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 13.8330 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.2757 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | | 76.5332 | 76.5332 | 0.0733 | | 78.3666 |
| **Total** | **17.3750** | **0.4891** | **42.4613** | **2.2400e-003** | | **0.2356** | **0.2356** | | **0.2356** | **0.2356** | **0.0000** | **76.5332** | **76.5332** | **0.0733** | **0.0000** | **78.3666** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2663 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.7987 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.2757 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | | 76.5332 | 76.5332 | 0.0733 | | 78.3666 |
| **Total** | **16.3408** | **0.4891** | **42.4613** | **2.2400e-003** | | **0.2356** | **0.2356** | | **0.2356** | **0.2356** | **0.0000** | **76.5332** | **76.5332** | **0.0733** | **0.0000** | **78.3666** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 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

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# Alisal Marketplace GPA and Rezone

**Monterey Bay Unified APCD Air District, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Apartments Mid Rise | 515.00 | Dwelling Unit | 12.10 | 515,000.00 | 2137 |
| Strip Mall | 131.40 | 1000sqft | 0.00 | 131,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.8 | **Precipitation Freq (Days)** | 53 |
| **Climate Zone** | 4 | | | **Operational Year** | 2027 |
| **Utility Company** | Pacific Gas and Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 203.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot acerage: Per the CalEEMod guide, if the project is mixed-use with non-residential and residential use, lot acreage value of the residential area should be retained and non-residential area to be zeroed out.
population: according to average household size

Construction Phase - Lengthen the total days for each phase to assume a 5-year buildout.

Grading -

Mobile Land Use Mitigation -

Area Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 300.00 | 900.00 |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |
| tblConstructionPhase | NumDays | 30.00 | 90.00 |
| tblConstructionPhase | NumDays | 20.00 | 60.00 |
| tblConstructionPhase | NumDays | 10.00 | 30.00 |
| tblConstructionPhase | PhaseEndDate | 7/12/2024 | 12/23/2026 |
| tblConstructionPhase | PhaseEndDate | 5/17/2024 | 9/4/2026 |
| tblConstructionPhase | PhaseEndDate | 1/27/2023 | 3/24/2023 |
| tblConstructionPhase | PhaseEndDate | 3/24/2023 | 6/16/2023 |
| tblConstructionPhase | PhaseEndDate | 6/14/2024 | 10/23/2026 |
| tblConstructionPhase | PhaseEndDate | 2/10/2023 | 3/10/2023 |
| tblConstructionPhase | PhaseStartDate | 6/15/2024 | 10/1/2026 |
| tblConstructionPhase | PhaseStartDate | 5/18/2024 | 8/1/2026 |
| tblLandUse | LotAcreage | 13.55 | 12.10 |
| tblLandUse | LotAcreage | 3.02 | 0.00 |
| tblLandUse | Population | 1,473.00 | 2,137.00 |

## 2.0 Emissions Summary

Alisal Marketplace GPA and Rezone - Monterey Bay Unified APCD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 8.4372 | 83.6699 | 67.4855 | 0.1428 | 29.2960 | 3.6908 | 32.9868 | 13.8717 | 3.4058 | 17.2775 | 0.0000 | 13,835.1977 | 13,835.1977 | 4.2008 | 0.3550 | 13,944.1074 |
| 2024 | 2.9348 | 18.3989 | 28.5250 | 0.0714 | 3.9143 | 0.6583 | 4.5726 | 1.0501 | 0.6193 | 1.6693 | 0.0000 | 7,182.3651 | 7,182.3651 | 0.7213 | 0.3386 | 7,301.2857 |
| 2025 | 2.7427 | 17.2605 | 27.6322 | 0.0702 | 3.9143 | 0.5711 | 4.4854 | 1.0501 | 0.5372 | 1.5873 | 0.0000 | 7,086.9867 | 7,086.9867 | 0.7079 | 0.3276 | 7,202.3137 |
| 2026 | 139.2398 | 25.7114 | 41.8431 | 0.0928 | 4.0376 | 0.9887 | 5.0263 | 1.0828 | 0.9214 | 2.0042 | 0.0000 | 9,294.9710 | 9,294.9710 | 1.4158 | 0.3198 | 9,425.6730 |
| **Maximum** | **139.2398** | **83.6699** | **67.4855** | **0.1428** | **29.2960** | **3.6908** | **32.9868** | **13.8717** | **3.4058** | **17.2775** | **0.0000** | **13,835.1977** | **13,835.1977** | **4.2008** | **0.3550** | **13,944.1074** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 8.4372 | 83.6699 | 67.4855 | 0.1428 | 29.2960 | 3.6908 | 32.9868 | 13.8717 | 3.4058 | 17.2775 | 0.0000 | 13,835.1977 | 13,835.1977 | 4.2008 | 0.3550 | 13,944.1074 |
| 2024 | 2.9348 | 18.3989 | 28.5250 | 0.0714 | 3.9143 | 0.6583 | 4.5726 | 1.0501 | 0.6193 | 1.6693 | 0.0000 | 7,182.3651 | 7,182.3651 | 0.7213 | 0.3386 | 7,301.2857 |
| 2025 | 2.7427 | 17.2605 | 27.6322 | 0.0702 | 3.9143 | 0.5711 | 4.4854 | 1.0501 | 0.5372 | 1.5873 | 0.0000 | 7,086.9867 | 7,086.9867 | 0.7079 | 0.3276 | 7,202.3137 |
| 2026 | 139.2398 | 25.7114 | 41.8431 | 0.0928 | 4.0376 | 0.9887 | 5.0263 | 1.0828 | 0.9214 | 2.0042 | 0.0000 | 9,294.9710 | 9,294.9710 | 1.4158 | 0.3198 | 9,425.6730 |
| **Maximum** | **139.2398** | **83.6699** | **67.4855** | **0.1428** | **29.2960** | **3.6908** | **32.9868** | **13.8717** | **3.4058** | **17.2775** | **0.0000** | **13,835.1977** | **13,835.1977** | **4.2008** | **0.3550** | **13,944.1074** |

| | ROG | NOx | 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** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 17.3750 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |
| Energy | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |
| Mobile | 19.9225 | 24.6417 | 182.7619 | 0.3260 | 35.9294 | 0.2881 | 36.2175 | 9.5786 | 0.2690 | 9.8476 | | 34,444.9600 | 34,444.9600 | 2.7050 | 1.8504 | 35,064.0182 |
| **Total** | **37.4341** | **26.3033** | **225.7563** | **0.3357** | **35.9294** | **0.6181** | **36.5475** | **9.5786** | **0.5990** | **10.1776** | **0.0000** | **36,011.9174** | **36,011.9174** | **2.8069** | **1.8778** | **36,641.6659** |

### 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 | 16.3408 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |
| Energy | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |
| Mobile | 17.1600 | 18.9723 | 143.1328 | 0.2276 | 24.6476 | 0.2078 | 24.8554 | 6.5709 | 0.1939 | 6.7648 | | 24,045.2610 | 24,045.2610 | 2.2266 | 1.4359 | 24,528.8237 |
| **Total** | **33.6374** | **20.6338** | **186.1273** | **0.2373** | **24.6476** | **0.5378** | **25.1854** | **6.5709** | **0.5239** | **7.0948** | **0.0000** | **25,612.2185** | **25,612.2185** | **2.3285** | **1.4632** | **26,106.4714** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 10.14 | 21.55 | 17.55 | 29.32 | 31.40 | 12.99 | 31.09 | 31.40 | 12.54 | 30.29 | 0.00 | 28.88 | 28.88 | 17.05 | 22.08 | 28.75 |

## 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 | 1/1/2023 | 3/24/2023 | 5 | 60 | |
| 2 | Site Preparation | Site Preparation | 1/28/2023 | 3/10/2023 | 5 | 30 | |
| 3 | Grading | Grading | 2/11/2023 | 6/16/2023 | 5 | 90 | |
| 4 | Building Construction | Building Construction | 3/25/2023 | 9/4/2026 | 5 | 900 | |
| 5 | Paving | Paving | 8/1/2026 | 10/23/2026 | 5 | 60 | |
| 6 | Architectural Coating | Architectural Coating | 10/1/2026 | 12/23/2026 | 5 | 60 | |

**Acres of Grading (Site Preparation Phase): 45**

**Acres of Grading (Grading Phase): 270**

**Acres of Paving: 0**

**Residential Indoor: 1,042,875; Residential Outdoor: 347,625; Non-Residential Indoor: 197,100; Non-Residential Outdoor: 65,700; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| 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 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

**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 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 413.00 | 77.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 83.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Demolition - 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 | 2.2691 | 21.4844 | 19.6434 | 0.0388 | | 0.9975 | 0.9975 | | 0.9280 | 0.9280 | | 3,746.9840 | 3,746.9840 | 1.0494 | | 3,773.2183 |
| **Total** | **2.2691** | **21.4844** | **19.6434** | **0.0388** | | **0.9975** | **0.9975** | | **0.9280** | **0.9280** | | **3,746.9840** | **3,746.9840** | **1.0494** | | **3,773.2183** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0529 | 0.0412 | 0.4377 | 1.0800e-003 | 0.1232 | 7.8000e-004 | 0.1240 | 0.0327 | 7.2000e-004 | 0.0334 | | 110.2154 | 110.2154 | 4.1400e-003 | 3.6900e-003 | 111.4199 |
| **Total** | **0.0529** | **0.0412** | **0.4377** | **1.0800e-003** | **0.1232** | **7.8000e-004** | **0.1240** | **0.0327** | **7.2000e-004** | **0.0334** | | **110.2154** | **110.2154** | **4.1400e-003** | **3.6900e-003** | **111.4199** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Demolition - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.2691 | 21.4844 | 19.6434 | 0.0388 | | 0.9975 | 0.9975 | | 0.9280 | 0.9280 | 0.0000 | 3,746.9840 | 3,746.9840 | 1.0494 | | 3,773.2183 |
| **Total** | **2.2691** | **21.4844** | **19.6434** | **0.0388** | | **0.9975** | **0.9975** | | **0.9280** | **0.9280** | **0.0000** | **3,746.9840** | **3,746.9840** | **1.0494** | | **3,773.2183** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0529 | 0.0412 | 0.4377 | 1.0800e-003 | 0.1232 | 7.8000e-004 | 0.1240 | 0.0327 | 7.2000e-004 | 0.0334 | | 110.2154 | 110.2154 | 4.1400e-003 | 3.6900e-003 | 111.4199 |
| **Total** | **0.0529** | **0.0412** | **0.4377** | **1.0800e-003** | **0.1232** | **7.8000e-004** | **0.1240** | **0.0327** | **7.2000e-004** | **0.0334** | | **110.2154** | **110.2154** | **4.1400e-003** | **3.6900e-003** | **111.4199** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0635 | 0.0495 | 0.5253 | 1.2900e-003 | 0.1479 | 9.3000e-004 | 0.1488 | 0.0392 | 8.6000e-004 | 0.0401 | | 132.2585 | 132.2585 | 4.9700e-003 | 4.4300e-003 | 133.7039 |
| **Total** | **0.0635** | **0.0495** | **0.5253** | **1.2900e-003** | **0.1479** | **9.3000e-004** | **0.1488** | **0.0392** | **8.6000e-004** | **0.0401** | | **132.2585** | **132.2585** | **4.9700e-003** | **4.4300e-003** | **133.7039** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Site Preparation - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | 0.0000 | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | **0.0000** | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0635 | 0.0495 | 0.5253 | 1.2900e-003 | 0.1479 | 9.3000e-004 | 0.1488 | 0.0392 | 8.6000e-004 | 0.0401 | | 132.2585 | 132.2585 | 4.9700e-003 | 4.4300e-003 | 133.7039 |
| **Total** | **0.0635** | **0.0495** | **0.5253** | **1.2900e-003** | **0.1479** | **9.3000e-004** | **0.1488** | **0.0392** | **8.6000e-004** | **0.0401** | | **132.2585** | **132.2585** | **4.9700e-003** | **4.4300e-003** | **133.7039** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Grading - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0705 | 0.0550 | 0.5836 | 1.4400e-003 | 0.1643 | 1.0400e-003 | 0.1653 | 0.0436 | 9.6000e-004 | 0.0445 | | 146.9539 | 146.9539 | 5.5200e-003 | 4.9300e-003 | 148.5599 |
| **Total** | **0.0705** | **0.0550** | **0.5836** | **1.4400e-003** | **0.1643** | **1.0400e-003** | **0.1653** | **0.0436** | **9.6000e-004** | **0.0445** | | **146.9539** | **146.9539** | **5.5200e-003** | **4.9300e-003** | **148.5599** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Grading - 2023

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0705 | 0.0550 | 0.5836 | 1.4400e-003 | 0.1643 | 1.0400e-003 | 0.1653 | 0.0436 | 9.6000e-004 | 0.0445 | | 146.9539 | 146.9539 | 5.5200e-003 | 4.9300e-003 | 148.5599 |
| **Total** | **0.0705** | **0.0550** | **0.5836** | **1.4400e-003** | **0.1643** | **1.0400e-003** | **0.1653** | **0.0436** | **9.6000e-004** | **0.0445** | | **146.9539** | **146.9539** | **5.5200e-003** | **4.9300e-003** | **148.5599** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1082 | 3.9970 | 1.2562 | 0.0159 | 0.5216 | 0.0251 | 0.5467 | 0.1502 | 0.0240 | 0.1742 | | 1,689.7535 | 1,689.7535 | 0.0145 | 0.2484 | 1,764.1326 |
| Worker | 1.4566 | 1.1352 | 12.0520 | 0.0297 | 3.3927 | 0.0214 | 3.4141 | 0.8999 | 0.0198 | 0.9197 | | 3,034.5982 | 3,034.5982 | 0.1140 | 0.1017 | 3,067.7617 |
| **Total** | **1.5647** | **5.1322** | **13.3082** | **0.0456** | **3.9143** | **0.0465** | **3.9608** | **1.0501** | **0.0438** | **1.0938** | | **4,724.3517** | **4,724.3517** | **0.1285** | **0.3501** | **4,831.8944** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2023

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1082 | 3.9970 | 1.2562 | 0.0159 | 0.5216 | 0.0251 | 0.5467 | 0.1502 | 0.0240 | 0.1742 | | 1,689.7535 | 1,689.7535 | 0.0145 | 0.2484 | 1,764.1326 |
| Worker | 1.4566 | 1.1352 | 12.0520 | 0.0297 | 3.3927 | 0.0214 | 3.4141 | 0.8999 | 0.0198 | 0.9197 | | 3,034.5982 | 3,034.5982 | 0.1140 | 0.1017 | 3,067.7617 |
| **Total** | **1.5647** | **5.1322** | **13.3082** | **0.0456** | **3.9143** | **0.0465** | **3.9608** | **1.0501** | **0.0438** | **1.0938** | | **4,724.3517** | **4,724.3517** | **0.1285** | **0.3501** | **4,831.8944** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1031 | 3.9493 | 1.2115 | 0.0157 | 0.5216 | 0.0248 | 0.5464 | 0.1502 | 0.0237 | 0.1739 | | 1,663.6046 | 1,663.6046 | 0.0141 | 0.2446 | 1,736.8422 |
| Worker | 1.3602 | 1.0058 | 11.1468 | 0.0287 | 3.3927 | 0.0203 | 3.4130 | 0.8999 | 0.0187 | 0.9186 | | 2,963.0616 | 2,963.0616 | 0.1029 | 0.0940 | 2,993.6358 |
| **Total** | **1.4632** | **4.9551** | **12.3582** | **0.0444** | **3.9143** | **0.0450** | **3.9593** | **1.0501** | **0.0424** | **1.0924** | | **4,626.6662** | **4,626.6662** | **0.1170** | **0.3386** | **4,730.4780** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2024

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.1031 | 3.9493 | 1.2115 | 0.0157 | 0.5216 | 0.0248 | 0.5464 | 0.1502 | 0.0237 | 0.1739 | | 1,663.6046 | 1,663.6046 | 0.0141 | 0.2446 | 1,736.8422 |
| Worker | 1.3602 | 1.0058 | 11.1468 | 0.0287 | 3.3927 | 0.0203 | 3.4130 | 0.8999 | 0.0187 | 0.9186 | | 2,963.0616 | 2,963.0616 | 0.1029 | 0.0940 | 2,993.6358 |
| **Total** | **1.4632** | **4.9551** | **12.3582** | **0.0444** | **3.9143** | **0.0450** | **3.9593** | **1.0501** | **0.0424** | **1.0924** | | **4,626.6662** | **4,626.6662** | **0.1170** | **0.3386** | **4,730.4780** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0986 | 3.8927 | 1.1750 | 0.0154 | 0.5216 | 0.0243 | 0.5459 | 0.1502 | 0.0232 | 0.1734 | | 1,634.6157 | 1,634.6157 | 0.0137 | 0.2403 | 1,706.5678 |
| Worker | 1.2767 | 0.8982 | 10.3726 | 0.0278 | 3.3927 | 0.0193 | 3.4120 | 0.8999 | 0.0178 | 0.9177 | | 2,895.8966 | 2,895.8966 | 0.0932 | 0.0873 | 2,924.2478 |
| **Total** | **1.3753** | **4.7908** | **11.5476** | **0.0432** | **3.9143** | **0.0436** | **3.9579** | **1.0501** | **0.0410** | **1.0911** | | **4,530.5123** | **4,530.5123** | **0.1069** | **0.3276** | **4,630.8156** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0986 | 3.8927 | 1.1750 | 0.0154 | 0.5216 | 0.0243 | 0.5459 | 0.1502 | 0.0232 | 0.1734 | | 1,634.6157 | 1,634.6157 | 0.0137 | 0.2403 | 1,706.5678 |
| Worker | 1.2767 | 0.8982 | 10.3726 | 0.0278 | 3.3927 | 0.0193 | 3.4120 | 0.8999 | 0.0178 | 0.9177 | | 2,895.8966 | 2,895.8966 | 0.0932 | 0.0873 | 2,924.2478 |
| **Total** | **1.3753** | **4.7908** | **11.5476** | **0.0432** | **3.9143** | **0.0436** | **3.9579** | **1.0501** | **0.0410** | **1.0911** | | **4,530.5123** | **4,530.5123** | **0.1069** | **0.3276** | **4,630.8156** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0950 | 3.8225 | 1.1463 | 0.0151 | 0.5216 | 0.0238 | 0.5454 | 0.1502 | 0.0228 | 0.1730 | | 1,602.1950 | 1,602.1950 | 0.0135 | 0.2352 | 1,672.6068 |
| Worker | 1.2040 | 0.8082 | 9.6825 | 0.0269 | 3.3927 | 0.0182 | 3.4109 | 0.8999 | 0.0168 | 0.9167 | | 2,826.8852 | 2,826.8852 | 0.0847 | 0.0817 | 2,853.3478 |
| **Total** | **1.2990** | **4.6307** | **10.8288** | **0.0420** | **3.9143** | **0.0420** | **3.9563** | **1.0501** | **0.0395** | **1.0896** | | **4,429.0801** | **4,429.0801** | **0.0981** | **0.3169** | **4,525.9547** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0950 | 3.8225 | 1.1463 | 0.0151 | 0.5216 | 0.0238 | 0.5454 | 0.1502 | 0.0228 | 0.1730 | | 1,602.1950 | 1,602.1950 | 0.0135 | 0.2352 | 1,672.6068 |
| Worker | 1.2040 | 0.8082 | 9.6825 | 0.0269 | 3.3927 | 0.0182 | 3.4109 | 0.8999 | 0.0168 | 0.9167 | | 2,826.8852 | 2,826.8852 | 0.0847 | 0.0817 | 2,853.3478 |
| **Total** | **1.2990** | **4.6307** | **10.8288** | **0.0420** | **3.9143** | **0.0420** | **3.9563** | **1.0501** | **0.0395** | **1.0896** | | **4,429.0801** | **4,429.0801** | **0.0981** | **0.3169** | **4,525.9547** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Paving - 2026

### 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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0437 | 0.0294 | 0.3517 | 9.8000e-004 | 0.1232 | 6.6000e-004 | 0.1239 | 0.0327 | 6.1000e-004 | 0.0333 | | 102.6714 | 102.6714 | 3.0700e-003 | 2.9700e-003 | 103.6325 |
| **Total** | **0.0437** | **0.0294** | **0.3517** | **9.8000e-004** | **0.1232** | **6.6000e-004** | **0.1239** | **0.0327** | **6.1000e-004** | **0.0333** | | **102.6714** | **102.6714** | **3.0700e-003** | **2.9700e-003** | **103.6325** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Paving - 2026

**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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0437 | 0.0294 | 0.3517 | 9.8000e-004 | 0.1232 | 6.6000e-004 | 0.1239 | 0.0327 | 6.1000e-004 | 0.0333 | | 102.6714 | 102.6714 | 3.0700e-003 | 2.9700e-003 | 103.6325 |
| **Total** | **0.0437** | **0.0294** | **0.3517** | **9.8000e-004** | **0.1232** | **6.6000e-004** | **0.1239** | **0.0327** | **6.1000e-004** | **0.0333** | | **102.6714** | **102.6714** | **3.0700e-003** | **2.9700e-003** | **103.6325** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.7 Architectural Coating - 2026

**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 | 137.8681 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **138.0389** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2420 | 0.1624 | 1.9459 | 5.4100e-003 | 0.6818 | 3.6600e-003 | 0.6855 | 0.1809 | 3.3700e-003 | 0.1842 | | 568.1149 | 568.1149 | 0.0170 | 0.0164 | 573.4331 |
| **Total** | **0.2420** | **0.1624** | **1.9459** | **5.4100e-003** | **0.6818** | **3.6600e-003** | **0.6855** | **0.1809** | **3.3700e-003** | **0.1842** | | **568.1149** | **568.1149** | **0.0170** | **0.0164** | **573.4331** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.7 Architectural Coating - 2026

**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 | 137.8681 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **138.0389** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2420 | 0.1624 | 1.9459 | 5.4100e-003 | 0.6818 | 3.6600e-003 | 0.6855 | 0.1809 | 3.3700e-003 | 0.1842 | | 568.1149 | 568.1149 | 0.0170 | 0.0164 | 573.4331 |
| **Total** | **0.2420** | **0.1624** | **1.9459** | **5.4100e-003** | **0.6818** | **3.6600e-003** | **0.6855** | **0.1809** | **3.3700e-003** | **0.1842** | | **568.1149** | **568.1149** | **0.0170** | **0.0164** | **573.4331** |

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

Increase Density

Improve Pedestrian Network

| | ROG | NOx | CO | SO2 | Fugitive 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 | 17.1600 | 18.9723 | 143.1328 | 0.2276 | 24.6476 | 0.2078 | 24.8554 | 6.5709 | 0.1939 | 6.7648 | | 24,045.2610 | 24,045.2610 | 2.2266 | 1.4359 | 24,528.8237 |
| Unmitigated | 19.9225 | 24.6417 | 182.7619 | 0.3260 | 35.9294 | 0.2881 | 36.2175 | 9.5786 | 0.2690 | 9.8476 | | 34,444.9600 | 34,444.9600 | 2.7050 | 1.8504 | 35,064.0182 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 2,801.60 | 2,528.65 | 2106.35 | 7,672,630 | 5,263,424 |
| Strip Mall | 5,823.65 | 5,524.06 | 2684.50 | 8,212,072 | 5,633,481 |
| Total | 8,625.25 | 8,052.71 | 4,790.85 | 15,884,702 | 10,896,906 |

## 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 Mid Rise | 10.80 | 7.30 | 7.50 | 44.00 | 18.80 | 37.20 | 86 | 11 | 3 |
| Strip Mall | 9.50 | 7.30 | 7.30 | 16.60 | 64.40 | 19.00 | 45 | 40 | 15 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.528356 | 0.053553 | 0.192311 | 0.140981 | 0.025845 | 0.006434 | 0.010672 | 0.009485 | 0.001155 | 0.000563 | 0.026223 | 0.001221 | 0.003200 |
| Strip Mall | 0.528356 | 0.053553 | 0.192311 | 0.140981 | 0.025845 | 0.006434 | 0.010672 | 0.009485 | 0.001155 | 0.000563 | 0.026223 | 0.001221 | 0.003200 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive 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 | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |
| NaturalGas Unmitigated | 0.1366 | 1.1725 | 0.5332 | 7.4500e-003 | | 0.0944 | 0.0944 | | 0.0944 | 0.0944 | | 1,490.4242 | 1,490.4242 | 0.0286 | 0.0273 | 1,499.2811 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 11826.2 | 0.1275 | 1.0899 | 0.4638 | 6.9600e-003 | | 0.0881 | 0.0881 | | 0.0881 | 0.0881 | | 1,391.3184 | 1,391.3184 | 0.0267 | 0.0255 | 1,399.5863 |
| Strip Mall | 842.4 | 9.0800e-003 | 0.0826 | 0.0694 | 5.0000e-004 | | 6.2800e-003 | 6.2800e-003 | | 6.2800e-003 | 6.2800e-003 | | 99.1059 | 99.1059 | 1.9000e-003 | 1.8200e-003 | 99.6948 |
| **Total** | | **0.1366** | **1.1725** | **0.5331** | **7.4600e-003** | | **0.0944** | **0.0944** | | **0.0944** | **0.0944** | | **1,490.4242** | **1,490.4242** | **0.0286** | **0.0273** | **1,499.2811** |

**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 Mid Rise | 11.8262 | 0.1275 | 1.0899 | 0.4638 | 6.9600e-003 | | 0.0881 | 0.0881 | | 0.0881 | 0.0881 | | 1,391.3184 | 1,391.3184 | 0.0267 | 0.0255 | 1,399.5863 |
| Strip Mall | 0.8424 | 9.0800e-003 | 0.0826 | 0.0694 | 5.0000e-004 | | 6.2800e-003 | 6.2800e-003 | | 6.2800e-003 | 6.2800e-003 | | 99.1059 | 99.1059 | 1.9000e-003 | 1.8200e-003 | 99.6948 |
| **Total** | | **0.1366** | **1.1725** | **0.5331** | **7.4600e-003** | | **0.0944** | **0.0944** | | **0.0944** | **0.0944** | | **1,490.4242** | **1,490.4242** | **0.0286** | **0.0273** | **1,499.2811** |

## 6.0 Area Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

No Hearths Installed

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive 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 | 16.3408 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |
| Unmitigated | 17.3750 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | 0.0000 | 76.5332 | 76.5332 | 0.0733 | 0.0000 | 78.3666 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 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 | 2.2663 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 13.8330 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.2757 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | | 76.5332 | 76.5332 | 0.0733 | | 78.3666 |
| **Total** | **17.3750** | **0.4891** | **42.4613** | **2.2400e-003** | | **0.2356** | **0.2356** | | **0.2356** | **0.2356** | **0.0000** | **76.5332** | **76.5332** | **0.0733** | **0.0000** | **78.3666** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2663 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.7987 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.2757 | 0.4891 | 42.4613 | 2.2400e-003 | | 0.2356 | 0.2356 | | 0.2356 | 0.2356 | | 76.5332 | 76.5332 | 0.0733 | | 78.3666 |
| **Total** | **16.3408** | **0.4891** | **42.4613** | **2.2400e-003** | | **0.2356** | **0.2356** | | **0.2356** | **0.2356** | **0.0000** | **76.5332** | **76.5332** | **0.0733** | **0.0000** | **78.3666** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 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

## 7.2 Appendix B: CNDDB Occurrence Report

Downloaded from the California Natural Diversity Database dated October 2, 2022.

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Salinas (3612166))

| | | | |
|---|---|---|---|
| **Map Index Number:** | 26012 | **EO Index:** | 1758 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 17 | **Occurrence Last Updated:** | 1996-04-23 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1995-02-24 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1995-02-24 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

WESTERN-MOST POOL ON MACHINE GUN FLATS, FORT ORD MILITARY RESERVATION.

**Detailed Location:**

IN 1995-WATER DEPTH: 29 INCHES, SURFACE AREA: ABOUT 20,000 SQ FEET.

**Ecological:**

HABITAT CONSISTS OF A LARGE VERNAL POOL WITHIN A VERNAL POOL COMPLEX; UPLAND HABITAT CONSISTS OF OAK WOODLAND & COASTAL SCRUB.

**Threats:**

POSSIBLE THREAT OF DEVELOPMENT AFTER BASE CLOSURE.

**General:**

5/28/1991-CTS PRESENT AT SHAFFER SITE #252, NUMBER AND LIFESTAGE UNKNOWN; 1992-CTS OBSERVED BY JSA, MAPPED BASED ON PROVIDED GRAPHICS IN REPORT, WILDLIFE TEXT MISSING FROM REPORT; 2/24/1995-CTS LARVAE PRESENT DURING SURVEY FOR FAIRY SHRIMP.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 8 |
| **UTM:** | Zone-10 N4055473 E611548 | **Latitude/Longitude:** | 36.63829 / -121.75223 | **Elevation (feet):** | 430 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| BEC95R0001 | BECHTA, S. (JONES AND STOKES ASSOCIATES) - REPORT OF SPECIMENS CAPTURED DURING 1993-1995 (FAIRY SHRIMP SPECIES) 1995-XX-XX |
| SHA93R0001 | SHAFFER, H.B. ET AL. - STATUS REPORT FOR CALIFORNIA TIGER SALAMANDER, AMBYSTOMA CALIFORNIENSE (CONTRACT FG 9422 & FG 1383). 1993-XX-XX |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 26013 | **EO Index:** | 1784 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 18 | **Occurrence Last Updated:** | 1996-04-23 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EASTERN-MOST POOL ON MACHINE GUN FLATS, FORT ORD MILITARY RESERVATION.

**Detailed Location:**

**Ecological:**

HABITAT CONSISTS OF A LARGE VERNAL POOL WITHIN A VERNAL POOL COMPLEX.

**Threats:**

**General:**

SHAFFER SITE #253, CTS PRESENT ON 28 MAY 1991, NUMBER AND LIFESTAGE UNKNOWN; 1992-CTS OBSERVED BY JONES & STOKES ASSOCIATES, MAPPED BASED ON GRAPHICS PROVIDED IN REPORT, WILDLIFE TEXT IS MISSING IN REPORT.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 13 |
| **UTM:** | Zone-10 N4055138 E612036 | **Latitude/Longitude:** | 36.63522 / -121.74681 | **Elevation (feet):** | 460 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| SHA93R0001 | SHAFFER, H.B. ET AL. - STATUS REPORT FOR CALIFORNIA TIGER SALAMANDER, AMBYSTOMA CALIFORNIENSE (CONTRACT FG 9422 & FG 1383). 1993-XX-XX |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 32559 | **EO Index:** | 1785 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 19 | **Occurrence Last Updated:** | 2003-12-18 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2003-02-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2003-02-13 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

BETWEEN MACHINE GUN FLATS AND EAST GARRISON; FORT ORD MILITARY RESERVATION.

**Detailed Location:**

2003: CALLED "FAR EAST" POND, 1995: CALLED POND #5; WATER DEPTH: VARIED FROM 30-40 INCHES; SURFACE AREA: VARIED FROM ABOUT 75,000 TO ABOUT 300,000 SQ FEET; WATER HAS REDDISH TINGE TO IT.

**Ecological:**

VERNAL POOL WITH VEGETATION/SOIL SUBSTRATE; UPLAND HABITAT CONSISTS OF OAK WOODLAND.

**Threats:**

**General:**

3/10/1995-SALAMANDER LARVAE, MULTIPLE AGE CLASSES PRESENT; 3/24/95: 8-15 SALAMANDER LARVAE PRESENT, RANGE IN SIZE FROM 1-3 INCHES IN LENGTH; CALIFORNIA LINDERIELLA PRESENT IN LOW ABUNDANCE. 19 JUVENILES OBSERVED ON 13 FEB 2003.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 03 (M) | **Accuracy:** | specific area | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4056301 E612686 | **Latitude/Longitude:** | 36.64562 / -121.73937 | **Elevation (feet):** | 340 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| BEC95R0001 | BECHTA, S. (JONES AND STOKES ASSOCIATES) - REPORT OF SPECIMENS CAPTURED DURING 1993-1995 (FAIRY SHRIMP SPECIES) 1995-XX-XX |
| FIT03F0004 | FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 45813 | **EO Index:** | 45813 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 440 | **Occurrence Last Updated:** | 2009-05-19 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1952-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1952-XX-XX | **Occurrence Rank:** | None |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Possibly Extirpated | | |

**Location:**

SALINAS.

**Detailed Location:**

NO OTHER LOCATION INFORMATION GIVEN.

**Ecological:**

2005 AERIAL PHOTO SHOWS THAT THIS AREA IS ENTIRELY DEVELOPED OR IN AGRICULTURE. THERE DOES NOT APPEAR TO BE ANY SUITABLE HABITAT REMAINING.

**Threats:**

**General:**

COLLECTED SPRING 1952: CAS #187386, ADULT. FROM SAN JOSE STATE UNIVERSITY COLLECTION.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 32 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4059965 E620134 | **Latitude/Longitude:** | 36.67773 / -121.65550 | **Elevation (feet):** | 40 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

CAS01S0004 CALIFORNIA ACADEMY OF SCIENCES - 1951-1989 CAS HERPETOLOGY HOLDINGS (INCLUDES STANFORD UNIVERSITY COLLECTIONS) FOR AMBYSTOMA CALIFORNIENSE 2001-08-15

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 53624 | **EO Index:** | 53624 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 607 | **Occurrence Last Updated:** | 2003-12-18 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2003-02-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2003-02-13 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

0.6 MILE NW OF MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

POOL NAME GIVEN AS "LONG".

**Ecological:**

HABITAT CONSISTS OF A VERNAL POOL WITHIN GRASSLAND/OAK WOODLAND.

**Threats:**

**General:**

23 JUVENILES OBSERVED ON 13 FEB 2003.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | specific area | **Area (acres):** | 4 |
| **UTM:** | Zone-10 N4055986 E611607 | **Latitude/Longitude:** | 36.64291 / -121.75148 | **Elevation (feet):** | 357 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

FIT03F0001 FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 53625 | **EO Index:** | 53625 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 608 | **Occurrence Last Updated:** | 2003-12-18 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2003-02-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2003-02-13 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

0.7 MILE NORTH OF MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

POOL NAME GIVEN AS "TWIN A".

**Ecological:**

HABITAT CONSISTS OF A VERNAL POOL WITHIN GRASSLAND/OAK WOODLAND.

**Threats:**

**General:**

23 JUVENILES OBSERVED ON 13 FEB 2003.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 04 (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4056321 E612135 | **Latitude/Longitude:** | 36.64587 / -121.74552 | **Elevation (feet):** | 305 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

FIT03F0002 FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 53626 | **EO Index:** | 53626 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 609 | **Occurrence Last Updated:** | 2003-12-18 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2003-02-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2003-02-13 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

0.65 MILE NNW OF MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

POOL NAME GIVEN AS "TWIN B".

**Ecological:**

HABITAT CONSISTS OF A VERNAL POOL WITHIN GRASSLAND/OAK WOODLAND.

**Threats:**

**General:**

24 JUVENILES OBSERVED ON 13 FEB 2003.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 04 (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4056388 E611914 | **Latitude/Longitude:** | 36.64649 / -121.74799 | **Elevation (feet):** | 305 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

FIT03F0003 FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 53629 | **EO Index:** | 53629 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 610 | **Occurrence Last Updated:** | 2006-03-09 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2006-03-06 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2006-03-06 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

JUST WEST OF MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

"COYOTE" & "BULLFROG" ARE TWO ADJACENT VERNAL POOLS.

**Ecological:**

HABITAT CONSISTS OF VERNAL POOLS WITHIN GRASSLAND/OAK WOODLAND. MACHINE GUN FLAT IS TOPOGRAPHICALLY BELOW A SERIES OF MIMA MOUND COMPLEXES;SURROUNDED ON 3 SIDES BY MARITIME CHAPARRAL OR MIXED LIVE,OAK WOODLAND/CHAPARRAL.

**Threats:**

**General:**

22 JUVENILES OBSERVED IN "COYOTE" AND 19 JUVENILES OBSERVED IN "BULLFROG" ON 13 FEB 2003. 1 LARVA OBSERVED ON 6 MAR 2006 IN THE CRATER JUST WEST OF THE MAIN VERNAL POOL.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | specific area | **Area (acres):** | 9 |
| **UTM:** | Zone-10 N4055028 E611801 | **Latitude/Longitude:** | 36.63425 / -121.74946 | **Elevation (feet):** | 470 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| FIT03F0005 | FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13 |
| FIT03F0006 | FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13 |
| WOR06F0002 | WORCESTER, DR. S. (CALIFORNIA STATE UNIVERSITY, MONTEREY BAY) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2006-03-06 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 53632 | **EO Index:** | 53632 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 611 | **Occurrence Last Updated:** | 2003-12-18 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2003-02-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2003-02-13 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

"MACHINE GUN FLATS" POND.

**Ecological:**

HABITAT CONSISTS OF VERNAL POOLS WITHIN GRASSLAND/OAK WOODLAND.

**Threats:**

**General:**

14 JUVENILES OBSERVED ON 13 FEB 2003.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | specific area | **Area (acres):** | 7 |
| **UTM:** | Zone-10 N4055163 E612037 | **Latitude/Longitude:** | 36.63544 / -121.74679 | **Elevation (feet):** | 460 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

FIT03F0007 FITZPATRICK, B.M. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2003-02-13

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 68166 | **EO Index:** | 68318 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 756 | **Occurrence Last Updated:** | 2018-10-24 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2018-03-14 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2018-03-14 | **Occurrence Rank:** | Poor |
| **Owner/Manager:** | DOD-ARMY, PVT, MNT COUNTY | **Trend:** | Decreasing |
| **Presence:** | Presumed Extant | | |

**Location:**

N & S SIDES OF WATKINS GATE RD FROM CHAPEL HILL RD TO THE W SIDE OF CAMP ST, FORT ORD, BETWEEN SEASIDE AND SALINAS.

**Detailed Location:**

MAPPED TO INCLUDE DETECTION AND RELOCATION SITES FROM 2005, 2016, 2017, & 2018. ON FORMER FORT ORD MILITARY RESERVATION.

**Ecological:**

DEVELOPMENT SITE & ADJACENT PRESERVE IN OAK WOODLAND, ANNUAL GRASSLAND & MARITIME CHAPARRAL ON SANDY SOILS. INCLUDES POND WHERE CTS RELOCATED FROM OCCURRENCE #1277 WERE RELEASED IN 2017-18. A HYBRID WAS FOUND & REMOVED IN 2005.

**Threats:**

EAST GARRISON DEVELOPMENT. HYBRIDIZATION W/ INTRODUCED TIGER SALAMANDERS. PREDATORS, ARGENTINE ANTS, TRAFFIC, PETS.

**General:**

8 ADULTS RELOCATED FROM CONSTRUCTION SITE 12 FEB 2005. 2 DETECTED IN 2011. 1 JUVENILE FOUND IN STORM DRAIN SEDIMENT BAG ON 15 JAN 2016 & RELEASED NEARBY. 5 JUVS RELEASED HERE IN 2017 & 2 IN 2018. 1 JUV DET 17 JAN 2018.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 3, SW (M) | **Accuracy:** | specific area | **Area (acres):** | 52 |
| **UTM:** | Zone-10 N4056839 E612746 | **Latitude/Longitude:** | 36.65047 / -121.73863 | **Elevation (feet):** | 210 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| JEN16F0001 | JENNINGS, M. (LIVE OAK ASSOCIATES) - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2016-01-15 |
| MOF17F0002 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-06-21 |
| MOF17F0003 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-06-29 |
| MOF17F0004 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-07-28 |
| MOF17F0006 | MOFFITT, E. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-11-28 |
| MOF18F0001 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2018-01-30 |
| MOF18F0002 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2018-03-14 |
| MOF18F0003 | MOFFITT, E. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2018-01-17 |
| MOR05F0011 | MORI, B. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2005-02-12 |
| SHI17F0001 | SHIELDS , R. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-06-22 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B1208 | **EO Index:** | 113100 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAA01181 |
| **Occurrence Number:** | 1066 | **Occurrence Last Updated:** | 2018-11-02 |

**Scientific Name:** *Ambystoma californiense pop. 1*

**Common Name:** California tiger salamander - central California DPS

**Listing Status:** **Federal:** Threatened
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G2G3T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_VU-Vulnerable

**General Habitat:**

LIVES IN VACANT OR MAMMAL-OCCUPIED BURROWS THROUGHOUT MOST OF THE YEAR; IN GRASSLAND, SAVANNA, OR OPEN WOODLAND HABITATS.

**Micro Habitat:**

NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2018-03-14 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2018-03-14 | **Occurrence Rank:** | Poor |
| **Owner/Manager:** | PVT, MNT COUNTY | **Trend:** | Decreasing |
| **Presence:** | Presumed Extant | | |

**Location:**

SW SIDE OF RESERVATION RD IN VICINITY OF THE INTERSECTION WITH INTER-GARRISON RD, FORT ORD NATIONAL MONUMENT.

**Detailed Location:**

MAPPED TO INCLUDE PROVIDED COORDINATES. BREEDING POND & ADULT DETECTIONS ON E SIDE OF INTER-GARRISON RD. DEAD LARVAE FOUND ON W SIDE OF INTER-GARRISON RD, ADD'L DEAD CTS FOUND IN POND. CTS RELOCATED IN 2017-18 WERE MOVED TO OCCURRENCE #919.

**Ecological:**

INDIVIDUALS OBSERVED DURING HOUSING CONSTRUCTION. LARVAE OBS IN DETENTION POND (LIVE) & AT OUTLET OF POND'S OVERFLOW PIPE (DEAD). ADULTS OBSERVED AT ACTIVE CONSTRUCTION SITES ADJACENT TO POND. NEXT TO BUSY ROADS, SURROUNDED BY OAK WOODLAND.

**Threats:**

VEHICLE TRAFFIC, PETS, HUMAN INTERACTION, DEVELOPMENT, STORMWATER INFRASTRUCTURE, POSSIBILITY OF HYBRIDIZATION.

**General:**

3 METAMORPHS OBSERVED IN POND, 2016. 39 DEAD LARVAE OBS AT PIPE OUTLET, MAR 2017. 2 LIVE JUVENILES & 14 DEAD (AGE CLASS UNKNOWN) OBS IN POND, 11 SEP 2017. 5 JUVS MOVED OFF CONSTRUCTION SITE, JUN-NOV 2017. 2 JUVS MOVED OFFSITE, JAN-MAR 2018.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 3, NW (M) | **Accuracy:** | specific area | **Area (acres):** | 17 |
| **UTM:** | Zone-10 N4057753 E612498 | **Latitude/Longitude:** | 36.65873 / -121.74127 | **Elevation (feet):** | 196 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| JEN16F0003 | JENNINGS, M. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2016-08-10 |
| MOF17F0001 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-03-29 |
| MOF17F0002 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-06-21 |
| MOF17F0003 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-06-29 |
| MOF17F0004 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-07-28 |
| MOF17F0005 | MOFFITT, E. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-09-11 |
| MOF17F0006 | MOFFITT, E. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-11-28 |
| MOF18F0001 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2018-01-30 |
| MOF18F0002 | MOFFITT, E. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2018-03-14 |
| SHI17F0001 | SHIELDS , R. ET AL. - FIELD SURVEY FORM FOR AMBYSTOMA CALIFORNIENSE 2017-06-22 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B2165 | **EO Index:** | 114091 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAAAF02032 |
| **Occurrence Number:** | 90 | **Occurrence Last Updated:** | 2019-02-22 |

**Scientific Name:** *Taricha torosa*

**Common Name:** Coast Range newt

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:**

**Other Lists:** CDFW_SSC-Species of Special Concern

**CNDDB Element Ranks:** **Global:** G4

**State:** S4

**General Habitat:**

COASTAL DRAINAGES FROM MENDOCINO COUNTY TO SAN DIEGO COUNTY.

**Micro Habitat:**

LIVES IN TERRESTRIAL HABITATS AND WILL MIGRATE OVER 1 KM TO BREED IN PONDS, RESERVOIRS AND SLOW MOVING STREAMS.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2017-04-03 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2017-04-03 | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | CALTRANS | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

SALINAS RIVER, UNDER THE HWY 68 BRIDGE CROSSING, ABOUT 1.5 MILES NW OF SPRECKELS.

**Detailed Location:**

MAPPED TO PROVIDED COORDINATES.

**Ecological:**

SMALL, SHALLOW POOL IN BED OF SALINAS RIVER. SUBSTRATE WAS SANDY MUD. HABITAT WAS WILLOW/COTTONWOOD RIPARIAN SURROUNDED BY AGRICULTURAL FIELDS. DETECTED DURING BRIDGE WIDENING PROJECT.

**Threats:**

DISTURBANCE FROM CONSTRUCTION, LIMITED AVAILABILITY OF HABITAT, DRYING OF POOL BEFORE COMPLETION OF METAMORPHOSIS.

**General:**

1 LARVA OBSERVED SWIMMING IN SMALL POOL ON 3 APR 2017; BY THE FOLLOWING DAY, THE POOL HAD DRIED AND THE LARVA WAS FOUND DEAD & DESSICATED.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R03E, Sec. 18, NE (M) | **Accuracy:** | 80 meters | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4054615 E618560 | **Latitude/Longitude:** | 36.62971 / -121.67394 | **Elevation (feet):** | 30 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

WAG17F0002 WAGONER, S. - FIELD SURVEY FORM FOR TARICHA TOROSA 2017-04-03

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B2454 | **EO Index:** | 114378 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAABF02020 |
| **Occurrence Number:** | 838 | **Occurrence Last Updated:** | 2019-03-05 |

**Scientific Name:** *Spea hammondii*

**Common Name:** western spadefoot

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2G3
**State:** S3S4

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_NT-Near Threatened

**General Habitat:**

OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.

**Micro Habitat:**

VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1922-05-05 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1922-05-05 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

VICINITY OF SALINAS, NEAR NATIVIDAD CREEK.

**Detailed Location:**

PROVIDED LOCATION DESCRIBED ONLY AS "NEAR SALINAS." MAPPED AS BEST GUESS ALONG WETLAND PORTIONS OF NATIVIDAD CREEK ALONG THE NORTH SIDE OF SALINAS BASED ON A 1912 USGS TOPOGRAPHIC MAP FOR THE SALINAS QUAD.

**Ecological:**

**Threats:**

**General:**

5 COLLECTED ON 5 MAY 1922.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 28 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 1,987 |
| **UTM:** | Zone-10 N4060959 E621583 | **Latitude/Longitude:** | 36.68651 / -121.63914 | **Elevation (feet):** | 37 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Natividad (3612165), Salinas (3612166) |

**Sources:**

| | |
|---|---|
| MYE30A0001 | MYERS, G. - NOTES ON SOME AMPHIBIANS IN WESTERN NORTH AMERICA. PROCEEDINGS OF THE BIOLOGICAL SOCIETY OF WASHINGTON 43:55-64. 1930-03-12 |
| SNY22S0002 | SNYDER, J. - CAS #2681, 2682, 2683, 2684 & 2685 COLLECTED NEAR SALINAS 1922-05-05 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 71515 | **EO Index:** | 72411 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AAABH01022 |
| **Occurrence Number:** | 997 | **Occurrence Last Updated:** | 2009-05-12 |

**Scientific Name:** *Rana draytonii*

**Common Name:** California red-legged frog

**Listing Status:** **Federal:** Threatened
**State:** None

**CNDDB Element Ranks:** **Global:** G2G3
**State:** S2S3

**Rare Plant Rank:**

**Other Lists:** CDFW_SSC-Species of Special Concern
IUCN_VU-Vulnerable

**General Habitat:**

LOWLANDS AND FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.

**Micro Habitat:**

REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-05-04 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-05-04 | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | MNT WATER RESOURCES AGENCY | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

LAS SALINAS, ON THE SALINAS RIVER, 248 METERS NORTH OF RIVER MARKER MILE 5 (TOPO), SALINAS.

**Detailed Location:**

ON THE EAST BANK (ON TOPO APPEARS TO BE WEST BANK, BUT CHANNEL SHIFTED) IN STREAMSIDE EMERGENT VEGETATION. PROJECT SITE FOR SALINAS RIVER DIVERSION FACILITY. 4 MAY 2009 FROG OBSERVED IN RAINWATER POOL FORMED WITHIN DIVERSION FACILITY.

**Ecological:**

HABITAT (2008): STREAMSIDE/EMERGENT JUNCUS VEGETATION & ASSOC LITTER PROVIDE HABITAT FOR SPECIES. UPLAND HERBACEOUS VEG DOM BY NETTLE, POISON OAK; DOM CANOPY COAST LIVE OAK/WILLOW; ARUNDO STANDS PRESENT. 2009: SITE ALMOST DENUDEDED OF VEG.

**Threats:**

THREATENED BY HABITAT REMOVAL & ALTERATION OF PROPOSED WATER DIVERSION PROJECT, AND BULLFROGS.

**General:**

5 SUBADULTS OBS 28 APR 2008 ADJ TO PROJECT SITE. ONE SUBADULT WAS RELOCATED OUTSIDE OF POTENTIAL IMPACT AREA BY D. KEEGAN. 1 SUBADULT CAPT/REMOVED JUL '08. 1 SUBADULT OBS 4 MAY 2009 - RELOCATED 75M UPSTREAM TO APPROPRIATE HABITAT,EAST BANK.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 16, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 10 |
| **UTM:** | Zone-10 N4063287 E611647 | **Latitude/Longitude:** | 36.70870 / -121.74997 | **Elevation (feet):** | 15 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| KEE08F0001 | KEEGAN, D. & B. TRAVERS (D.R. DUFFY AND ASSOCIATES) - FIELD SURVEY FORM FOR RANA DRAYTONII 2008-04-28 |
| KEE09F0001 | KEEGAN, D. (D.R. DUFFY AND ASSOCIATES) - FIELD SURVEY FORM FOR RANA DRAYTONII & ACTINEMYS MARMORATA PALLIDA 2009-05-04 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 37728 | **EO Index:** | 32730 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ABNSB10010 |
| **Occurrence Number:** | 256 | **Occurrence Last Updated:** | 1997-12-16 |

**Scientific Name:** *Athene cunicularia*

**Common Name:** burrowing owl

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G4
**State:** S3

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

**General Habitat:**

OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**

SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1997-08-27 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1997-08-27 | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | PVT | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EAST SIDE OF HIGHWAY 183, BETWEEN SALINAS AND SANTA RITA.

**Detailed Location:**

SITE CONSISTS OF A 7-ACRE LOT LOCATED AT THE SW CORNER OF THE INTERSECTION OF HARDIN PARKWAY AND REGENCY CIRCLE, SALINAS.

**Ecological:**

HABITAT CONSISTS OF A WEEDY FIELD VEGETATED PRIMARILY BY NON-NATIVE ANNUALS.

**Threats:**

THREATENED BY DEVELOPMENT.

**General:**

6 BIRDS REPORTED EARLIER; 2 BIRDS (THAT APPEARED TO HAVE NESTED) OBSERVED ON 27 AUG 1997.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 16, SW (M) | **Accuracy:** | 1/10 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4063851 E620456 | **Latitude/Longitude:** | 36.71272 / -121.65128 | **Elevation (feet):** | 95 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

PAL97F0001 PALMISANO, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 3) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 1997-08-27

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 49151 | **EO Index:** | 49151 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ABNSB10010 |
| **Occurrence Number:** | 531 | **Occurrence Last Updated:** | 2004-07-12 |

**Scientific Name:** *Athene cunicularia*

**Common Name:** burrowing owl

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G4
**State:** S3

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

**General Habitat:**

OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**

SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2004-06-28 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2004-06-28 | **Occurrence Rank:** | Poor |
| **Owner/Manager:** | PVT | **Trend:** | Decreasing |
| **Presence:** | Presumed Extant | | |

**Location:**

SITE BORDERED BY HIGHWAY 68 TO THE WEST, HIGHWAY 101 TO THE NORTH, AND RAILROAD TRACKS TO THE SOUTH, SALINAS.

**Detailed Location:**

**Ecological:**

HABITAT CONSISTS OF NON-NATIVE GRASSLAND/RUDERAL VEGETATION WITHIN AN INDUSTRIAL/COMMERCIAL AREA OF SALINAS SURROUNDED BY DEVELOPMENT.

**Threats:**

THREATENED BY ANNUAL DISKING, THE DEVELOPMENT OF A PROPOSED MOTEL (MOTEL IN PLACE BY 1993), AND HUMAN FOOT TRAFFIC.

**General:**

2 OWLS OBSERVED ON-SITE ON 12 JAN 1990. OWLS RELOCATED TO ADJACENT PARCELS WHEN SITE WAS DISKED; AFTER DISKING, 2 FEMALES AND 1 MALE OBSERVED. 2 ADULTS AND 4 JUVENILES OBSERVED AT THE BURROW ON 28 JUN 2004.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 29 (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4060495 E619411 | **Latitude/Longitude:** | 36.68260 / -121.66350 | **Elevation (feet):** | 40 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| MOR90F0048 | MORI, B. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROWING OWL) 1990-01-12 |
| SIE04F0004 | SIEMENS, M. (LFR, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2004-06-28 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 70227 | **EO Index:** | 71109 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ABNSB10010 |
| **Occurrence Number:** | 993 | **Occurrence Last Updated:** | 2007-10-17 |

**Scientific Name:** *Athene cunicularia*

**Common Name:** burrowing owl

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G4
**State:** S3

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

**General Habitat:**

OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**

SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2007-01-17 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2007-01-17 | **Occurrence Rank:** | Poor |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

0.7 MILE NE OF THE INTERSECTION OF RUSSELL ROAD AND HIGHWAY 101, SANTA RITA.

**Detailed Location:**

**Ecological:**

HABITAT SURROUNDING BURROW SITE CONSISTS OF A SMALL, HIGHLY-MANIPULATED, RUDERAL AREA ALONG THE SIDE OF A FARM ROAD OF STRAWBERRY FIELDS; VEGETATION FREQUENTLY CONTROLLED BY HERBICIDE APPLICATION AND OTHER MEANS.

**Threats:**

THREATENED BY DEVELOPMENT.

**General:**

1 OWL OBSERVED OCCUPYING A GROUND SQUIRREL BURROW ON 17 JAN 2007; NO LONG-TERM SIGNS OF INHABITANCE (PELLETS OR WHITEWASH) WERE OBSERVED.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 04, SW (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4066945 E620800 | **Latitude/Longitude:** | 36.74055 / -121.64694 | **Elevation (feet):** | 141 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

MON07F0002 MONK, G. & S. SCOLARI (MONK AND ASSOCIATES, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-17

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 55925 | **EO Index:** | 55941 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | ABPAT02011 |
| **Occurrence Number:** | 65 | **Occurrence Last Updated:** | 2004-06-25 |

**Scientific Name:** *Eremophila alpestris actia*

**Common Name:** California horned lark

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G5T4Q

**State:** S4

**Rare Plant Rank:**

**Other Lists:** CDFW_WL-Watch List
IUCN_LC-Least Concern

**General Habitat:**

COASTAL REGIONS, CHIEFLY FROM SONOMA COUNTY TO SAN DIEGO COUNTY. ALSO MAIN PART OF SAN JOAQUIN VALLEY AND EAST TO FOOTHILLS.

**Micro Habitat:**

SHORT-GRASS PRAIRIE, "BALD" HILLS, MOUNTAIN MEADOWS, OPEN COASTAL PLAINS, FALLOW GRAIN FIELDS, ALKALI FLATS.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

0.75 MILE NE OF THE INTERSECTION OF THE SALINAS RIVER AND BLANCO ROAD, JUST EAST OF THE SALINAS RIVER, WEST OF MARINA.

**Detailed Location:**

**Ecological:**

HABITAT CONSISTS OF GRASSLAND.

**Threats:**

**General:**

UNKNOWN NUMBER OBSERVED DURING 1992.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 28, SW (M) | **Accuracy:** | 2/5 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4060407 E611108 | **Latitude/Longitude:** | 36.68281 / -121.75643 | **Elevation (feet):** | 120 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A0375 | **EO Index:** | 101934 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ABPBXB0020 |
| **Occurrence Number:** | 865 | **Occurrence Last Updated:** | 2016-06-07 |

**Scientific Name:** *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:** **Federal:** None
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G1G2
**State:** S1S2

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_EN-Endangered
NABCI_RWL-Red Watch List
USFWS_BCC-Birds of Conservation Concern

**General Habitat:**

HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY AND VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**

REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1932-05-04 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1932-05-04 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

GENERAL AREA ABOUT 3.5 MI SSE OF HWY 156 & HWY 183 INTERSECTION, 4.5 MI NW OF SALINAS.

**Detailed Location:**

1932 LOCATION DESCRIBED ONLY AS "4.5 MILES NORTHWEST OF SALINAS." EXACT LOCATION UNKNOWN. UNCLEAR IF 2014 SURVEY WAS CONDUCTED AT THE SAME LOCATION AS 1932 SITE. COLONY PRESUMED EXTIRPATED BY BEEDY (1991).

**Ecological:**

1932 HABITAT DESCRIBED AS CATTAILS/TULES ALONG SLOUGH. MANY SLOUGHS IN THE VICINITY. IN 2014, ESPINOSA LAKE IN NORTHWEST SALINAS APPEARED TO BE THE NEAREST POTENTIAL HABITAT IN THE AREA.

**Threats:**

**General:**

A COLONY COMPOSED OF ABOUT 750 NESTS OBSERVED ON 4 MAY 1932 (NEFF 1937). 0 BIRDS OBSERVED ON 18 APR 2014.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 14 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 1,987 |
| **UTM:** | Zone-10 N4064316 E613999 | **Latitude/Longitude:** | 36.7177 / -121.7235 | **Elevation (feet):** | 23 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**


BEE91R0001 BEEDY, E.C., S.D. SANDERS & D. BLOOM - BREEDING STATUS, DISTRIBURTION, AND HABITAT ASSOCIATIONS OF THE TRICOLORED BLACKBIRD (AGELAIUS TRICOLOR), 1850-1989. 1991-06-XX

NEF37R0001 NEFF, J.A. - DISTRIBUTION OF THE TRICOLORED RED WING. THE CONDOR 39(2):61-81. 1937-03-XX

TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 45813 | **EO Index:** | 101936 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ABPBXB0020 |
| **Occurrence Number:** | 866 | **Occurrence Last Updated:** | 2016-07-05 |

**Scientific Name:** *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:** **Federal:** None
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G1G2
**State:** S1S2

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_EN-Endangered
NABCI_RWL-Red Watch List
USFWS_BCC-Birds of Conservation Concern

**General Habitat:**

HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY AND VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**

REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1936-05-20 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1936-05-20 | **Occurrence Rank:** | None |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Possibly Extirpated | | |

**Location:**

SALINAS.

**Detailed Location:**

LOCATION GIVEN ONLY AS "NEAR SALINAS." COLONY STORED IN THE UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME WAS "SALINAS." MAPPED GENERALLY TO THE VICINITY OF SALINAS. EXACT LOCATION UNKNOWN.

**Ecological:**

HABITAT DESCRIBED AS CATTAIL/TULE MARSH.

**Threats:**

**General:**

A COLONY COMPOSED OF ABOUT 2,000 NESTS OBSERVED ON 20 MAY 1936 (NEFF 1937). COLONY PRESUMED EXTIRPATED BY BEEDY (1991).

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 32 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4059965 E620134 | **Latitude/Longitude:** | 36.67773 / -121.65550 | **Elevation (feet):** | 40 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**


| | |
|---|---|
| BEE91R0001 | BEEDY, E.C., S.D. SANDERS & D. BLOOM - BREEDING STATUS, DISTRIBURTION, AND HABITAT ASSOCIATIONS OF THE TRICOLORED BLACKBIRD (AGELAIUS TRICOLOR), 1850-1989. 1991-06-XX |
| NEF37R0001 | NEFF, J.A. - DISTRIBUTION OF THE TRICOLORED RED WING. THE CONDOR 39(2):61-81. 1937-03-XX |
| TRI14D0001 | TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B4739 | **EO Index:** | 117679 |
| **Key Quad:** | Greenfield (3612132) | **Element Code:** | AFCJB19013 |
| **Occurrence Number:** | 1 | **Occurrence Last Updated:** | 2020-11-06 |

**Scientific Name:** *Lavinia exilicauda harengus*

**Common Name:** Monterey hitch

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G4T3

**State:** S3

**Rare Plant Rank:**

**Other Lists:** CDFW_SSC-Species of Special Concern

**General Habitat:**

**Micro Habitat:**

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2018-10-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2018-10-13 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

ALONG SALINAS RIVER AND NACIMIENTO RIVER, FROM SAN MIGUEL DOWNSTREAM TO MONTERERY BAY.

**Detailed Location:**

MAPPED NON-SPECIFICALLY ALONG THIS 110 MILE STRETCH OF RIVER.

**Ecological:**

**Threats:**

**General:**

DETECTED AT VARIOUS SITES ALONG THIS STRETCH OF RIVER HISTORICALLY AND ALSO MORE RECENTLY IN 1990, 1991, 1999, 2002, 2010, AND 2018.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T19S, R07E, Sec. 23 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 7,478 |
| **UTM:** | Zone-10 N4015238 E663888 | **Latitude/Longitude:** | 36.26818 / -121.1755 | **Elevation (feet):** | 250 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey, San Luis Obispo | San Miguel (3512076), Bradley (3512077), Wunpost (3512087), Hames Valley (3512088), San Ardo (3612018), Espinosa Canyon (3612111), San Lucas (3612121), Thompson Canyon (3612122), Greenfield (3612132), North Chalone Peak (3612142), Soledad (3612143), Palo Escrito Peak (3612144), Gonzales (3612154), Chualar (3612155), Spreckels (3612156), Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| CAS03R0001 | CASAGRANDE, J. ET AL. - FISH SPECIES DISTRIBUTION AND HABITAT QUALITY FOR SELECTED STREAMS OF THE SALINAS WATERSHED: SUMMER/FALL 2002. THE WATERSHED INSTITUTE REPORT WI-2003-02. 2003-05-29 |
| CUT19D0001 | CUTHBERT, P. (FISHBIO) - SCIENTIFIC COLLECTING REPORT OF SPECIMENS CAPTURED OR SALVAGED [SC-002147] 2019-01-11 |
| DFWNDD0001 | CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE - SCIENTIFIC COLLECTING LEGACY PERMIT REPORTED DATA XXXX-XX-XX |
| HAB92R0001 | HABITAT RESTORATION GROUP - DRAFT SALINAS RIVER LAGOON MANAGEMENT AND ENHANCEMENT PLAN, VOLUME 2, TECHNICAL APPENDICES 1992-12-14 |
| HUBNDS0003 | HUBBS & SCHULTZ - UMMZ #94206 COLLECTED FROM SALINAS RIVER, AT BRIDGE BELOW BRADLEY 19XX-XX-XX |
| JON99S0001 | JONES, W. & BERNARDI - CAS #213822 COLLECTED FROM SALINAS RIVER, G17 AT SALINAS CROSSING 1999-03-04 |
| MIL39S0031 | MILLER, R. & R. MILLER - UMMZ #133202 COLLECTED FROM SALINAS RIVER, AT BRIDGE, 19.2 MI N OF KING CITY, TRIB MONTEREY BAY 1939-06-20 |
| MIL39S0033 | MILLER, R. & R. MILLER - UMMZ #133208 COLLECTED FROM SALINAS RIVER, JUST SW OF BLANCO, TRIB MONTEREY BAY 1939-06-20 |
| MIL41S0017 | MILLER, R. & W. FOLLETT - UMMZ #137636 COLLECTED FROM NACIMIENTO RIVER, 5.7 MI NW OF SAN MIGUEL, 9.7 MI E OF BEE ROCK, TRIB SALINAS RIVER 1941-XX-XX |
| MIL45A0001 | MILLER, R. - THE STATUS OF LAVINIA ARDESIACA, A CYPRINID FISH FROM THE PAJARO-SALINAS RIVER BASIN, CALIFORNIA. COPEIA 1945(4): 197-204. 1945-12-31 |
| MOY15R0001 | MOYLE, P. ET AL. (UNIVERSITY OF CALIFORNIA, DAVIS) - FISH SPECIES OF SPECIAL CONCERN IN CALIFORNIA, THIRD EDITION. REPORT TO THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE. 2015-07-XX |
| SNY14A0001 | SNYDER, J. - THE FISHES OF THE STREAMS TRIBUTARY TO MONTEREY BAY, CALIFORNIA. BULLETIN OF THE UNITED STATES BUREAU OF FISHERIES 32: 49-72. 1914-XX-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 92256 | **EO Index:** | 93360 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AMACC08010 |
| **Occurrence Number:** | 400 | **Occurrence Last Updated:** | 2014-05-05 |

**Scientific Name:** *Corynorhinus townsendii*

**Common Name:** Townsend's big-eared bat

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G4

**State:** S2

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFS_S-Sensitive

**General Habitat:**

THROUGHOUT CALIFORNIA IN A WIDE VARIETY OF HABITATS. MOST COMMON IN MESIC SITES.

**Micro Habitat:**

ROOSTS IN THE OPEN, HANGING FROM WALLS AND CEILINGS. ROOSTING SITES LIMITING. EXTREMELY SENSITIVE TO HUMAN DISTURBANCE.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2013-02-06 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2013-02-06 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | PVT | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

ALONG ORD AVENUE, SOUTH OF RESERVATION ROAD, AND ABOUT 2.5 MI NE OF LEARY HILL.

**Detailed Location:**

MAPPED TO PROVIDED COORDINATES. DETAILED LOCATION OF FORD ORD, MARINA, CA.

**Ecological:**

HABITAT CONSISTED OF AN EX-MILITARY BASE UNDER REDEVELOPMENT, PARTIALLY GRADED TO THE W, COASTAL SHRUB TO THE S AND AGRICULTURE TO THE N, E AND W.

**Threats:**

LOSS OF ROOSTING HABITAT DUE TO DEMOLITION OF BUILDINGS AND CONSTRUCTION.

**General:**

FECAL SIGN DETECTED ON 19 DEC 2012 BY G. TATARIAN. FECAL SIGN DECTECTED ON 20 DEC 2012 BY G. TATARIAN. FECAL SIGN DETECTED ON 6 FEB 2013 BY G. TATARIAN.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 03, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 15 |
| **UTM:** | Zone-10 N4057140 E613748 | **Latitude/Longitude:** | 36.65306 / -121.72737 | **Elevation (feet):** | 120 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| TAT12F0021 | TATARIAN, G. (WILDLIFE RESEARCH ASSOCIATES) - FIELD SURVEY FORM FOR CORYNORHINUS TOWNSENDII 2012-12-19 |
| TAT12F0022 | TATARIAN, G. (WILDLIFE RESEARCH ASSOCIATES) - FIELD SURVEY FORM FOR CORYNORHINUS TOWNSENDII 2012-12-19 |
| TAT12F0023 | TATARIAN, G. (WILDLIFE RESEARCH ASSOCIATES) - FIELD SURVEY FORM FOR CORYNORHINUS TOWNSENDII 2012-12-20 |
| TAT13F0001 | TATARIAN, G. (WILDLIFE RESEARCH ASSOCIATES) - FIELD SURVEY FORM FOR CORYNORHINUS TOWNSENDII 2013-02-06 |
| TAT13F0002 | TATARIAN, G. (WILDLIFE RESEARCH ASSOCIATES) - FIELD SURVEY FORM FOR CORYNORHINUS TOWNSENDII 2013-02-06 |
| TAT13F0003 | TATARIAN, G. (WILDLIFE RESEARCH ASSOCIATES) - FIELD SURVEY FORM FOR CORYNORHINUS TOWNSENDII 2013-02-06 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 10568 | **EO Index:** | 23884 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | AMAFF02032 |
| **Occurrence Number:** | 5 | **Occurrence Last Updated:** | 2006-01-30 |

**Scientific Name:** *Reithrodontomys megalotis distichlis*

**Common Name:** Salinas harvest mouse

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G5T1

**State:** S2

**Rare Plant Rank:**

**Other Lists:**

**General Habitat:**

KNOWN ONLY FROM THE MONTEREY BAY REGION.

**Micro Habitat:**

OCCURS IN FRESH AND BRACKISH WATER WETLANDS AND PROBABLY IN THE ADJACENT UPLANDS AROUND THE MOUTH OF THE SALINAS RIVER.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1937-05-30 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1937-05-30 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

CAMP ORD, 3.5 MILES EAST OF MARINA (MAPPED AT EAST BOUNDARY OF FORT ORD, ABOUT 2.5 MILES EAST OF MARINA).

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**

MVZ #108408 (FEMALE) COLLECTED 10 JAN 1937 AND #108409 (FEMALE) COLLECTED 30 MAY 1937.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 28 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4060612 E611139 | **Latitude/Longitude:** | 36.68466 / -121.75605 | **Elevation (feet):** | 100 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| MVZ06S0002 | MUSEUM OF VERTEBRATE ZOOLOGY (UNIVERSITY OF CALIFORNIA, BERKELEY) - PRINTOUT OF MVZ SPECIMEN RECORDS FOR REITHRODONTOMYS MEGALOTIS DISTICHLIS. 2006-01-30 |
| VON37S0002 | VON BLOEKER, J.C. - MVZ #108409 1937-05-30 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 10586 | **EO Index:** | 23883 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AMAFF02032 |
| **Occurrence Number:** | 7 | **Occurrence Last Updated:** | 2006-01-30 |

**Scientific Name:** *Reithrodontomys megalotis distichlis*

**Common Name:** Salinas harvest mouse

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G5T1

**State:** S2

**Rare Plant Rank:**

**Other Lists:**

**General Habitat:**

KNOWN ONLY FROM THE MONTEREY BAY REGION.

**Micro Habitat:**

OCCURS IN FRESH AND BRACKISH WATER WETLANDS AND PROBABLY IN THE ADJACENT UPLANDS AROUND THE MOUTH OF THE SALINAS RIVER.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1936-06-02 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1936-06-02 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

WEST SIDE OF THE SALINAS RIVER, 5 MILES WEST OF SALINAS.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**

MVZ #108420 (FEMALE) COLLECTED 2 JUN 1936.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 33 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4059422 E611972 | **Latitude/Longitude:** | 36.67384 / -121.74690 | **Elevation (feet):** | 50 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| MVZ06S0002 | MUSEUM OF VERTEBRATE ZOOLOGY (UNIVERSITY OF CALIFORNIA, BERKELEY) - PRINTOUT OF MVZ SPECIMEN RECORDS FOR REITHRODONTOMYS MEGALOTIS DISTICHLIS. 2006-01-30 |
| VON36S0002 | VON BLOEKER, J.C. - MVZ #108420 1936-06-02 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B3587 | **EO Index:** | 115507 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | AMAFF08083 |
| **Occurrence Number:** | 8 | **Occurrence Last Updated:** | 2019-07-26 |

**Scientific Name:** *Neotoma macrotis luciana*

**Common Name:** Monterey dusky-footed woodrat

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G5T3
**State:** S3

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern

**General Habitat:**

FOREST HABITATS OF MODERATE CANOPY AND MODERATE TO DENSE UNDERSTORY. ALSO IN CHAPARRAL HABITATS.

**Micro Habitat:**

NESTS CONSTRUCTED OF GRASS, LEAVES, STICKS, FEATHERS, ETC. POPULATION MAY BE LIMITED BY AVAILABILITY OF NEST MATERIALS.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2017-10-23 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2017-10-23 | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | CALTRANS | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

ALONG THE SALINAS RIVER JUST W OF THE CA-68 CROSSING, S OF SALINAS.

**Detailed Location:**

MAPPED TO PROVIDED COORDINATES.

**Ecological:**

DRY RIVERBED SURROUNDED BY RIPARIAN VEGETATION (STREAMSIDE THICKET, MIXED WOODS). DETECTED IN MIDDLE OF CONSTRUCTION ACCESS ROAD; NO NESTS WERE OBSERVED IN PROJECT SITE.

**Threats:**

ACTIVE BRIDGE CONSTRUCTION SITE, UNPREDICTABLE HIGH WINTER FLOWS (2017).

**General:**

2 BABY WOODRATS FOUND IN TRUCK RUT IN MIDDLE OF CONSTRUCTION ACCESS ROAD ON 23 OCT 2017. THE WOODRATS WERE TAKEN TO A WILDLIFE CARE CENTER FOR REHABILITATION.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R03E, Sec. 18, NE (M) | **Accuracy:** | 80 meters | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4054699 E618561 | **Latitude/Longitude:** | 36.63047 / -121.67392 | **Elevation (feet):** | 28 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

MAN17F0001 MANISCALCO, D. ET AL. - FIELD SURVEY FORM FOR NEOTOMA MACROTIS LUCIANA 2017-10-23

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B2162 | **EO Index:** | 114089 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ARAAD02030 |
| **Occurrence Number:** | 1481 | **Occurrence Last Updated:** | 2019-01-31 |

**Scientific Name:** *Emys marmorata*

**Common Name:** western pond turtle

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3G4
**State:** S3

**Rare Plant Rank:**

**Other Lists:** BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_VU-Vulnerable
USFS_S-Sensitive

**General Habitat:**

A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS AND IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**

NEEDS BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2017-07-25 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2017-07-25 | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | CALTRANS, UNK | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

SALINAS RIVER IN THE VICINITY OF THE HWY 68 BRIDGE, ABOUT 1.6 MILES WNW OF SPRECKELS.

**Detailed Location:**

MAPPED TO INCLUDE AREA INDICATED ON MAP ATTACHED TO 1996 FIELD SURVEY FORM (E SIDE OF HWY) AND COORDINATES GIVEN FOR 2017 DETECTION (JUST WEST OF HWY).

**Ecological:**

1996: TURTLES OBSEVED IN OFF-CHANNEL SEWAGE TREATMENT POND; RIVER ITSELF WAS DRY; TURTLE TRACKS SEEN IN SANDY RIVERBED.
2017: DETECTED DURING BRIDGE WIDENING CONSTRUCTION; RIVER BORDERED BY WILLOW & COTTONWOOD, SURROUNDED BY AG FIELDS.

**Threats:**

LACK OF VEGETATIVE COVER, DRYING OF RIVER (1996). DISTURBANCE FROM CONSTRUCTION, LIMITED HABITAT AVAILABILITY (2017).

**General:**

3 ADULTS OBSERVED ON 11 AUG 1996. OBSERVED PERIODICALLY DURING CONSTRUCTION MONITORING, MAY-JUL 2017.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R03E, Sec. 18, N (M) | **Accuracy:** | non-specific area | **Area (acres):** | 60 |
| **UTM:** | Zone-10 N4054629 E618779 | **Latitude/Longitude:** | 36.62981 / -121.67149 | **Elevation (feet):** | 32 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| ABE96F0004 | ABEL, J. - FIELD SURVEY FORM FOR EMYS MARMORATA 1996-08-11 |
| WAG17F0001 | WAGONER, S. - FIELD SURVEY FORM FOR EMYS MARMORATA 2017-07-21 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B1997 | **EO Index:** | 113920 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ARACC01020 |
| **Occurrence Number:** | 378 | **Occurrence Last Updated:** | 2019-01-16 |

**Scientific Name:** *Anniella pulchra*

**Common Name:** Northern California legless lizard

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G3

**State:** S2S3

**Rare Plant Rank:**

**Other Lists:** CDFW_SSC-Species of Special Concern
USFS_S-Sensitive

**General Habitat:**

SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION.

**Micro Habitat:**

SOIL MOISTURE IS ESSENTIAL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2018-04-06 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2018-04-06 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | PVT | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

ALONG WATKINS GATE RD ABOUT 0.2 MILES W OF RESERVATION RD, 2.5 MILES SW OF IMJIN RD AT RESERVATION RD, WEST OF SALINAS.

**Detailed Location:**

FORMER FORT ORD. FOUND ALONG CONCRETE CURB OF PAVED ROAD.

**Ecological:**

SURROUNDING LANDSCAPE INCLUDED COAST LIVE OAK WOODLAND AND NEW RESIDENTIAL DEVELOPMENT.

**Threats:**

VEHICLES, PETS, HUMAN INTERACTION, DEVELOPMENT, AND STROM WATER INFRASTRUCTURE.

**General:**

ONE FOUND AND PHOTOGRAPHED MOVING ALONG CONCRETE GUTTER OF WATKINS GATE RD ON 6 APR 2018.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 3, SE (M) | **Accuracy:** | 80 meters | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4056793 E613573 | **Latitude/Longitude:** | 36.64995 / -121.72938 | **Elevation (feet):** | 96 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

MOF18F0004 MOFFITT, E. (LIVE OAK ASSOCIATES) - FIELD SURVEY FORM FOR ANNIELLA PULCHRA 2018-04-06

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 10517 | **EO Index:** | 16309 |
| **Key Quad:** | Seaside (3612157) | **Element Code:** | CTT37C20CA |
| **Occurrence Number:** | 3 | **Occurrence Last Updated:** | 1998-07-14 |

**Scientific Name:** *Central Maritime Chaparral*

**Common Name:** Central Maritime Chaparral

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G2

**State:** S2.2

**Rare Plant Rank:**

**Other Lists:**

**General Habitat:**

□

**Micro Habitat:**

□

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1985-03-20 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1985-03-20 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Decreasing |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD GUNNERY RANGE & VICINITY. (INCL FORMER OCCS #03-06 AT FORT ORD BOTANICAL RESERVES 1,2,5,8).

**Detailed Location:**

SMALL BOTANICAL RESERVES W/IN 16000 ACRE BOUNDARY FROM 1982 CDF AERIALS.

**Ecological:**

KNEE-SHOULDER HIGH, OPEN DENSE CHAP W/ CHAMISE, ARCTOSTAPHYLOS MONTEREYENSIS, A. TOMENTOSA SSP. CRUSTACEA, A. PUMILA, A. TOMENTOSA SSP. TOMENTOSA, CEANOTHUS RIGIDUS, C. DENTATUS, QUERCUS AGRIFOLIA.

**Threats:**

USED AS MILITARY SHOOTING RANGE W/LOCALIZED DISTURBANCE, ESPECIALLY IN MORTAR RANGE.

**General:**

SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 20 (M) | **Accuracy:** | specific area | **Area (acres):** | 10,315 |
| **UTM:** | Zone-10 N4052295 E610156 | **Latitude/Longitude:** | 36.60981 / -121.76825 | **Elevation (feet):** | |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| CDF82U0001 | CA DEPT. OF FORESTRY - B&W AERIAL PHOTOS AT 1:24,000 SCALE OF FORT ORD VICINITY PHOTO #'S (14-20)-(14-25), 1/8/82. PHOTO #'S (16-12)-(16-18), 1/7/82. PHOTO #'S (12-17)-(12-25), 8/27/81. 1982-01-08 |
| GRI76A0001 | GRIFFIN, J.R. - NATIVE PLANT RESERVES AT FORT ORD - FREMONTIA, VOL. 4(2):25-28. 1976-07-XX |
| HOL85F0026 | HOLLAND, R.F. - FIELD SURVEY FORM FOR CENTRAL MARITIME CHAPARRAL (NC37C20) 1985-03-20 |
| HOO77R0001 | HOOD, L. - INVENTORY OF CALIFORNIA NATURAL AREAS, CALIFORNIA NATURAL AREAS COORDINATING COUNCIL 1977-XX-XX |
| MAT89U0001 | MATHEWS, M. - LETTER TO LEON PANETTA ATTACHED TO NC37C20 OCC 3. 1989-XX-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 26013 | **EO Index:** | 1783 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ICBRA06010 |
| **Occurrence Number:** | 69 | **Occurrence Last Updated:** | 1995-11-09 |

**Scientific Name:** *Linderiella occidentalis*

**Common Name:** California linderiella

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:**

**Other Lists:** IUCN_NT-Near Threatened

**CNDDB Element Ranks:** **Global:** G2G3

**State:** S2S3

**General Habitat:**

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TOTAL DISSOLVED SOLIDS.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1995-01-27 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1995-01-27 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EASTERN-MOST POOL IN MACHINE GUN FLATS; FORT ORD MILITARY RESERVATION.

**Detailed Location:**

**Ecological:**

CONSISTS OF A VERNAL POOL WITHIN VERNAL POOL COMPLEX.

**Threats:**

POSSIBLE THREAT OF DEVELOPMENT AFTER BASE CLOSURE.

**General:**

FEW LINDERIELLA OBSERVED DURING "QUICK LITTLE SURVEY"; SPECIES CONFIRMED BY CHRIS ROGERS-1/27/1995.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 13 |
| **UTM:** | Zone-10 N4055138 E612036 | **Latitude/Longitude:** | 36.63522 / -121.74681 | **Elevation (feet):** | 450 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

BEC95R0001 BECHTA, S. (JONES AND STOKES ASSOCIATES) - REPORT OF SPECIMENS CAPTURED DURING 1993-1995 (FAIRY SHRIMP SPECIES) 1995-XX-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 26012 | **EO Index:** | 1759 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | ICBRA06010 |
| **Occurrence Number:** | 70 | **Occurrence Last Updated:** | 1995-11-21 |

**Scientific Name:** *Linderiella occidentalis*

**Common Name:** California linderiella

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:**

**Other Lists:** IUCN_NT-Near Threatened

**CNDDB Element Ranks:** **Global:** G2G3

**State:** S2S3

**General Habitat:**

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TOTAL DISSOLVED SOLIDS.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1995-02-24 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1995-02-24 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

WESTERNMOST POOL IN MACHINE GUN FLAT; FORT ORD MILITARY RESERVATION.

**Detailed Location:**

MIDDLE MACHINE GUN FLATS; WATER DEPTH: 29 INCHES; SURFACE AREA: ABOUT 20,000 SQ FT.

**Ecological:**

VERNAL POOL IN VERNAL POOL COMPLEX; SOIL/VEGETATION SUBSTRATE; VEGETATIVE TOTAL COVER: 50% OF WATER AREA (5% ALGAE, 5% FLOATING PLANTS, 85% EMERGENT PLANTS), UPLAND HABITAT CONSISTS OF OAK WOODLAND & COASTAL SCRUB; SITE SLIGHTLY TRAMPLED.

**Threats:**

POSSIBLE THREAT OF DEVELOPMENT AFTER BASE CLOSURE.

**General:**

LOW ABUNDANCE OF ADULTS AT EDGE OF POOL BECAUSE OF MANY PEOPLE NETTING, BUT HIGH ABUNDANCE IN MIDDLE; CA TIGER SALAMANDER LARVAE OBS; PACIFIC TREE FROG ADULTS & LARVAE OBS; MALLARDS AND KILLDEER PRESENT.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 8 |
| **UTM:** | Zone-10 N4055473 E611548 | **Latitude/Longitude:** | 36.63829 / -121.75223 | **Elevation (feet):** | 420 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

BEC95R0001 BECHTA, S. (JONES AND STOKES ASSOCIATES) - REPORT OF SPECIMENS CAPTURED DURING 1993-1995 (FAIRY SHRIMP SPECIES) 1995-XX-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 32559 | **EO Index:** | 1786 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | ICBRA06010 |
| **Occurrence Number:** | 71 | **Occurrence Last Updated:** | 2003-12-18 |

**Scientific Name:** *Linderiella occidentalis*

**Common Name:** California linderiella

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:**

**Other Lists:** IUCN_NT-Near Threatened

**CNDDB Element Ranks:** **Global:** G2G3

**State:** S2S3

**General Habitat:**

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TOTAL DISSOLVED SOLIDS.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1995-03-24 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1995-03-24 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

BETWEEN MACHINE GUN FLATS AND EAST GARRISON; FORT ORD MILITARY RESERVATION.

**Detailed Location:**

POND #5; WATER DEPTH: VARIED BETWEEN 17-40 INCHES; SURFACE AREA: VARIED FROM ~20,000 TO ~300,000 SQ FEET; TURBIDITY: NONE TO SLIGHT; WATER HAS SLIGHT REDDISH TINGE TO IT; TIGER SALAMANDER LARVAE, MALLARDS, GREAT BLUE HERON, GREAT EGRET OBS.

**Ecological:**

VERNAL POOL WITH GRASS/VEGETATION/SOIL SUBSTRATE; MEDIUM-HIGH OVERALL VEGETATIVE COVERAGE WITH MOST BEING EMERGENT PLANTS & SOME FLOATING & SUBMERGENT PLANTS; UPLAND HABITAT CONSISTS OF ANNUAL GRASSLAND & OAK WOODLAND.

**Threats:**

POSSIBLE THREAT OF DEVELOPMENT AFTER BASE CLOSURE.

**General:**

1/26/1995: MODERATE ABUNDANCE. SHRIMP HAVE DISTINCT RED COLOR & SEEM TO BE ASSOC. W/SEED SHRIMP; 2/10/95-MODERATE ABUNDANCE-TOOK VOUCHER SPECIMEN; 2/24/95-LOW ABUNDANCE; 3/10/95-NO FAIRY SHRIMP OBS; 3/24/95-LOW ABUNDANCE; CTS LARVAE OBS.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 03 (M) | **Accuracy:** | specific area | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4056301 E612686 | **Latitude/Longitude:** | 36.64562 / -121.73937 | **Elevation (feet):** | 260 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

BEC95R0001 BECHTA, S. (JONES AND STOKES ASSOCIATES) - REPORT OF SPECIMENS CAPTURED DURING 1993-1995 (FAIRY SHRIMP SPECIES) 1995-XX-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 45813 | **EO Index:** | 100385 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | IIHYM24252 |
| **Occurrence Number:** | 269 | **Occurrence Last Updated:** | 2016-01-21 |

**Scientific Name:** *Bombus occidentalis*

**Common Name:** western bumble bee

**Listing Status:** **Federal:** None

**State:** Candidate Endangered

**CNDDB Element Ranks:** **Global:** G3

**State:** S1

**Rare Plant Rank:**

**Other Lists:** IUCN_VU-Vulnerable
USFS_S-Sensitive

**General Habitat:**

ONCE COMMON AND WIDESPREAD, SPECIES HAS DECLINED PRECIPITOUSLY FROM CENTRAL CA TO SOUTHERN B.C., PERHAPS FROM DISEASE.

**Micro Habitat:**

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1965-08-09 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1965-08-09 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

SALINAS.

**Detailed Location:**

EXACT LOCATION UNKNOWN. MAPPED BY CNDDB CENTERED ON THE CITY OF SALINAS.

**Ecological:**

**Threats:**

**General:**

COLLECTED 10 OCT 1948 AND 9 AUG 1965.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 32 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4059965 E620134 | **Latitude/Longitude:** | 36.67773 / -121.65550 | **Elevation (feet):** | 50 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| ANO65S0009 | ANONYMOUS - BBSL #JPS3874 FROM SALINAS 1965-08-09 |
| STE48S0004 | STEVENS, B. - BBSL #OS78710 FROM SALINAS 1948-10-10 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 98873 | **EO Index:** | 100386 |
| **Key Quad:** | Spreckels (3612156) | **Element Code:** | IIHYM24252 |
| **Occurrence Number:** | 270 | **Occurrence Last Updated:** | 2016-01-21 |

**Scientific Name:** *Bombus occidentalis*

**Common Name:** western bumble bee

**Listing Status:** **Federal:** None

**State:** Candidate Endangered

**CNDDB Element Ranks:** **Global:** G3

**State:** S1

**Rare Plant Rank:**

**Other Lists:** IUCN_VU-Vulnerable
USFS_S-Sensitive

**General Habitat:**

ONCE COMMON AND WIDESPREAD, SPECIES HAS DECLINED PRECIPITOUSLY FROM CENTRAL CA TO SOUTHERN B.C., PERHAPS FROM DISEASE.

**Micro Habitat:**

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1904-08-20 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1904-08-20 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

SPRECKELS.

**Detailed Location:**

EXACT LOCATION UNKNOWN. MAPPED BY CNDDB CENTERED ON THE TOWN OF SPRECKELS, SOUTH OF SALINAS.

**Ecological:**

**Threats:**

**General:**

COLLECTED 20 AUG 1904.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R03E, Sec. 16 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4054041 E621071 | **Latitude/Longitude:** | 36.62422 / -121.64595 | **Elevation (feet):** | 60 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Salinas (3612166) |

**Sources:**

ANO04S0032 ANONYMOUS - BBSL USNM #741051, 741052 & 741053 FROM SPRECKELS 1904-08-20

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 67989 | **EO Index:** | 68117 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDAST3L080 |
| **Occurrence Number:** | 23 | **Occurrence Last Updated:** | 2017-10-26 |

**Scientific Name:** *Ericameria fasciculata*

**Common Name:** Eastwood's goldenbush

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_UCSC-UC Santa Cruz

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL (MARITIME), COASTAL SCRUB, COASTAL DUNES.

**Micro Habitat:**

IN SANDY OPENINGS. 30-215 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1995-07-20 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1995-07-20 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

NORTH END OF FORT ORD MILITARY RESERVATION; VICINITY OF THE JUNCTION OF RESERVATION ROAD WITH IMJIN ROAD.

**Detailed Location:**

7 POLYGONS FROM SOUTH OF LANDING FIELD (NORTH OF RESERVATION RD.) TO NORTH OF INTER-GARRISON ROAD. MAPPED ACCORDING TO A 1992 USACE MAP AND A 1995 COLLECTION LABEL DESCRIPTION ("FORT ORD, UC RESERVE SITE: H2.").

**Ecological:**

**Threats:**

**General:**

UNKNOWN NUMBER OF PLANTS OBSERVED IN 1992 AND 1995.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 32 (M) | **Accuracy:** | specific area | **Area (acres):** | 421 |
| **UTM:** | Zone-10 N4059086 E610017 | **Latitude/Longitude:** | 36.67103 / -121.76883 | **Elevation (feet):** | 150 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| ANO95S0003 | ANONYMOUS - ANONYMOUS SN UCSC #1943 1995-07-20 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 67990 | **EO Index:** | 68118 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST3L080 |
| **Occurrence Number:** | 24 | **Occurrence Last Updated:** | 2017-10-26 |

**Scientific Name:** *Ericameria fasciculata*

**Common Name:** Eastwood's goldenbush

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_UCSC-UC Santa Cruz

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL (MARITIME), COASTAL SCRUB, COASTAL DUNES.

**Micro Habitat:**

IN SANDY OPENINGS. 30-215 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EASTERN PORTION OF FORT ORD MILITARY RESERVATION.

**Detailed Location:**

MAPPED AS SEVERAL POLYGONS ACCORDING TO A 1992 USACE MAP.

**Ecological:**

IN SANDY SOIL IN MARITIME CHAPARRAL WITH ARCTOSTAPHYLOS, CEANOTHUS, AND GARRYA.

**Threats:**

**General:**

SMALL PORTION OF SITE OBSERVED IN 1983. MAIN SOURCE OF INFORMATION IS 1992 MAP DETAIL FROM USACE. A 1989 MORGAN COLLECTION FROM "E OF BARLEY CANYON RD (FORT ORD)" IS ALSO ATTRIBUTED TO THIS SITE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 15 (M) | **Accuracy:** | specific area | **Area (acres):** | 2,197 |
| **UTM:** | Zone-10 N4054050 E613674 | **Latitude/Longitude:** | 36.62521 / -121.72867 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166), Marina (3612167) |

**Sources:**


MOR89S0016 MORGAN, R. - MORGAN #1670 UCSC #7311 1989-06-22

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

YOR83F0009 YORK, R. - FIELD SURVEY FORM FOR ERICAMERIA FASCICULATA 1983-03-06

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 25093 | **EO Index:** | 6091 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST4R0P1 |
| **Occurrence Number:** | 4 | **Occurrence Last Updated:** | 2011-08-31 |

**Scientific Name:** *Centromadia parryi ssp. congdonii*

**Common Name:** Congdon's tarplant

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3T2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

**General Habitat:**

VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

ALKALINE SOILS, SOMETIMES DESCRIBED AS HEAVY WHITE CLAY. 0-245 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1998-10-15 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-10-15 | **Occurrence Rank:** | Poor |
| **Owner/Manager:** | PVT | **Trend:** | Decreasing |
| **Presence:** | Presumed Extant | | |

**Location:**

BOLSA KNOLLS, ALONG SAN JUAN GRADE ABOUT 0.4 MILE NORTHEAST OF ROGGEE ROAD, NORTH OF SALINAS.

**Detailed Location:**

ALONG WEST SIDE OF ROAD ABOUT 0.2 MILE SOUTHWEST OF ENTRANCE TO SALINAS GOLF AND COUNTRY CLUB.

**Ecological:**

RUDERAL HABITAT WITH POLYGONUM ARENASTRUM, BROMUS WILDENOVII, CONYZA BONARIENSIS, PICRIS ECHIOIDES, AND POLYPOGON MONSPELIENSIS. SOILS MAPPED AS ARROYO SECO GRAVELLY LOAM.

**Threats:**

ROADSIDE VEGETATION MANAGEMENT.

**General:**

1 PLANT OBSERVED IN 1998. ACCORDING TO R. PRESTON, THIS SITE IS ESSENTIALLY EXTIRPATED; NO NATURAL HABITAT EXISTS IN THE AREA. HISTORIC COLLECTIONS BY R. HOOVER ARE FROM THIS SAME VICINITY.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 03, SW (M) | **Accuracy:** | specific area | **Area (acres):** | 2 |
| **UTM:** | Zone-10 N4066819 E622016 | **Latitude/Longitude:** | 36.73926 / -121.63335 | **Elevation (feet):** | 140 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| HOO66S0002 | HOOVER, R. - HOOVER #9971 UC #1321352, CAS #491574, OBI #16178, CAS-BOT-BC #272798 1966-09-08 |
| HOO66S0020 | HOOVER, R. - HOOVER #9969 CAS #491573, OBI #16177, CAS-BOT-BC #272797 (ALSO CITED IN PRE99R0001) 1966-09-08 |
| PRE98F0051 | PRESTON, R. - FIELD SURVEY FORM FOR CENTROMADIA PARRYI SSP. CONGDONII 1998-10-15 |
| PRE99R0001 | PRESTON, R. - PRELIMINARY REPORT ON THE CONSERVATION STATUS OF CONGDON'S SPIKEWEED (HEMIZONIA PARRYI SSP. CONGDONII) IN THE SOUTH AND EAST SAN FRANCISCO BAY AREA AND MONTEREY COUNTY, CALIFORNIA. 1999-02-23 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 25094 | **EO Index:** | 6093 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST4R0P1 |
| **Occurrence Number:** | 5 | **Occurrence Last Updated:** | 2011-08-29 |

**Scientific Name:** *Centromadia parryi ssp. congdonii*

**Common Name:** Congdon's tarplant

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3T2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

**General Habitat:**

VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

ALKALINE SOILS, SOMETIMES DESCRIBED AS HEAVY WHITE CLAY. 0-245 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1998-10-15 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-10-15 | **Occurrence Rank:** | Poor |
| **Owner/Manager:** | PVT | **Trend:** | Decreasing |
| **Presence:** | Presumed Extant | | |

**Location:**

SALINAS, ALONG EAST BLANCO ROAD BETWEEN HIGHWAY 101 AND THE SOUTHERN PACIFIC RAILROAD TRACKS.

**Detailed Location:**

MAPPED NORTH OF E BLANCO STREET ALONG WORK STREET. PLANTS FOUND IN RUDERAL STRIP ADJACENT TO SIDEWALKS.

**Ecological:**

RUDERAL HABITAT WITH POLYGONUM ARENASTRUM, HIRSCHFELDIA INCANA, LOLIUM MULTIFLORUM, CONYZA BONARIENSIS, PICRIS ECHIOIDES, AND CENTAUREA SOLSTITIALIS. SOILS MAPPED AS ANTIOCH VERY FINE SANDY LOAM AND CROPLEY SILTY CLAY.

**Threats:**

COMMERCIAL DEVELOPMENT. AREA IS BEING GRADED FOR DEVELOPMENT.

**General:**

PROBABLE TYPE LOCALITY. 880 PLANTS OBSERVED IN 1998. VARIOUS HISTORIC COLLECTIONS FROM "SALINAS" ARE ATTRIBUTED TO THIS SITE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 34, SW (M) | **Accuracy:** | specific area | **Area (acres):** | 13 |
| **UTM:** | Zone-10 N4058508 E622258 | **Latitude/Longitude:** | 36.66433 / -121.63197 | **Elevation (feet):** | 40 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| CON81S0006 | CONGDON, J. - CONGDON SN UC #89054 1881-05-26 |
| CON86S0002 | CONGDON, J. - CONGDON #151 DS #3455, UC #177490, CAS-BOT-BC #123596 1886-05-26 |
| MCM09S0004 | MCMURPHY, J. - MCMURPHY #733 UC #990562, RSA #81632, DS #375389, GH #414575, CAS-BOT-BC #272794 1909-08-23 |
| PRE98F0050 | PRESTON, R. - FIELD SURVEY FORM FOR CENTROMADIA PARRYI SSP. CONGDONII 1998-10-15 |
| PRE98S0001 | PRESTON, R. - PRESTON #1192 DAV #130141 (ALSO CITED IN PRE99R0001) 1998-10-15 |
| PRE99R0001 | PRESTON, R. - PRELIMINARY REPORT ON THE CONSERVATION STATUS OF CONGDON'S SPIKEWEED (HEMIZONIA PARRYI SSP. CONGDONII) IN THE SOUTH AND EAST SAN FRANCISCO BAY AREA AND MONTEREY COUNTY, CALIFORNIA. 1999-02-23 |
| SMI07S0003 | SMITH, C. - SMITH #1361 DS #280554, #3453, #3454, #520077, CAS-BOT-BC #272785, #272789-272791 (ALSO CITED IN PRE99R0001) 1907-07-04 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 25092 | **EO Index:** | 6090 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST4R0P1 |
| **Occurrence Number:** | 6 | **Occurrence Last Updated:** | 2015-12-21 |

**Scientific Name:** *Centromadia parryi ssp. congdonii*

**Common Name:** Congdon's tarplant

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3T2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

**General Habitat:**

VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

ALKALINE SOILS, SOMETIMES DESCRIBED AS HEAVY WHITE CLAY. 0-245 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1931-10-11 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-10-15 | **Occurrence Rank:** | None |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Extirpated | | |

**Location:**

HALFWAY BETWEEN SALINAS AND CASTROVILLE.

**Detailed Location:**

MAPPED BY CNDDB AS BEST GUESS ALONG HWY 183 NEAR COOPER. ANOTHER 1909 MCMURPHY COLLECTION FROM SAME LOCATION AND DATE WAS ANNOTATED TO C. PUNGENS SSP. PUNGENS BY B. BALDWIN; ID OF REMAINING SPECIMENS SHOULD BE CHECKED.

**Ecological:**

ROADSIDE. SLIGHTLY SALINE SOIL.

**Threats:**

**General:**

TWO COLLECTIONS ATTRIBUTED TO THIS SITE: HALL IN 1931 AND MCMURPHY IN 1909. AREA SEARCHED IN 1998 BY R. PRESTON; NO NATURAL HABITAT REMAINS ALONG HIGHWAY 183. RUDERAL HABITAT ALONG ROAD AND RR, BUT NO C. PARRYI SSP. CONGDONII OBSERVED.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 14 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 87 |
| **UTM:** | Zone-10 N4063810 E614634 | **Latitude/Longitude:** | 36.71307 / -121.71646 | **Elevation (feet):** | 20 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| HAL31S0001 | HALL, H. - HALL #13274 DS #672091, CAS-BOT-BC #272779 1931-10-11 |
| MCM09S0010 | MCMURPHY, J. - MCMURPHY #734 RSA #81637, DS #375329, CAS-BOT-BC #272793 1909-08-23 |
| PRE98F0049 | PRESTON, R. - FIELD SURVEY FORM FOR CENTROMADIA PARRYI SSP. CONGDONII 1998-10-15 |
| PRE99R0001 | PRESTON, R. - PRELIMINARY REPORT ON THE CONSERVATION STATUS OF CONGDON'S SPIKEWEED (HEMIZONIA PARRYI SSP. CONGDONII) IN THE SOUTH AND EAST SAN FRANCISCO BAY AREA AND MONTEREY COUNTY, CALIFORNIA. 1999-02-23 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 42498 | **EO Index:** | 42498 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST5L040 |
| **Occurrence Number:** | 31 | **Occurrence Last Updated:** | 2018-11-07 |

**Scientific Name:** *Lasthenia conjugens*

**Common Name:** Contra Costa goldfields

**Listing Status:** **Federal:** Endangered

**State:** None

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**Rare Plant Rank:** 1B.1

**Other Lists:** SB_UCBG-UC Botanical Garden at Berkeley

**General Habitat:**

VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, ALKALINE PLAYAS, CISMONTANE WOODLAND.

**Micro Habitat:**

VERNAL POOLS, SWALES, LOW DEPRESSIONS, IN OPEN GRASSY AREAS. 1-450 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1998-06-13 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-06-13 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, ABOUT 0.25 MILE NORTH OF MACHINE GUN FLATS, SOUTHWEST OF SALINAS.

**Detailed Location:**

VERNAL POOL LOCATED ABOUT 0.33 MILE EAST OF HENNEKENS RANCH ROAD AND 0.25 MILE NORTH OF MACHINE GUN FLATS.

**Ecological:**

VERNAL POOL (DEPRESSION) IN GRASSLAND WITH MIMA MOUND TOPOGRAPHY. DOMINANTS: PLAGIOBOTHRYS CHORISIANUS VAR. HICKMANII, ELEOCHARIS SP, AND ERYNGIUN ARMATUM. ARNOLD SERIES SOILS ON CLAY HARDPAN.

**Threats:**

EQUESTRIAN AND MOUNTAIN BIKE TRESPASS. PAST VEHICLE IMPACTS HAVE DEGRADED SITE VIA SOIL COMPACTION.

**General:**

ABOUT 500 PLANTS OBSERVED BY DELGADO IN 1998. SITE IS WITHIN BLM HABITAT PRESERVE. 1998 COLLECTION BY YADON FROM "FORT ORD, EAST OF HENNEKIN'S RANCH ROAD" ATTRIBUTED TO SITE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | specific area | **Area (acres):** | 2 |
| **UTM:** | Zone-10 N4055651 E611952 | **Latitude/Longitude:** | 36.63985 / -121.74768 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| DEL98F0001 | DELGADO, B. - FIELD SURVEY FORM FOR LASTHENIA CONJUGENS 1998-06-13 |
| YAD98S0001 | YADON, V. - YADON SN JEPS #94001 1998-05-25 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 42499 | **EO Index:** | 42499 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST5L040 |
| **Occurrence Number:** | 32 | **Occurrence Last Updated:** | 2018-09-04 |

**Scientific Name:** *Lasthenia conjugens*

**Common Name:** Contra Costa goldfields

**Listing Status:** **Federal:** Endangered

**State:** None

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**Rare Plant Rank:** 1B.1

**Other Lists:** SB_UCBG-UC Botanical Garden at Berkeley

**General Habitat:**

VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, ALKALINE PLAYAS, CISMONTANE WOODLAND.

**Micro Habitat:**

VERNAL POOLS, SWALES, LOW DEPRESSIONS, IN OPEN GRASSY AREAS. 1-450 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-05-05 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-05-05 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | BLM, DOD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, WEST AND SOUTH OF MACHINE GUN FLATS, SOUTHWEST OF SALINAS.

**Detailed Location:**

IN THE VICINITY OF BUTTERFLY VALLEY AND MACHINE GUN FLATS. 3 POLYGONS MAPPED ACCORDING TO MAPS FROM 1998 & 2007 AND 2007 KEELAN COORDINATES.

**Ecological:**

VERNAL POOL (DEPRESSION) IN GRASSLAND WITH MIMA MOUND TOPOGRAPHY. ASSOCIATED WITH BRODIAEA TERRESTRIS, DESCHAMPSIA DANTHONIOIDES, LASTHENIA GLABERRIMA, DANTHONIA CALIFORNICA, AND ERYNGIUM SP.

**Threats:**

TRACKS FROM TANKS WERE OBSERVED IN 2007 THROUGH POOLS. INTENSE SOIL DISTURBANCE FROM PIG ACTIVITY IN BUTTERFLY VALLEY.

**General:**

PLANTS SEEN IN 1998, 2007, AND 2008. 1999 FORBES COLLECTIONS FROM "3/4 MI N OF EUCALYPTUS RD" & "MACHINE GUN FLATS" AND 2009 SOLOMESHCH COLLECTIONS FROM "BUTTERFLY VALLEY" & "MACHINE GUN FLATS" ALSO ATTRIBUTED TO THIS EO.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 9, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 15 |
| **UTM:** | Zone-10 N4054980 E612241 | **Latitude/Longitude:** | 36.63377 / -121.74455 | **Elevation (feet):** | 500 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| DEL98F0001 | DELGADO, B. - FIELD SURVEY FORM FOR LASTHENIA CONJUGENS 1998-06-13 |
| EME07F0001 | EMERY, N. - FIELD SURVEY FORM FOR LASTHENIA CONJUGENS 2007-04-30 |
| EME07F0002 | EMERY, N. - FIELD SURVEY FORM FOR LASTHENIA CONJUGENS 2007-05-11 |
| FOR99S0001 | FORBES, H. & B. KELLER - FORBES SN JEPS #115075 1999-07-06 |
| FOR99S0002 | FORBES, H. & B. KELLER - FORBES SN JEPS #115076 1999-07-06 |
| KEE13U0001 | KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26 |
| SOL09S0005 | SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #85191 2009-04-08 |
| SOL09S0006 | SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #85192 2009-04-08 |
| SOL09S0007 | SOLOMESHCH, A. - SOLOMESHCH SN DAV #84748, UCR #224667 2009-05-05 |
| TAN09R0001 | TANNOURJU, D.N. - ECOLOGICAL FACTORS SUITABLE FOR THE ENDANGERED LASTHENIA CONJUGENS (ASTERACEAE). MASTER'S THESIS, SJSU 2009-08-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 95101 | **EO Index:** | 96234 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDAST6E0D0 |
| **Occurrence Number:** | 35 | **Occurrence Last Updated:** | 2015-02-03 |

**Scientific Name:** *Microseris paludosa*

**Common Name:** marsh microseris

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCSC-UC Santa Cruz

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CISMONTANE WOODLAND, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

3-610 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-05-05 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-05-05 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM, UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

MACHINE GUN FLATS AND BUTTERFLY VALLEY, FORT ORD.

**Detailed Location:**

MAPPED BY CNDDB AS 2 POLYGONS ACCORDING TO 2009 SOLOMESHCH COORDINATES, IN THE SE 1/4 OF THE SE 1/4 OF SECTION 9.

**Ecological:**

VERNAL POOLS. SURROUNDING VEGETATION IS GRASSLAND. ASSOCIATED WITH ERYNGIUM ARMATUM, PLAGIOBOTHRYS CHORISIANUS HICKMANII, PSILOCARPHUS TENELLUS GLOBIFERUS, BRODIAEA TERRESTRIS, ISOETES HOWELLII, LASTHENIA CONJUGENS, POGOGYNE, ETC.

**Threats:**

**General:**

ONLY SOURCES OF INFORMATION FOR THIS SITE ARE TWO 2009 SOLOMESHCH ET AL. COLLECTIONS.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 10 |
| **UTM:** | Zone-10 N4054822 E612251 | **Latitude/Longitude:** | 36.63234 / -121.74445 | **Elevation (feet):** | 500 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| SOL09S0015 | SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #85196 2009-04-08 |
| SOL09S0016 | SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #85197 2009-04-08 |
| SOL09S0017 | SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #84754 2009-05-05 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 93085 | **EO Index:** | 94235 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDBOR0V061 |
| **Occurrence Number:** | 13 | **Occurrence Last Updated:** | 2014-07-09 |

**Scientific Name:** *Plagiobothrys chorisianus var. chorisianus*

**Common Name:** Choris' popcornflower

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3T1Q
**State:** S1

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_UCSC-UC Santa Cruz

**General Habitat:**

CHAPARRAL, COASTAL SCRUB, COASTAL PRAIRIE.

**Micro Habitat:**

MESIC SITES. 5-705 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-04-09 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-04-09 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, CRESCENT BLUFFS.

**Detailed Location:**

MAPPED ACCORDING TO COORDINATES PROVIDED ON A 2009 SOLOMESHCH COLLECTION, IN THE NW 1/4 OF THE NW 1/4 OF SECTION 11.

**Ecological:**

VERNAL POOLS. SURROUNDING VEGETATION IS GRASSLAND. ASSOCIATED WITH ELEOCHARIS MACROSTACHYA, PLAGIOBOTHRYS CHORISIANUS HICKMANII, PLANTAGO CORONOPUS, AND POGOGYNE SERPYLLOIDES.

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2009 SOLOMESHCH COLLECTION.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 11, NW (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4056077 E614188 | **Latitude/Longitude:** | 36.64342 / -121.72261 | **Elevation (feet):** | 200 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

SOL09S0012 SOLOMESHCH, A. - SOLOMESHCH SN DAV #84658 2009-04-09

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 93087 | **EO Index:** | 94236 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDBOR0V061 |
| **Occurrence Number:** | 14 | **Occurrence Last Updated:** | 2014-07-09 |

**Scientific Name:** *Plagiobothrys chorisianus var. chorisianus*

**Common Name:** Choris' popcornflower

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3T1Q
**State:** S1

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_UCSC-UC Santa Cruz

**General Habitat:**

CHAPARRAL, COASTAL SCRUB, COASTAL PRAIRIE.

**Micro Habitat:**

MESIC SITES. 5-705 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-05-05 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-05-05 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, MACHINE GUN FLATS.

**Detailed Location:**

MAPPED ACCORDING TO COORDINATES PROVIDED ON A 2009 SOLOMESHCH COLLECTION, IN THE SE 1/4 OF THE SE 1/4 OF SECTION 9.

**Ecological:**

VERNAL POOLS. SURROUNDING VEGETATION IS GRASSLAND. ASSOCIATED WITH ERYNGIUM ARMATUM AND PSILOCARPHUS TENELLUS GLOBIFERUS.

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2009 SOLOMESHCH COLLECTION.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09, SE (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4054870 E611972 | **Latitude/Longitude:** | 36.63281 / -121.74757 | **Elevation (feet):** | 520 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

SOL09S0013 SOLOMESHCH, A. - SOLOMESHCH SN DAV #85494 2009-05-05

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 28685 | **EO Index:** | 30031 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDBRA16010 |
| **Occurrence Number:** | 9 | **Occurrence Last Updated:** | 2017-11-08 |

**Scientific Name:** *Erysimum ammophilum*

**Common Name:** sand-loving wallflower

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_CRES-San Diego Zoo CRES Native Gene Seed Bank
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CHAPARRAL (MARITIME), COASTAL DUNES, COASTAL SCRUB.

**Micro Habitat:**

SANDY OPENINGS. 3-320 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2014-03-30 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2014-03-30 | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | UCNR-FORT ORD NR, BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, JUST EAST OF MARINA ALONG RESERVATION ROAD AND SOUTH OF AIRFIELD.

**Detailed Location:**

SEVERAL COLONIES ALONG EITHER SIDE OF RESERVATION ROAD FROM SEASIDE EAST ABOUT TWO MILES. INCLUDES PORTIONS OF THE UC FORT ORD NATURAL RESERVE.

**Ecological:**

GROWING IN COASTAL DUNES AND COASTAL DUNE SCRUB. OTHER RARE PLANTS IN THIS AREA INCLUDE GILIA TENUIFLORA ARENARIA, CHORIZANTHE PUNGENS PUNGENS, ARCTOSTAPHYLOS PUMILA, AND ERIASTRUM VIRGATUM.

**Threats:**

OFF-ROAD VEHICLES, ROADWAY WIDENING.

**General:**

1992 POPULATION DENSITY VARIED FROM LOW TO HIGH, DEPENDING ON THE COLONY. ~25 PLANTS OBSERVED IN 1994. TWO UNDATED ANONYMOUS COLLECTIONS, 2012 MCSTAY OBSERVATION, 2013 STYER COLLECTION, AND 2014 COLLECTION ARE ALSO ATTRIBUTED TO THIS SITE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 32 (M) | **Accuracy:** | specific area | **Area (acres):** | 363 |
| **UTM:** | Zone-10 N4058908 E610260 | **Latitude/Longitude:** | 36.6694 / -121.76614 | **Elevation (feet):** | 150 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| AKU12F0001 | AKULOVA-BARLOW, Z. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR ERYSIMUM AMMOPHILUM & CORDYLANTHUS RIGIDUS SSP. LITTORALIS 2012-07-16 |
| ANO14S0003 | ANONYMOUS - ANONYMOUS #835 UCSC #9564 2014-03-30 |
| ANONDS0073 | ANONYMOUS - ANONYMOUS SN UCSC #2004 XXXX-XX-XX |
| ANONDS0074 | ANONYMOUS - ANONYMOUS SN UCSC #2005 XXXX-XX-XX |
| MCS12U0001 | MCSTAY, S. - OBSERVATION RECORD FOR ERYSIMUM AMMOPHILUM, CALFLORA ID #OE3255 2012-04-21 |
| STY13S0002 | STYER, D. - STYER #836 UCSC #9565 2013-04-21 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| WES94F0005 | WESCO - FIELD SURVEY FORM FOR ERYSIMUM AMMOPHILUM 1994-05-18 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 83413 | **EO Index:** | 84429 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDCAM0C010 |
| **Occurrence Number:** | 82 | **Occurrence Last Updated:** | 2011-07-18 |

**Scientific Name:** *Legenere limosa*

**Common Name:** legenere

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_UCBG-UC Botanical Garden at Berkeley

**General Habitat:**

VERNAL POOLS.

**Micro Habitat:**

IN BEDS OF VERNAL POOLS. 1-1005 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-04-08 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-04-08 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, BUTTERFLY VALLEY.

**Detailed Location:**

EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB IN VICINITY OF BUTTERFLY VALLEY, JUST SOUTH OF MACHINE GUN FLATS. COLLECTOR'S PLOT 9A.

**Ecological:**

VERNAL POOLS. SURROUNDING VEGETATION IS GRASSLAND. ASSOCIATED WITH BRODIAEA TERRESTRIS TERRESTRIS, ISOETES HOWELLII, PLAGIOBOTHRYS CHORISIANUS HICKMANII, LASTHENIA CONJUGENS, AND POGOGYNE SERPYLLOIDES.

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2009 COLLECTION BY SOLOMESHCH ET AL.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09, SE (M) | **Accuracy:** | 1/5 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4054783 E612283 | **Latitude/Longitude:** | 36.63198 / -121.74410 | **Elevation (feet):** | |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

SOL09S0004 SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #85194 2009-04-08

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 28441 | **EO Index:** | 21097 |
| **Key Quad:** | Seaside (3612157) | **Element Code:** | PDERI040J1 |
| **Occurrence Number:** | 5 | **Occurrence Last Updated:** | 2017-01-11 |

**Scientific Name:** *Arctostaphylos hookeri ssp. hookeri*

**Common Name:** Hooker's manzanita

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G3T2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_UCSC-UC Santa Cruz

**General Habitat:**

CHAPARRAL, COASTAL SCRUB, CLOSED-CONE CONIFEROUS FOREST, CISMONTANE WOODLAND.

**Micro Habitat:**

SANDY SOILS, SANDY SHALES, SANDSTONE OUTCROPS. 30-550 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2012-12-16 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2012-12-16 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | DOD-ARMY | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, MONTEREY.

**Detailed Location:**

LARGE OCCURRENCE MAPPED BETWEEN HWY 68 TO THE SOUTH, INTER-GARRISON ROAD TO THE NORTH, UP TO 2 MILES EAST OF BARLOY CANYON ROAD AND UP TO 3 MILES WEST OF BARLOY CANYON ROAD.

**Ecological:**

MARITIME CHAPARRAL WITH A. MONTEREYENSIS, A. PUMILA, AND A. TOMENTOSA. RARE TAMALIA GALLS PRESENT IN 2004.

**Threats:**

**General:**

MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL PROVIDED BY USACE; UNKNOWN NUMBER OF PLANTS IN 1992. UNKNOWN NUMBER OF PLANTS OBSERVED AT FORT ORD IN 2007 AND 2010. FEWER THAN 50 PLANTS OBSERVED AT FAR NW END OF OCCURRENCE IN 2012.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 21 (M) | **Accuracy:** | specific area | **Area (acres):** | 5,310 |
| **UTM:** | Zone-10 N4052586 E611062 | **Latitude/Longitude:** | 36.61233 / -121.75808 | **Elevation (feet):** | |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| CNP83M0001 | CALIFORNIA NATIVE PLANT SOCIETY - MAP OF FORT ORD WITH SPECIFIC LOCATIONS OF RARE PLANTS. 1983-XX-XX |
| HOW63S0050 | HOWITT, B. - HOWITT #2066 PGM #5744 1963-05-08 |
| HUB12U0004 | HUBBY, K. - OBSERVATION RECORD FOR ARCTOSTAPHYLOS HOOKERI SSP. HOOKERI, CALFLORA ID: OE4082 2012-12-16 |
| KEE13U0001 | KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26 |
| KNI86S0002 | KNIGHT, W. ET AL. - KNIGHT #5271 RSA #364246 1986-02-12 |
| MIL04S0004 | MILLER, D. - MILLER SN CHSC #90068 2004-01-25 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 41985 | **EO Index:** | 20198 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDERI040R0 |
| **Occurrence Number:** | 14 | **Occurrence Last Updated:** | 2017-03-03 |

**Scientific Name:** *Arctostaphylos montereyensis*

**Common Name:** Toro manzanita

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2?
**State:** S2?

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB.

**Micro Habitat:**

SANDY SOIL, USUALLY WITH CHAPARRAL ASSOCIATES. 45-765 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2012-12-16 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2012-12-16 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD; FROM JUNCTION OF INTERGARRISON RD AND GENERAL JIM MOORE RD EXTENDING SE TO RESERVATION BOUNDARY.

**Detailed Location:**

MAPPED AS SEVERAL POLYGONS, MOSTLY ACCORDING TO 1992 ARMY CORPS OF ENGINEERS MAP. NW-MOST POLYGON IS NON-SPECIFIC BASED ON 1996 COLLECTION. YADON'S 2000 COLLECTIONS FROM PARKER FLATS RD ARE IDENTIFIED AS A. PAJAROENSIS X A. MONTEREYENSIS.

**Ecological:**

MARITIME CHAPARRAL.

**Threats:**

NW PORTION OF SITE MAY BE IMPACTED BY DEVELOPMENT.

**General:**

THIS IS THE LARGEST KNOWN OCCURRENCE OF A. MONTEREYENSIS. PLANT DENSITY LOW TO HIGH IN 1992, DEPENDING ON COLONY. LARGE NUMBERS OBSERVED IN 2012. INCLUDES FORMER OCCURRENCE #5. COLLECTIONS FROM 1967-2008 ARE ATTRIBUTED HERE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 16 (M) | **Accuracy:** | specific area | **Area (acres):** | 6,237 |
| **UTM:** | Zone-10 N4054100 E612089 | **Latitude/Longitude:** | 36.62586 / -121.74638 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| ANO96S0010 | ANONYMOUS - ANONYMOUS SN UCSC #8513 1996-04-29 |
| HAL08S0012 | HALL, B. ET AL. - HALL #BH6065 UCSC #10706, 10709, 10713, 10752, 10756 2008-XX-XX |
| HOW67S0001 | HOWELL, J. - HOWELL #42042-42047 CAS #475696-475701 1967-03-15 |
| HOW67S0027 | HOWITT, B. - HOWITT #2068 PGM #5749 1967-03-15 |
| HOW67S0098 | HOWITT, B. - HOWITT #2068 CAS #466578 1967-05-08 |
| HUB12U0005 | HUBBY, K. - OBSERVATION RECORD FOR ARCTOSTAPHYLOS MONTEREYENSIS, CALFLORA ID: OE4080 2012-12-16 |
| KEE94S0002 | KEELEY, J. - KEELEY #25408-25412 RSA #633177, 633179, 633182-633184 1994-07-05 |
| KNI86S0003 | KNIGHT, W. ET AL. - KNIGHT #5269 RSA #364247, CAS #740364 1986-02-12 |
| MASNDM0001 | MASSERA, J. - MAP OF FORT ORD WITH RARE PLANT LIST XXXX-XX-XX |
| SAN03S0051 | SANDER, C. - SANDER #33007 HSC #97742 2003-06-23 |
| STO02S0002 | STONE, J. - STONE #3360 MO #1751347 2002-06-06 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| WAL75S0008 | WALLACE, G. - WALLACE #1427 RSA #254301 1975-05-10 |
| YAD00S0013 | YADON, V. - YADON SN PGM #3973 2000-01-23 |
| YAD00S0014 | YADON, V. - YADON SN PGM #4781 2000-05-19 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A8015 | **EO Index:** | 109808 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDERI04100 |
| **Occurrence Number:** | 28 | **Occurrence Last Updated:** | 2018-01-09 |

**Scientific Name:** *Arctostaphylos pajaroensis*

**Common Name:** Pajaro manzanita

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_UCSC-UC Santa Cruz

**General Habitat:**

CHAPARRAL.

**Micro Habitat:**

SANDY SOILS. 30-170 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-02-09 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-02-09 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

TRAIL 15, FORT ORD NATIONAL MONUMENT (REGION J5).

**Detailed Location:**

MAPPED AS BEST GUESS ALONG TRAIL 15.

**Ecological:**

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2009 STYER COLLECTION. NEEDS FIELDWORK.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 10, NW (M) | **Accuracy:** | non-specific area | **Area (acres):** | 61 |
| **UTM:** | Zone-10 N4055985 E612917 | **Latitude/Longitude:** | 36.64275 / -121.73684 | **Elevation (feet):** | |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

STY09S0001 STYER, D. - STYER #200 UCSC #10160 2009-02-09

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 67536 | **EO Index:** | 20158 |
| **Key Quad:** | Seaside (3612157) | **Element Code:** | PDERI04180 |
| **Occurrence Number:** | 2 | **Occurrence Last Updated:** | 2017-07-21 |

**Scientific Name:** *Arctostaphylos pumila*

**Common Name:** sandmat manzanita

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G1
**State:** S1

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND, COASTAL DUNES, COASTAL SCRUB.

**Micro Habitat:**

ON SANDY SOIL WITH OTHER CHAPARRAL ASSOCIATES. 3-210 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2015-12-30 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2015-12-30 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | BLM, CITY OF MONTEREY, PVT | **Trend:** | Increasing |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD; ALONG SOUTHERN AND WESTERN BORDERS OF FORMER MILITARY RESERVE, NORTH TO PARKER FLATS AND EAST TO ELLIOTT HILL.

**Detailed Location:**

EXTENSIVE OCCURRENCE MAPPED PRIMARILY ACCORDING TO A 1992 MAP FROM THE US ARMY CORPS OF ENGINEERS. ALSO INCLUDES TWO POLYGONS JUST WEST OF FORD ORD BOUNDARY IN DEL MONTE HEIGHTS/DEL REY OAKS AREA. INCLUDES VAGUE "FORT ORD" COLLECTIONS/OBS.

**Ecological:**

MARITIME CHAPARRAL, COASTAL DUNE SCRUB. ASSOCIATED WITH A. TOMENTOSA SSP. TOMENTOSA, ADENOSTOMA FASCICULATUM, ERICAMERIA ERICOIDES, HETEROMELES ARBUTIFOLIA, CEANOTHUS RIGIDUS, ETC. PRESCRIBED FIRE WENT THROUGH THIS AREA IN 2005.

**Threats:**

DEVELOPMENT, FUELBREAK MAINTENANCE, ROADSIDE SPRAYING OF HERBICIDE (UNLIKELY), ROAD MAINTENANCE (UNLIKELY).

**General:**

PLANT DENSITY REPORTED AS MEDIUM TO HIGH THROUGHOUT A MAJORITY OF THIS MAPPED AREA IN 1992. INCREASES IN A. PUMILA DENSITY FOUND FROM 2004 TO 2015. MANY HISTORIC COLLECTIONS ATTRIBUTED HERE. INCLUDES FORMER OCCURRENCES #18 AND 19.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 19 (M) | **Accuracy:** | specific area | **Area (acres):** | 7,569 |
| **UTM:** | Zone-10 N4052276 E608244 | **Latitude/Longitude:** | 36.60986 / -121.78963 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| ANO95S0002 | ANONYMOUS - ANONYMOUS SN UCSC #2056 1995-05-XX |
| ANO95S0013 | ANONYMOUS - ANONYMOUS SN UCSC #2054 & #2055 1995-05-27 |
| BLA89S0001 | BLAUER, A. - BLAUER #84-89 SEINET #8513227 1989-07-22 |
| CNP83M0001 | CALIFORNIA NATIVE PLANT SOCIETY - MAP OF FORT ORD WITH SPECIFIC LOCATIONS OF RARE PLANTS. 1983-XX-XX |
| GAN58S0002 | GANKIN, R. - GANKIN #302 & #303 CAS #475906, SBBG #25403, DAV #53737, #53738, #53740 1958-06-20 |
| GRE90U0014 | GREENHOUSE, J. - OBSERVATION RECORD FOR ARCTOSTAPHYLOS PUMILA, CALFLORA ID: JGR13944 1990-04-25 |
| GRE97U0007 | GREENHOUSE, J. - OBSERVATION RECORD FOR ARCTOSTAPHYLOS PUMILA, CALFLORA ID: JGR25773 1997-01-19 |
| HOW67S0026 | HOWE, D. - HOWE #4341 & #4344 SD #67321, SDSU #2824 1967-04-12 |
| HRU87S0001 | HRUSA, G. - HRUSA #5386-5389 CHSC #59313, DAV #53733 & #53734, UCR #74387 1987-06-08 |
| HUB12U0006 | HUBBY, K. - OBSERVATION RECORD FOR ARCTOSTAPHYLOS PUMILA, CALFLORA ID: OE4081 2012-12-16 |
| JEP13S0008 | JEPSON, W. - JEPSON #5702 JEPS #38607, A #362070, GH #362030 1913-11-29 |
| KEE13U0001 | KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26 |
| KRA15I0007 | KRAMER, N. - PHOTOS OF ARCTOSTAPHYLOS PUMILA, CALPHOTOS ID: 0000 0000 0116 1169 & 1170 2015-12-30 |
| KRA88F0006 | KRATTER, A. - FIELD SURVEY FORM FOR ARCTOSTAPHYLOS PUMILA 1988-12-14 |
| MASNDM0001 | MASSERA, J. - MAP OF FORT ORD WITH RARE PLANT LIST XXXX-XX-XX |
| MAT87F0003 | MATTHEWS, C. - FIELD SURVEY FORM FOR ERICAMERIA FASCICULATA & ARCTOSTAPHYLOS PUMILA 1987-10-24 |
| MIL04S0005 | MILLER, D. - MILLER SN CHSC #90053 2004-01-25 |
| PIE16R0001 | PIERCE, L. ET AL. - THE PARKER FLATS PRESCRIBED BURN: 10TH YEAR POST-FIRE VEGETATION RECOVERY IN 2015. 2016-03-XX |
| POS95I0002 | POST, D. - PHOTO OF ARCTOSTAPHYLOS PUMILA, CALPHOTOS ID: 0000 0000 0802 0252 1995-01-15 |
| SAN03S0052 | SANDER, C. - SANDER #33011 HSC #97667 2003-06-24 |
| SCH04I0014 | SCHUSTEFF, A. - PHOTOS OF ARCTOSTAPHYLOS PUMILA, CALPHOTOS ID: 0000 0000 0404 0941, 0957, 0959, 0970, 0973 2004-04-18 |
| STY09F0001 | STYER, D. - FIELD SURVEY FORM FOR ARCTOSTAPHYLOS PUMILA & PIPERIA YADONII 2009-07-01 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| WOO13S0002 | WOODCOCK, F. - WOODCOCK SN JEPS #38608, A #362071, GH #362031 1913-04-08 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A5169 | **EO Index:** | 106873 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDERI04180 |
| **Occurrence Number:** | 15 | **Occurrence Last Updated:** | 2017-06-30 |

**Scientific Name:** *Arctostaphylos pumila*

**Common Name:** sandmat manzanita

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G1
**State:** S1

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND, COASTAL DUNES, COASTAL SCRUB.

**Micro Habitat:**

ON SANDY SOIL WITH OTHER CHAPARRAL ASSOCIATES. 3-210 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2017-01-28 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2017-01-28 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | UCNR, CITY OF MARINA, DPR, UNK | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

NORTH END OF FORT ORD IN VICINITY OF MARINA, AND ALONG WEST SIDE OF HIGHWAY 1 BETWEEN LAKE DR AND 8TH ST.

**Detailed Location:**

SEVERAL POLYGONS MAPPED BY CNDDB, MOSTLY ACCORDING TO A 1992 USACE MAP AND 2014 DIGITAL DATA FROM ESA. INCLUDES VAGUE COLLECTIONS FROM MARINA, RESERVATION ROAD, "1 1/2 MI NNW OF GIGLING," "N RESERVE, FORT ORD," ETC.

**Ecological:**

COASTAL DUNE SCRUB. SANDY SOIL ASSOCIATED WITH RHAMNUS CALIFORNICA, SALVIA MELLIFERA, BACCHARIS PILULARIS, ARTEMISIA CALIFORNICA, ERICAMERIA FASCICULATA, LOTUS SCOPARIUS, TOXICODENDRON DIVERSILOBUM, CEANOTHUS RIGIDUS, ETC.

**Threats:**

ORVS, ROADWAY WIDENING, DEVELOPMENT, INVASIVE SPECIES, MAINTENANCE.

**General:**

DENSITY OF PLANTS ON FORD ORD RANGED FROM LOW TO HIGH IN 1992, HIGHEST DENSITY PORTIONS NEAR THE AIRPORT. 90+ PLANTS SEEN ON WEST SIDE OF HIGHWAY 1 IN 2013. SEEN IN 2008, 2015, 2016, & 2017. INCLUDES FORMER EO #17.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 31 (M) | **Accuracy:** | specific area | **Area (acres):** | 2,073 |
| **UTM:** | Zone-10 N4058767 E608944 | **Latitude/Longitude:** | 36.66828 / -121.78089 | **Elevation (feet):** | 100 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| AKU15I0001 | AKULOVA, Z. - PHOTO OF ARCTOSTAPHYLOS PUMILA, CALPHOTOS ID: 0000 0000 0215 3547 2015-02-XX |
| AXE36S0001 | AXELROD, D. - AXELROD #665 RSA #141375 1936-08-19 |
| CHA17U0002 | CHASEY, A. - OBSERVATION RECORD FOR ARCTOSTAPHYLOS PUMILA, CALFLORA ID: MG35065 2017-01-28 |
| ESA14D0001 | ESA - EXCEL TABLE AND SHAPEFILES FOR SURVEY WORK ASSOCIATED WITH THE MONTEREY PENINSULA WATER SUPPLY PROJECT IN 2012 AND 2013 2014-XX-XX |
| GIL00S0003 | GILLESPIE, I. - GILLESPIE #17 UCR #120819 2000-04-22 |
| GRA03F0006 | GRAFF, A. - FIELD SURVEY FORM FOR ERICAMERIA FASCICULATA & ARCTOSTAPHYLOS PUMILA & CEANOTHUS RIGIDUS & PIPERIA YADONII & PIPERIA MICHAELII 2003-07-03 |
| GRE95S0002 | GREY - GREY SN UCSC #2057 1995-04-XX |
| HOO41S0066 | HOOVER, R. - HOOVER #4775 UC #762306, GH #362062 1941-03-09 |
| HOO62S0005 | HOOVER, R. - HOOVER #8534 CAS #475899 & #475900, OBI #14529 1962-03-10 |
| HOO68S0033 | HOOVER, R. - HOOVER #33 OBI #3256 1968-04-11 |
| KEE13U0001 | KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26 |
| KEI03S0006 | KEIL, D. - KEIL #30258-1 & #30268-1 OBI #67052 & #67066, UC #1873003 2003-05-28 |
| KNI86S0015 | KNIGHT, W. - KNIGHT #5261 CAS #740044 1986-01-08 |
| KRE03F0003 | KREIBERG, P. - FIELD SURVEY FORM FOR GILIA TENUFLORA SSP. ARENARIA, CHORIZANTHE PUNGENS & ARCTOSTAPHYLOS PUMILA 2003-05-13 |
| TAY16I0005 | TAYLOR, D. - PHOTO OF ARCTOSTAPHYLOS PUMILA, CALPHOTOS ID: 0000 0000 0316 0936 2016-03-11 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| VAN38S0010 | VAN RENSSELAER, M. - VAN RENSSELAER SN SBBG #5396 1938-04-21 |
| VAN80R0002 | VANDERWIER, J. - REPORT AND FIELD SURVEY FORM FOR ARCTOSTAPHYLOS PUMILA. 1980-06-14 |
| WES94F0006 | WESCO - FIELD SURVEY FORM FOR ARCTOSTAPHYLOS PUMILA 1994-05-18 |
| YAD06S0005 | YADON, V. - YADON SN PGM #7508 2006-08-29 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A5171 | **EO Index:** | 106876 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDERI04180 |
| **Occurrence Number:** | 21 | **Occurrence Last Updated:** | 2017-06-30 |

**Scientific Name:** *Arctostaphylos pumila*

**Common Name:** sandmat manzanita

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G1
**State:** S1

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND, COASTAL DUNES, COASTAL SCRUB.

**Micro Habitat:**

ON SANDY SOIL WITH OTHER CHAPARRAL ASSOCIATES. 3-210 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM, MNT COUNTY | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

SOUTH SIDE OF WATKINS GATE ROAD, JUST WEST OF EAST GARRISON AND NORTH OF MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

MAPPED ACCORDING TO A 1992 USACE MAP.

**Ecological:**

**Threats:**

**General:**

LOW DENSITY OF PLANTS OBSERVED IN THIS AREA IN 1992.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 4, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 124 |
| **UTM:** | Zone-10 N4056575 E612307 | **Latitude/Longitude:** | 36.64814 / -121.74358 | **Elevation (feet):** | 300 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 24658 | **EO Index:** | 6914 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDFAB0F8R1 |
| **Occurrence Number:** | 1 | **Occurrence Last Updated:** | 2013-07-02 |

**Scientific Name:** *Astragalus tener var. tener*

**Common Name:** alkali milk-vetch

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_UCSC-UC Santa Cruz

**CNDDB Element Ranks:** **Global:** G2T1

**State:** S1

**General Habitat:**

ALKALI PLAYA, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

**Micro Habitat:**

LOW GROUND, ALKALI FLATS, AND FLOODED LANDS; IN ANNUAL GRASSLAND OR IN PLAYAS OR VERNAL POOLS. 0-170 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1889-04-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1889-04-XX | **Occurrence Rank:** | None |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Possibly Extirpated | | |

**Location:**

1-2 MILES NORTHEAST OF SALINAS.

**Detailed Location:**

EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AROUND 1 TO 2 AIR MILES NORTHEAST OF SALINAS BASED ON AN 1882 COLLECTION FROM "2 MI NE FROM SALINAS" AND AN 1889 COLLECTION FROM "SALINAS, 1 MI NE."

**Ecological:**

GROWING IN LOW GROUNDS.

**Threats:**

DEVELOPMENT, AGRICULTURE?

**General:**

BASED ON 1882 AND 1889 COLLECTIONS BY ABBOTT. WITHAM REVIEWED MAPS AND SPOT IMAGERY FOR THIS VICINITY IN 2002 & FOUND AREA ALL DEVELOPED AND/OR EXTENSIVE ROW CROP AGRICULTURE. PROBABLY EXTIRPATED.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R03E, Sec. 21 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4062118 E621790 | **Latitude/Longitude:** | 36.69692 / -121.63663 | **Elevation (feet):** | 60 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Natividad (3612165), Salinas (3612166) |

**Sources:**

| | |
|---|---|
| ABB82S0001 | ABBOTT, E. - ABBOTT SN CAS #63065 1882-XX-XX |
| ABB89S0005 | ABBOTT, E. - ABBOTT SN UNKNOWN HERBARIUM (CITED IN LIS88U0001) 1889-04-XX |
| LIS88U0001 | LISTON, A. - LIST OF ASTRAGALUS TENER VAR. TENER COLLECTIONS. 1988-11-17 |
| WIT02R0001 | WITHAM, C. - ALKALINE VERNAL POOL MILK-VETCH STATUS SURVEY REPORT 2002-09-11 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 40861 | **EO Index:** | 40861 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDFAB402W0 |
| **Occurrence Number:** | 10 | **Occurrence Last Updated:** | 2008-12-16 |

**Scientific Name:** *Trifolium buckwestiorum*

**Common Name:** Santa Cruz clover

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCSC-UC Santa Cruz
SB_USDA-US Dept of Agriculture

**General Habitat:**

COASTAL PRAIRIE, BROADLEAFED UPLAND FOREST, CISMONTANE WOODLAND.

**Micro Habitat:**

MOIST GRASSLAND. GRAVELLY MARGINS. 30-805 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1998-05-07 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-05-07 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

ALONG RESERVATION ROAD ABOUT 0.5 AIR MILE WEST OF JUNCTION WITH HIGHWAY 68, FORMER FORT ORD MILITARY RES, SW OF SALINAS.

**Detailed Location:**

FOUND IN WET AREA WEST OF ROAD ALONG ENGINEERS CANYON ROAD.

**Ecological:**

GROWING IN WET DRAINAGE.

**Threats:**

**General:**

SITE VERY SMALL; PERHAPS OTHERS IN VICINITY.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R03E, Sec. 18, NW (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4054155 E617155 | **Latitude/Longitude:** | 36.62574 / -121.68972 | **Elevation (feet):** | 100 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| YAD98F0002 | YADON, V. - FIELD SURVEY FORM FOR TRIFOLIUM BUCKWESTIORUM 1998-05-07 |
| YAD98S0003 | YADON, V. - YADON SN PGM #3955 1998-05-07 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 73141 | **EO Index:** | 74072 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDFAB402W0 |
| **Occurrence Number:** | 11 | **Occurrence Last Updated:** | 2017-12-01 |

**Scientific Name:** *Trifolium buckwestiorum*

**Common Name:** Santa Cruz clover

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCSC-UC Santa Cruz
SB_USDA-US Dept of Agriculture

**General Habitat:**

COASTAL PRAIRIE, BROADLEAFED UPLAND FOREST, CISMONTANE WOODLAND.

**Micro Habitat:**

MOIST GRASSLAND. GRAVELLY MARGINS. 30-805 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1998-06-06 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-06-06 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EAST OF HENNEKIN'S (HENNEKEN'S) RANCH ROAD, FORMER FORT ORD MILITARY RESERVATION.

**Detailed Location:**

EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB IN THE VICINITY OF HENNEKEN RANCH ROAD AND TO THE EAST OF THE ROAD.

**Ecological:**

GROWING IN VERNAL AREAS.

**Threats:**

**General:**

SITE BASED ON A 1998 YADON COLLECTION. ANOTHER 1998 YADON COLLECTION FROM "HENNIKEN RANCH ROAD, EAST OF HENNIKEN FLATS" AND A 1998 MORGAN COLLECTION FROM "ROADSIDE N? OF MACHINE GUN FLATS" ARE ATTRIBUTED TO THIS OCCURRENCE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09 (M) | **Accuracy:** | 3/5 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4055463 E611813 | **Latitude/Longitude:** | 36.63817 / -121.74925 | **Elevation (feet):** | |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| MOR98S0004 | MORGAN, R. - MORGAN #3261 UCSC #8704 1998-06-06 |
| YAD98S0004 | YADON, V. - YADON SN JEPS #94002 1998-05-25 |
| YAD98S0005 | YADON, V. - YADON SN PGM #4264, #4265 1998-05-26 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A7334 | **EO Index:** | 109102 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDFAB402W0 |
| **Occurrence Number:** | 25 | **Occurrence Last Updated:** | 2019-04-02 |

**Scientific Name:** *Trifolium buckwestiorum*

**Common Name:** Santa Cruz clover

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCSC-UC Santa Cruz
SB_USDA-US Dept of Agriculture

**General Habitat:**

COASTAL PRAIRIE, BROADLEAFED UPLAND FOREST, CISMONTANE WOODLAND.

**Micro Habitat:**

MOIST GRASSLAND. GRAVELLY MARGINS. 30-805 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2016-04-29 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2016-04-29 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

ALONG JACKS ROAD/EUCALYPTUS ROAD AT THE EAST END OF MUDHEN LAKE, FORT ORD NATIONAL MONUMENT.

**Detailed Location:**

MAPPED ACCORDING TO 2013 KEELAN COORDINATES AND 2016 STYER COORDINATES, IN THE NE 1/4 OF THE NE 1/4 OF SECTION 15.

**Ecological:**

**Threats:**

**General:**

UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008 AND 2016.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 15, NE (M) | **Accuracy:** | specific area | **Area (acres):** | 9 |
| **UTM:** | Zone-10 N4054316 E613634 | **Latitude/Longitude:** | 36.62762 / -121.72908 | **Elevation (feet):** | 150 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| KEE13U0001 | KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26 |
| STY16S0001 | STYER, D. - STYER SN UCSC #010636-010639 2016-04-29 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | B2807 | **EO Index:** | 114741 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDFAB402W0 |
| **Occurrence Number:** | 51 | **Occurrence Last Updated:** | 2019-12-12 |

**Scientific Name:** *Trifolium buckwestiorum*

**Common Name:** Santa Cruz clover

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCSC-UC Santa Cruz
SB_USDA-US Dept of Agriculture

**General Habitat:**

COASTAL PRAIRIE, BROADLEAFED UPLAND FOREST, CISMONTANE WOODLAND.

**Micro Habitat:**

MOIST GRASSLAND. GRAVELLY MARGINS. 30-805 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2017-05-25 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2017-05-25 | **Occurrence Rank:** | Excellent |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

APPROXIMATELY 0.5 AIR MILE EAST OF MUDHEN LAKE, PILARCITOS RIDGE.

**Detailed Location:**

MAPPED ACCORDING TO SANTA BARBARA BOTANIC GARDEN DATA, NEAR THE CENTER OF THE NW 1/4 OF SECTION 14.

**Ecological:**

OPENING IN OAK WOODLAND WITH BRIZA MAXIMA, TRITELEIA IXIOIDES SSP. IXIOIDES, QUERCUS AGRIFOLIA, JUNCUS PHAEOCEPHALUS, AND TRIFOLIUM MICROCEPHALUS SSP. GRACILENTUM.

**Threats:**

POTENTIAL WEED INVASIONS.

**General:**

100+ PLANTS OBSERVED IN 2017. MAY BE DIFFERENT THAN OTHER T. BUCKWESTIORUM IN SANTA CRUZ ACCORDING TO DAVID STYRE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 14, NW (M) | **Accuracy:** | 80 meters | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4054294 E614379 | **Latitude/Longitude:** | 36.62733 / -121.72074 | **Elevation (feet):** | 380 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| CAL18D0001 | CALLOWAY, S. (SANTA BARBARA BOTANIC GARDEN) - SANTA BARBARA BOTANIC GARDEN RARE PLANT TABLE, 2017. 2018-01-17 |
| CPR19U0001 | CALIFORNIA PLANT RESCUE - SEED BANK DATA FOR THE CALIFORNIA PLANT RESCUE PROJECT 2019-07-24 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 67825 | **EO Index:** | 29609 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDPGN040M2 |
| **Occurrence Number:** | 2 | **Occurrence Last Updated:** | 2018-05-01 |

**Scientific Name:** *Chorizanthe pungens var. pungens*

**Common Name:** Monterey spineflower

**Listing Status:** **Federal:** Threatened
**State:** None

**CNDDB Element Ranks:** **Global:** G2T2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCBG-UC Botanical Garden at Berkeley

**General Habitat:**

COASTAL DUNES, CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

SANDY SOILS IN COASTAL DUNES OR MORE INLAND WITHIN CHAPARRAL OR OTHER HABITATS. 3-270 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2016-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2016-XX-XX | **Occurrence Rank:** | Good |
| **Owner/Manager:** | BLM-FORT ORD, PVT | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD MILITARY RESERVATION; FROM MARINA EAST TO BARLOW CANYON ROAD AND SOUTH TO S BOUNDARY OF BASE (NEAR HWY 68).

**Detailed Location:**

LARGE OCCURRENCE ENCOMPASSING MOST OF FORT ORD. MAPPED PRIMARILY ACCORDING TO A 1992 ARMY CORPS OF ENGINEERS MAP. INCLUDES GENERAL "FORT ORD" COLLECTIONS/OBSERVATIONS. MOST RECENT OBSERVATIONS ARE FROM THE NORTHERN PORTION OF OCCURRENCE.

**Ecological:**

COASTAL DUNE/MARITIME CHAPARRAL; OAK WOODLAND TRANSITION. OPEN SANDY AREAS. ASSOCIATED WITH BROMUS DIANDRUS, LUPINUS BICOLOR, PLANTAGO CORONOPUS, LOTUS HUMISTRATUS, CARDIONEMA RAMOSISSIMUM, AVENA BARBATA, ERODIUM CICUTARIUM, ETC.

**Threats:**

ORVS, POTENTIAL ROAD WIDENING, INVASIVES (ICEPLANT, ETC.), PROPOSED REDEVELOPMENT, SHADING, SUCCESSION, TRESPASSING.

**General:**

POP NUMBERS FOR PARTS OF OCCURRENCE: SEEN THROUGHOUT OCC IN 1992, >200 PLANTS IN 1994, 19,700 IN 2003, 40,000 IN 2004, 1800 IN 2006, 5180+ IN 2009, >5000 IN 2011, SEEN IN 2012-2016. INCLUDES FORMER OCC #S 11, 22, 23, 24; C. ROBUSTA #22.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 7 (M) | **Accuracy:** | specific area | **Area (acres):** | 10,832 |
| **UTM:** | Zone-10 N4054930 E609004 | **Latitude/Longitude:** | 36.6337 / -121.78075 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| ANO95S0010 | ANONYMOUS - ANONYMOUS SN UCSC #2199 1995-04-15 |
| ANONDS0124 | ANONYMOUS - ANONYMOUS #2195 UCSC #2195, #2196, #2198, & #3541 XXXX-XX-XX |
| BAR07S0001 | BARON, S. - BARON SN SJSU #15181 2007-04-24 |
| BAR07S0002 | BARON, S. - BARON SN SJSU #15182 2007-04-24 |
| CHM04R0001 | CH2MHILL - RESULTS OF 2004 MONTEREY SPINEFLOWER AND SAND GILIA SURVEYS, OU-1, FORMER FT. ORD, CALIFORNIA. PREPARED FOR HYDRO GEOLOGIC, INC. 2004-06-XX |
| DEN14R0001 | DENISE DUFFY & ASSOCIATES, INC. - 2013 ANNUAL BIOLOGICAL MONITORING REPORT, FORMER FORT ORD, CALIFORNIA. PREPARED FOR US ARMY CORPS OF ENGINEERS. 46PP. 2014-03-XX |
| DEN17R0001 | DENISE DUFFY & ASSOCIATES, INC. - 2016 ANNUAL RARE PLANT SURVEY AND BIOLOGICAL MONITORING REPORT FOR THE AHTNA MONITORING WELL INSTALLATION AND DEVELOPMENT AND EISB DEPLOYMENT AREA CONSTRUCTION AT THE OUCTP 2017-03-XX |
| FER19S0002 | FERGUSON, E. ET AL. - FERGUSON #268 JEPS #57716 1919-06-19 |
| FOR11F0015 | FORBES, H. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2011-08-16 |

| | |
|---|---|
| GIL00S0004 | GILLESPIE, I. - GILLESPIE #16 UCR #120818 2000-04-22 |
| HAC04F0003 | HACKER, D. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2004-06-08 |
| JHO91S0001 | JHON - JHON SN UCSC #2188, #2189, & #2190 1991-04-30 |
| JHO92S0001 | JHON - JHON SN UCSC #2201 1992-03-31 |
| JHO95S0001 | JHON - JHON SN UCSC #2164 1995-05-03 |
| JHO96S0001 | JHON - JHON SN UCSC #2191, #2192, #2193, #2194, & #2197 1996-04-19 |
| KRE03F0002 | KREIBERG, P. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2003-05-13 |
| KRE03F0004 | KREIBERG, P. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2003-05-19 |
| KRE03F0006 | KREIBERG, P. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2003-05-13 |
| KRE09F0004 | KREIBERG, P. - FIELD SURVEY FORM FOR ANNIELLA PULCHRA NIGRA & CHORIZANTHE PUNGENS VAR. PUNGENS & GILIA TENUIFLORA SSP. ARENARIA 2009-06-12 |
| LFR10R0001 | LFR, WESTON, & WESTCLIFFE - 2009 ANNUAL NATURAL RESOURCE MONITORING, MITIGATION, AND MANAGEMENT REPORT, FORMER FORT ORD, MONTEREY COUNTY, CALIFORNIA. PREPARED FOR FORT ORD REUSE AUTHORITY. 109PP. 2010-02-05 |
| MCS14U0001 | MCSTAY, S. - OBSERVATION RECORD FOR CHORIZANTHE PUNGENS VAR. PUNGENS, CALFLORA ID: CBO23601 2014-05-23 |
| MOR06F0035 | MORGAN, R. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2006-09-14 |
| MOR06F0036 | MORGAN, R. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2006-09-14 |
| MOR06F0039 | MORGAN, R. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2006-09-21 |
| MOR06F0040 | MORGAN, R. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2006-09-21 |
| MOR06F0041 | MORGAN, R. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2006-09-21 |
| MOR06F0042 | MORGAN, R. - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2006-09-21 |
| MOR89S0006 | MORGAN, R. - MORGAN #1611 UCSC #7071 1989-05-13 |
| MOR95S0006 | MORGAN, R. - MORGAN #2640 UCSC #7067 1995-05-22 |
| PIE16R0001 | PIERCE, L. ET AL. - THE PARKER FLATS PRESCRIBED BURN: 10TH YEAR POST-FIRE VEGETATION RECOVERY IN 2015. 2016-03-XX |
| PRE09F0013 | PRESTON, R. (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2009-06-03 |
| PRE09F0014 | PRESTON, R. (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 2009-06-03 |
| REV87S0002 | REVEAL, J. & C. BROOME - REVEAL #6441 RSA #491743, CAS #800584, CAS-BOT-BC #257400 1987-06-14 |
| REV88S0001 | REVEAL, J. - REVEAL #6952 RSA #489235, CAS #800487, CAS-BOT-BC #257418 1988-05-30 |
| REV88S0002 | REVEAL, J. - REVEAL #6953 RSA #489236, CAS #800488, CAS-BOT-BC #257401 1988-05-30 |
| REV88S0003 | REVEAL, J. - REVEAL #6951 RSA #489234, CAS #800486, NY #32494, CAS-BOT-BC #257417 1988-05-30 |
| SHA08R0001 | SHAW ENVIRONMENTAL, INC. - 2007 ANNUAL BIOLOGICAL MONITORING REPORT, FORMER FORT ORD, CALIFORNIA. PREPARED FOR US ARMY CORPS OF ENGINEERS. 2008-02-XX |
| USA06U0001 | U.S. ARMY CORPS OF ENGINEERS - EMAIL REGARDING CORRECTIONS TO USA92R0001. 2006-08-10 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| WES94F0002 | WESCO - FIELD SURVEY FORM FOR CHORIZANTHE PUNGENS VAR. PUNGENS 1994-05-18 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 97249 | **EO Index:** | 98515 |
| **Key Quad:** | Spreckels (3612156) | **Element Code:** | PDPGN040M2 |
| **Occurrence Number:** | 33 | **Occurrence Last Updated:** | 2015-08-18 |

**Scientific Name:** *Chorizanthe pungens var. pungens*

**Common Name:** Monterey spineflower

**Listing Status:** **Federal:** Threatened
**State:** None

**CNDDB Element Ranks:** **Global:** G2T2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
SB_UCBG-UC Botanical Garden at Berkeley

**General Habitat:**

COASTAL DUNES, CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

SANDY SOILS IN COASTAL DUNES OR MORE INLAND WITHIN CHAPARRAL OR OTHER HABITATS. 3-270 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2007-04-24 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2007-04-24 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

PICNIC CANYON; SOUTH OF SANDSTONE RIDGE, NORTH OF PILARCITOS CANYON, AND WEST OF PILARCITOS RIDGE, FORT ORD.

**Detailed Location:**

MAPPED ACCORDING TO A 1992 ARMY CORPS OF ENGINEERS MAP.

**Ecological:**

**Threats:**

**General:**

LOW DENSITY OF PLANTS SEEN HERE IN 1992. A 2007 BARON COLLECTION FROM "CRESCENT BLUFF ROAD, FORT ORD" IS ALSO ATTRIBUTED TO THIS OCCURRENCE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 15, E (M) | **Accuracy:** | specific area | **Area (acres):** | 256 |
| **UTM:** | Zone-10 N4053461 E613365 | **Latitude/Longitude:** | 36.61994 / -121.73220 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Salinas (3612166) |

**Sources:**

| | |
|---|---|
| BAR07S0003 | BARON, S. - BARON SN SJSU #15180 2007-04-24 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A4901 | **EO Index:** | 106597 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDPGN04100 |
| **Occurrence Number:** | 1 | **Occurrence Last Updated:** | 2017-05-31 |

**Scientific Name:** *Chorizanthe minutiflora*

**Common Name:** Fort Ord spineflower

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_SBBG-Santa Barbara Botanic Garden

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**General Habitat:**

COASTAL SCRUB, CHAPARRAL (MARITIME).

**Micro Habitat:**

SANDY, OPENINGS. 60-145 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1994-05-12 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1994-05-12 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

CRESCENT BLUFF ROAD, FORT ORD.

**Detailed Location:**

EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB ALONG CRESCENT BLUFF RD, BASED ON A 1994 MORGAN COLLECTION.

**Ecological:**

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1994 MORGAN COLLECTION. NEEDS FIELDWORK.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 11 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 168 |
| **UTM:** | Zone-10 N4055763 E614736 | **Latitude/Longitude:** | 36.64052 / -121.71653 | **Elevation (feet):** | 200 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

MOR94S0013 MORGAN, R. - MOGAN #2237 UCSC #5830 1994-05-12

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | A4902 | **EO Index:** | 106598 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDPGN04100 |
| **Occurrence Number:** | 2 | **Occurrence Last Updated:** | 2017-07-17 |

**Scientific Name:** *Chorizanthe minutiflora*

**Common Name:** Fort Ord spineflower

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_SBBG-Santa Barbara Botanic Garden

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**General Habitat:**

COASTAL SCRUB, CHAPARRAL (MARITIME).

**Micro Habitat:**

SANDY, OPENINGS. 60-145 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2016-05-27 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2016-05-27 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | DOD-FORT ORD NM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

BUTTERFLY VALLEY ABOUT 0.65 AIR MILE NE OF ELLIOTT HILL AND 0.2 MI SSE OF MACHINE GUN FLATS, FORT ORD.

**Detailed Location:**

MAPPED BY CNDDB FROM 2014 & 2016 COORDINATES, IN THE SE 1/4 OF THE SE 1/4 OF PROJECTED SECTION 9.

**Ecological:**

ON EXPOSED, SPARSELY VEGETATED SAND AT EDGE OF FORMERLY DISTURBED ROAD BEDS AND TRAILS, IN PATCHY CHAPARRAL OF SALVIA MELLIFERA, ERIODICTYON CALIFORNICUM, QUERCUS AGRIFOLIA AND BACCHARIS PILULARIS.

**Threats:**

SOME DISTURBANCE IN THIS AREA APPEARS TO BE BENEFICIAL SO IT DOESN'T BECOME OVERGROWN.

**General:**

TYPE LOCALITY. SITE DISCOVERED IN 2010, ALSO VISITED IN 2014 & 2016. NEEDS POPULATION INFORMATION.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 9, SE (M) | **Accuracy:** | 80 meters | **Area (acres):** | 5 |
| **UTM:** | Zone-10 N4054907 E612309 | **Latitude/Longitude:** | 36.6331 / -121.7438 | **Elevation (feet):** | 470 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**


| | |
|---|---|
| MOR10S0003 | MORGAN, R. - MORGAN #4981 UCSC #7402 2010-05-03 |
| MOR14A0001 | MORGAN, R. ET AL. - CHORIZANTHE MINUTIFLORA (POLYGONACEAE: ERIOGONEAE), A NEW NARROW ENDEMIC CALIFORNIA SPECIES. PHYTONEURON 2014-63:1-9. 2014-06-16 |
| STY14S0002 | STYER, D. & R. MORGAN - STYER SN UC, BH, CAS, GH, NY, RSA, US, UTC (CITED IN MOR14A0001) 2014-05-24 |
| STY14S0003 | STYER, D. - STYER SN BH, RSA, UC (CITED IN MOR14A0001) 2014-05-05 |
| TAY16I0004 | TAYLOR, D. - PHOTOS OF CHORIZANTHE MINUTIFLORA, CALPHOTOS ID: 0000 0000 0516 2344-2346 2016-05-27 |
| TAY16S0001 | TAYLOR, D. & D. STYER - TAYLOR #21688 HERBARIUM UNKNOWN 2016-05-27 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 27796 | **EO Index:** | 16991 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDPLM041P2 |
| **Occurrence Number:** | 14 | **Occurrence Last Updated:** | 2007-04-12 |

**Scientific Name:** *Gilia tenuiflora ssp. arenaria*

**Common Name:** Monterey gilia

**Listing Status:** **Federal:** Endangered
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G3G4T2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

**General Habitat:**

COASTAL DUNES, COASTAL SCRUB, CHAPARRAL (MARITIME), CISMONTANE WOODLAND.

**Micro Habitat:**

SANDY OPENINGS IN BARE, WIND-SHELTERED AREAS. OFTEN NEAR DUNE SUMMIT OR IN THE HIND DUNES; TWO RECORDS FROM PLEISTOCENE INLAND DUNES. 5-245 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FT ORD; FROM NR CLAUSENS RNCH, SW TO BOTH SIDES BARLOY CYN RD, E TO JCT PILARCITOS CYN RD/JACKS RD, S TO IMPOSSIBLE CYN.

**Detailed Location:**

MAPPED AS 5 NONSPECIFIC BOUNDED AREAS. NEAR JUNCTION OF THE SALINAS, SPECKELS, AND SEASIDE USGS TOPO QUADRANGLES.

**Ecological:**

**Threats:**

**General:**

JOEY DORRELL-CANEPA BELIEVES PLANTS HERE ARE LIKELY INTERGRADES W/SSP. TENUIFLORA. STUDIES NEEDED. 1967 HOWITT COLLECTION FROM "BARLOY CANYON NEAR EUCALYPTUS RD" ATTRIBUTED TO THIS OCCURRENCE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 15 (M) | **Accuracy:** | non-specific area | **Area (acres):** | 1,185 |
| **UTM:** | Zone-10 N4053825 E612897 | **Latitude/Longitude:** | 36.62328 / -121.73738 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Seaside (3612157), Salinas (3612166) |

**Sources:**


HOW67S0030 HOWITT, B. - HOWITT #2063 PGM #6485, CAS #466577, CAS-BOT-BC #226411 1967-05-08

MOR96U0003 MOREY, S. - COASTAL PLANTS RECOVERY WORKSHOP SUMMARY 1996-12-17

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 27799 | **EO Index:** | 16989 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDPLM041P2 |
| **Occurrence Number:** | 15 | **Occurrence Last Updated:** | 2015-11-16 |

**Scientific Name:** *Gilia tenuiflora ssp. arenaria*

**Common Name:** Monterey gilia

**Listing Status:** **Federal:** Endangered
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G3G4T2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

**General Habitat:**

COASTAL DUNES, COASTAL SCRUB, CHAPARRAL (MARITIME), CISMONTANE WOODLAND.

**Micro Habitat:**

SANDY OPENINGS IN BARE, WIND-SHELTERED AREAS. OFTEN NEAR DUNE SUMMIT OR IN THE HIND DUNES; TWO RECORDS FROM PLEISTOCENE INLAND DUNES. 5-245 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD MILITARY RESERVATION; VICINITY OF EAST GARRISON. BORDERED ON N BY WATKINS GATE RD, AND EXTENDING S FOR 0.25 MI.

**Detailed Location:**

**Ecological:**

**Threats:**

PORTIONS OF SITE UNDER DEVELOPMENT THREAT ACCORDING TO 2008 USFWS REPORT.

**General:**

ONLY INFO IS VAGUE MAP IN "FLORA AND FAUNA BASELINE STUDY OF FORT ORD." FIELDWORK CONDUCTED BY JONES AND STOKES ASSOC., INC. JOEY DORRELL-CANEPA BELIEVES PLANTS HERE ARE LIKELY INTERGRADES W/SSP. TENUIFLORA. STUDIES NEEDED.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 04, SE (M) | **Accuracy:** | non-specific area | **Area (acres):** | 69 |
| **UTM:** | Zone-10 N4056684 E612191 | **Latitude/Longitude:** | 36.64913 / -121.74486 | **Elevation (feet):** | 250 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| FWS08R0008 | U.S. FISH AND WILDLIFE SERVICE - MONTEREY GILIA (GILIA TENUIFLORA SSP. ARENARIA) 5-YEAR REVIEW: SUMMARY AND EVALUATION 2008-03-XX |
| MOR96U0003 | MOREY, S. - COASTAL PLANTS RECOVERY WORKSHOP SUMMARY 1996-12-17 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 27791 | **EO Index:** | 423 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDPLM041P2 |
| **Occurrence Number:** | 20 | **Occurrence Last Updated:** | 2018-12-28 |

**Scientific Name:** *Gilia tenuiflora ssp. arenaria*

**Common Name:** Monterey gilia

**Listing Status:** **Federal:** Endangered
**State:** Threatened

**CNDDB Element Ranks:** **Global:** G3G4T2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

**General Habitat:**

COASTAL DUNES, COASTAL SCRUB, CHAPARRAL (MARITIME), CISMONTANE WOODLAND.

**Micro Habitat:**

SANDY OPENINGS IN BARE, WIND-SHELTERED AREAS. OFTEN NEAR DUNE SUMMIT OR IN THE HIND DUNES; TWO RECORDS FROM PLEISTOCENE INLAND DUNES. 5-245 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2017-06-02 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2018-XX-XX | **Occurrence Rank:** | Fair |
| **Owner/Manager:** | UCNR-FORT ORD NR, PVT | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORMERLY FORT ORD MR; FROM N SIDE OF INTER-GARRISON RD EXTENDING N WITHIN MILITARY BOUNDARY TO MARINA MUNICIPAL AIRPORT.

**Detailed Location:**

MAPPED AS MANY POLYGONS. MARINA MUNICIPAL AIRPORT FORMERLY CALLED FRITZSCHE AIRFIELD, LABELED "LANDING FIELD" ON TOPO MAPS. MONTEREY COUNTY PARKS IS ALSO PART OWNER. INCLUDES 2006 MORGAN COLLECTION FROM "FORT ORD, UC RESERVE SITE: P1 & P2."

**Ecological:**

OTHER RARE PLANTS IN THE AREA: CHORIZANTHE PUNGENS PUNGENS, ARCTOSTAPHYLOS PUMILA, ERIASTRUM VIRGATUM, & ERYSIMUM AMMOPHILUM.

**Threats:**

PAST GRADING, ROAD WIDENING. PLANTS ON LANDFILL PROPERTY TO BE EXTIRPATED, WITH TRANSLOCATION AS MITIGATION. INVASIVES.

**General:**

45,590 PLANTS IN 1993. 2 MILLION+ IN 1995. AVERAGE OF 59,300 PLANTS DURING 1999-2002 SURVEYS (NOT FULL CENSUSES). PORTIONS OF SITE: 25 IN 1994, 1320+ IN 2003, 2850+ IN 2004, 528 IN 2007, SEEN IN 2008-2013, 2015-2017, NONE IN 2018.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 32 (M) | **Accuracy:** | specific area | **Area (acres):** | 515 |
| **UTM:** | Zone-10 N4059349 E610099 | **Latitude/Longitude:** | 36.6734 / -121.76788 | **Elevation (feet):** | 150 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| CAN94R0001 | CANEPA, J. - POPULATION BIOLOGY OF GILIA TENUIFLORA SSP. ARENARIA. 1994-12-01 |
| CHM04R0001 | CH2MHILL - RESULTS OF 2004 MONTEREY SPINEFLOWER AND SAND GILIA SURVEYS, OU-1, FORMER FT. ORD, CALIFORNIA. PREPARED FOR HYDRO GEOLOGIC, INC. 2004-06-XX |
| DEN14R0001 | DENISE DUFFY & ASSOCIATES, INC. - 2013 ANNUAL BIOLOGICAL MONITORING REPORT, FORMER FORT ORD, CALIFORNIA. PREPARED FOR US ARMY CORPS OF ENGINEERS. 46PP. 2014-03-XX |
| DEN17R0001 | DENISE DUFFY & ASSOCIATES, INC. - 2016 ANNUAL RARE PLANT SURVEY AND BIOLOGICAL MONITORING REPORT FOR THE AHTNA MONITORING WELL INSTALLATION AND DEVELOPMENT AND EISB DEPLOYMENT AREA CONSTRUCTION AT THE OUCTP 2017-03-XX |
| FWS08R0008 | U.S. FISH AND WILDLIFE SERVICE - MONTEREY GILIA (GILIA TENUIFLORA SSP. ARENARIA) 5-YEAR REVIEW: SUMMARY AND EVALUATION 2008-03-XX |
| GIL00S0005 | GILLESPIE, I. - GILLESPIE #15 UCR #120817 2000-04-22 |
| JSA94R0001 | JONES & STOKES ASSOCIATES, INC. - MULTI-SPECIES HABITAT MANAGEMENT PLAN FOR FORT ORD 1994-02-XX |
| KRE03F0003 | KREIBERG, P. - FIELD SURVEY FORM FOR GILIA TENUFLORA SSP. ARENARIA, CHORIZANTHE PUNGENS & ARCTOSTAPHYLOS PUMILA 2003-05-13 |
| KRE03F0005 | KREIBERG, P. - FIELD SURVEY FORM FOR GILIA TENUIFLORA SSP. ARENARIA 2003-05-19 |
| KRE03F0007 | KREIBERG, P. - FIELD SURVEY FORM FOR GILIA TENUIFLORA SSP. ARENARIA 2003-05-13 |
| LFR10R0001 | LFR, WESTON, & WESTCLIFFE - 2009 ANNUAL NATURAL RESOURCE MONITORING, MITIGATION, AND MANAGEMENT REPORT, FORMER FORT ORD, MONTEREY COUNTY, CALIFORNIA. PREPARED FOR FORT ORD REUSE AUTHORITY. 109PP. 2010-02-05 |
| MOR06S0004 | MORGAN, R. - MORGAN #5024 UCSC #2174 2006-05-20 |
| MOR96U0003 | MOREY, S. - COASTAL PLANTS RECOVERY WORKSHOP SUMMARY 1996-12-17 |
| SHA08R0001 | SHAW ENVIRONMENTAL, INC. - 2007 ANNUAL BIOLOGICAL MONITORING REPORT, FORMER FORT ORD, CALIFORNIA. PREPARED FOR US ARMY CORPS OF ENGINEERS. 2008-02-XX |
| STA17F0013 | STAPELMANN, C. & S. ETCHELL - FIELD SURVEY FORM FOR GILIA TENUIFLORA SSP. ARENARIA 2017-06-02 |
| STU16F0017 | STUART, K. - FIELD SURVEY FORM FOR GILIA TENUIFLORA SSP. ARENARIA 2016-05-12 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| WES94F0004 | WESCO - FIELD SURVEY FORM FOR GILIA TENUIFLORA SSP. ARENARIA 1994-05-18 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 28845 | **EO Index:** | 30751 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDROS0W043 |
| **Occurrence Number:** | 18 | **Occurrence Last Updated:** | 2006-04-27 |

**Scientific Name:** *Horkelia cuneata var. sericea*

**Common Name:** Kellogg's horkelia

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G4T1?
**State:** S1?

**Rare Plant Rank:** 1B.1

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
SB_UCSC-UC Santa Cruz
USFS_S-Sensitive

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, COASTAL SCRUB, COASTAL DUNES, CHAPARRAL.

**Micro Habitat:**

OLD DUNES, COASTAL SANDHILLS; OPENINGS. SANDY OR GRAVELLY SOILS. 5-430 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1998-11-14 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1998-11-14 | **Occurrence Rank:** | Good |
| **Owner/Manager:** | UC-SANTA CRUZ, MNT COUNTY | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, 2 MILES EAST OF MARINA ALONG SOUTH SIDE OF RESERVATION ROAD.

**Detailed Location:**

**Ecological:**

SWALES BETWEEN MARITIME CHAPARRAL, QUERCUS AGRIFOLIA, AND/OR COASTAL SCRUB COMMUNITIES. DOMINANT: NASSELLA. ASSOCIATES: POLYGONUM PARONYCHIA, CROTON CALIFORNICA, LESSINGIA GLANDULIFERA VAR. PECTINATA, & ACAENA PINNATIFIDA VAR. CALIFORNICA.

**Threats:**

UTILITY AND ROAD RIGHT-OF-WAY, ROAD MAINTENANCE. ORV USE. WELL DRILLING TO TEST FOR CONTAMINATION.

**General:**

PLANT DENSITY ESTIMATED TO BE LOW (1-100S PER ACRE) TO MEDIUM (100S TO 1000S PER ACRE) IN 1992. SEVERAL THOUSAND PLANTS OBSERVED IN 1998. INCLUDES FORMER OCCURRENCE #24.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T14S, R02E, Sec. 33, S (M) | **Accuracy:** | specific area | **Area (acres):** | 279 |
| **UTM:** | Zone-10 N4058180 E611439 | **Latitude/Longitude:** | 36.66270 / -121.75304 | **Elevation (feet):** | 160 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| HOL98F0008 | HOLMES, E. - FIELD SURVEY FORM FOR HORKELIA CUNEATA SSP. SERICEA 1998-11-14 |
| HOL98S0001 | HOLMES, E. - HOLMES SN JEPS #95205 1998-06-24 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 28838 | **EO Index:** | 30365 |
| **Key Quad:** | Spreckels (3612156) | **Element Code:** | PDROS0W043 |
| **Occurrence Number:** | 22 | **Occurrence Last Updated:** | 1997-03-03 |

**Scientific Name:** *Horkelia cuneata var. sericea*

**Common Name:** Kellogg's horkelia

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G4T1?
**State:** S1?

**Rare Plant Rank:** 1B.1

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
SB_UCSC-UC Santa Cruz
USFS_S-Sensitive

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, COASTAL SCRUB, COASTAL DUNES, CHAPARRAL.

**Micro Habitat:**

OLD DUNES, COASTAL SANDHILLS; OPENINGS. SANDY OR GRAVELLY SOILS. 5-430 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, WEST OF PILARCITOS CANYON AND SOUTHWEST OF PILARCITOS RIDGE.

**Detailed Location:**

WEST OF ENGINEER CANYON ROAD AND NORTH OF JACKS ROAD.

**Ecological:**

COASTAL SCRUB, MARITIME CHAPARRAL, AND CLOSED CONE CONIFEROUS FOREST.

**Threats:**

**General:**

PLANT DENSITY ESTIMATED TO BE LOW (1-100S PER ACRE) IN 1992.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 13 (M) | **Accuracy:** | specific area | **Area (acres):** | 215 |
| **UTM:** | Zone-10 N4053677 E615621 | **Latitude/Longitude:** | 36.62162 / -121.70695 | **Elevation (feet):** | 300 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Salinas (3612166) |

**Sources:**

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 28837 | **EO Index:** | 30364 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDROS0W043 |
| **Occurrence Number:** | 23 | **Occurrence Last Updated:** | 1997-03-03 |

**Scientific Name:** *Horkelia cuneata var. sericea*

**Common Name:** Kellogg's horkelia

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G4T1?
**State:** S1?

**Rare Plant Rank:** 1B.1

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
SB_UCSC-UC Santa Cruz
USFS_S-Sensitive

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, COASTAL SCRUB, COASTAL DUNES, CHAPARRAL.

**Micro Habitat:**

OLD DUNES, COASTAL SANDHILLS; OPENINGS. SANDY OR GRAVELLY SOILS. 5-430 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD, VICINITY OF SANDSTONE RIDGE. ALSO ALONG PERRY RIDGE.

**Detailed Location:**

PART OF POPULATION FOUND EAST OF BARLOY CANYON ROAD.

**Ecological:**

COASTAL SCRUB, MARITIME CHAPARRAL, AND CLOSED CONE CONIFEROUS FOREST.

**Threats:**

**General:**

PLANT DENSITY ESTIMATED TO BE LOW (1-100S PER ACRE) IN 1992.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 16 (M) | **Accuracy:** | specific area | **Area (acres):** | 823 |
| **UTM:** | Zone-10 N4054230 E612240 | **Latitude/Longitude:** | 36.62701 / -121.74467 | **Elevation (feet):** | 400 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Salinas (3612166) |

**Sources:**

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 78467 | **EO Index:** | 79392 |
| **Key Quad:** | Marina (3612167) | **Element Code:** | PDSCR0D403 |
| **Occurrence Number:** | 13 | **Occurrence Last Updated:** | 2010-04-01 |

**Scientific Name:** *Castilleja ambigua var. insalutata*

**Common Name:** pink Johnny-nip

**Listing Status:** **Federal:** None

**State:** None

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:** **Global:** G4T2

**State:** S2

**General Habitat:**

COASTAL BLUFF SCRUB, COASTAL PRAIRIE.

**Micro Habitat:**

WET OR MOIST COASTAL STRAND OR SCRUB HABITATS. 3-135 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1999-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1999-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

FORT ORD HENNEKEN FLATS.

**Detailed Location:**

"MIMI MOUND AREA". EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS IN VICINITY OF HENNEKEN RANGER STATION IN FORT ORD.

**Ecological:**

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION IS A 1982 YADON COLLECTION. GREENLAKE FOUND A SMALL POPULATION AT FT. ORD IN 1997 AND 1999. TAYLOR THINKS THIS MAY BE THE ONLY EXTANT LOCATION. NEEDS FIELDWORK.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 04 (M) | **Accuracy:** | 4/5 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4056242 E610947 | **Latitude/Longitude:** | 36.64529 / -121.75883 | **Elevation (feet):** | 300 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| GRE99U0002 | GREENLAKE, J. - PROPOSED "NEW ADDITIONS" COMMENT FOR CASTILLEJA AMBIGUA SSP. INSALUTATA. 1999-06-30 |
| TAY10U0002 | TAYLOR, D. - CNPS RARE PLANT STATUS REVIEW POSTING FOR CASTILLEJA AMBIGUA SSP. INSALUTATA 2010-01-25 |
| YAD82S0008 | YADON, V. - YADON SN PGM #2181 1982-06-10 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 10606 | **EO Index:** | 11958 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PDSCR0J0P2 |
| **Occurrence Number:** | 6 | **Occurrence Last Updated:** | 2015-09-23 |

**Scientific Name:** *Cordylanthus rigidus ssp. littoralis*

**Common Name:** seaside bird's-beak

**Listing Status:** **Federal:** None
**State:** Endangered

**CNDDB Element Ranks:** **Global:** G5T2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, COASTAL DUNES.

**Micro Habitat:**

SANDY, OFTEN DISTURBED SITES, USUALLY WITHIN CHAPARRAL OR COASTAL SCRUB. 30-520 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Good |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EASTERN PART OF FT ORD MILITARY RESERVATION; CRESCENT BLUFF ROAD N OF SANDSTONE RIDGE AND N OF PILARCITOS RIDGE.

**Detailed Location:**

MAPPED ACCORDING TO 1992 MAP DETAIL PROVIDED BY USACE. COLLECTIONS FROM "EASTERN PART OF FORT ORD," "NE CORNER OF FORT ORD," AND "6 MI E WEST ENTRANCE (E SIDE OF FORT, CRESCENT BLUFFS RD OVERLOOKING MERRILL RANCH), FORT ORD" ATTRIB HERE.

**Ecological:**

IN SANDY S-FACING ROADCUT & IN ADJOINING CHAPARRAL/COASTAL SCRUB. WITH SALVIA MELLIFERA, ERICAMERIA ERICOIDES, QUERCUS AGRIFOLIA, CROTON CALIFORNICUS, ADENOSTOMA FASCICULATUM, BACCHARIS PILULARIS, & ARTEMISIA CALIFORNICA.

**Threats:**

ROAD MAINTENANCE ACTIVITIES COULD THREATEN.

**General:**

650 PLANTS OBSERVED IN 1990. UNKNOWN NUMBER OF PLANTS IN 1992. THREE 1967 HOWITT COLLECTIONS AND A 1968 HECKARD COLLECTION ARE ALSO ATTRIBUTED TO THIS SITE. INCLUDES FORMER OCCURRENCE #11.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 11 (M) | **Accuracy:** | specific area | **Area (acres):** | 437 |
| **UTM:** | Zone-10 N4054793 E614217 | **Latitude/Longitude:** | 36.63184 / -121.72247 | **Elevation (feet):** | 300 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Salinas (3612166) |

**Sources:**

| | |
|---|---|
| HEC68S0001 | HECKARD, L. ET AL. - HECKARD #2066 JEPS #57465, RSA #523327, SBBG #100097, OBI #59452 1968-07-18 |
| HOW67S0004 | HOWELL, J. - HOWELL #42050 CAS #476858 1967-03-15 |
| HOW67S0028 | HOWITT, B. - HOWITT #2072 PGM #6908, CAS #471145 1967-06-02 |
| HOW67S0029 | HOWITT, B. - HOWITT #3014-A PGM #6909-A, #6909-B, CAS #477101 1967-07-18 |
| STO90F0002 | STONE, D. - FIELD SURVEY FORM FOR CORDYLANTHUS RIGIDUS SSP. LITTORALIS 1990-08-20 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 39435 | **EO Index:** | 34437 |
| **Key Quad:** | Spreckels (3612156) | **Element Code:** | PDSCR0J0P2 |
| **Occurrence Number:** | 34 | **Occurrence Last Updated:** | 1998-08-13 |

**Scientific Name:** *Cordylanthus rigidus ssp. littoralis*

**Common Name:** seaside bird's-beak

**Listing Status:** **Federal:** None
**State:** Endangered

**CNDDB Element Ranks:** **Global:** G5T2
**State:** S2

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, COASTAL DUNES.

**Micro Habitat:**

SANDY, OFTEN DISTURBED SITES, USUALLY WITHIN CHAPARRAL OR COASTAL SCRUB. 30-520 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 1992-XX-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 1992-XX-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

EAST OF SEASIDE, WEST OF BARLOY CANYON ROAD ABOUT 0.75 MILE WSW OF MUDHEN LAKE, FORMER FORT ORD MILITARY RESERVATION.

**Detailed Location:**

MAPPED ABOUT 0.15 MILE WEST OF BARLOY CANYON ROAD AND JUST NORTH OF ROAD TO HUFFMAN RANGER STATION.

**Ecological:**

MAPPED WITHIN MARITIME CHAPARRAL.

**Threats:**

**General:**

PLANT DENSITY REPORTED AS LOW IN "FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA" BY JONES AND STOKES ASSOCIATES FOR U.S. ARMY C.O.E.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 16 (M) | **Accuracy:** | 80 meters | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4053973 E612216 | **Latitude/Longitude:** | 36.62470 / -121.74497 | **Elevation (feet):** | 250 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Spreckels (3612156), Salinas (3612166) |

**Sources:**

USA92R0001 USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 10582 | **EO Index:** | 21834 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PMLIL02140 |
| **Occurrence Number:** | 18 | **Occurrence Last Updated:** | 2016-09-29 |

**Scientific Name:** *Allium hickmanii*

**Common Name:** Hickman's onion

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
USFS_S-Sensitive

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, COASTAL SCRUB, COASTAL PRAIRIE, VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

SANDY LOAM, DAMP GROUND AND VERNAL SWALES; MOSTLY IN GRASSLAND THOUGH CAN BE ASSOCIATED WITH CHAPARRAL OR WOODLAND. 5-200 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2009-04-08 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2009-04-08 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

VICINITY OF MACHINE GUN FLATS, SOUTHWEST OF EAST GARRISON AT FORMER FORT ORD MILITARY RESERVATION.

**Detailed Location:**

MAPPED AS 3 POLYGONS ACCORDING TO A 1992 USACE MAP AND KEELAN COORDINATES.

**Ecological:**

PLANTS IN LARGE VERNAL SWALE ASSOCIATED WITH CALOCHORTUS UNIFLORUS, BRODIAEA TERRESTRIS, ISOETES HOWELLII, PLAGIOBOTHRYS CHORISIANUS HICKMANII, LASTHENIA CONJUGENS, AND POGOGYNE SERPYLLOIDES.

**Threats:**

ABOUT 50% OF AREA GRADED FOR PARACHUTE DROP SITE.

**General:**

MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL PROVIDED BY USACE. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2007-2009. 1984 YADON COLLECTION FROM "HENNIKEN FLATS - FORMERLY CALLED MACHINE GUN MEADOWS" ALSO ATTRIBUTED TO THIS SITE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 9 (M) | **Accuracy:** | specific area | **Area (acres):** | 164 |
| **UTM:** | Zone-10 N4055335 E612089 | **Latitude/Longitude:** | 36.63699 / -121.74619 | **Elevation (feet):** | 450 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166), Marina (3612167) |

**Sources:**

| | |
|---|---|
| KEE13U0001 | KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26 |
| SOL09S0038 | SOLOMESHCH, A. ET AL. - SOLOMESHCH SN DAV #85164 & #85165 2009-04-08 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |
| YAD84S0003 | YADON, V. - YADON SN PGM #2581 1984-04-27 |
| YAD85F0002 | YADON, V. - FIELD SURVEY FORM FOR ALLIUM HICKMANII 1985-02-XX |
| YAD87U0001 | YADON, V. - RECORD OF PHONE CONVERSATION WITH R. BITTMAN 1987-05-12 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 39460 | **EO Index:** | 34462 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PMLIL02140 |
| **Occurrence Number:** | 24 | **Occurrence Last Updated:** | 2017-10-26 |

**Scientific Name:** *Allium hickmanii*

**Common Name:** Hickman's onion

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden
USFS_S-Sensitive

**General Habitat:**

CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, COASTAL SCRUB, COASTAL PRAIRIE, VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**

SANDY LOAM, DAMP GROUND AND VERNAL SWALES; MOSTLY IN GRASSLAND THOUGH CAN BE ASSOCIATED WITH CHAPARRAL OR WOODLAND. 5-200 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2000-04-15 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2000-04-15 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

SOUTHEAST OF EAST GARRISON ABOUT 0.7 MILE WEST OF RESERVATION ROAD AT DAVIS ROAD, FORMER FORT ORD MILITARY RESERVATION.

**Detailed Location:**

ALONG SOUTH SIDE OF CRESCENT BLUFF ROAD.

**Ecological:**

OAK SCRUB AND OPEN SLOPES.

**Threats:**

FORMERLY THREATENED BY BUNKER BUILDING PROJECT; PRESUMABLY THIS IS NO LONGER A THREAT.

**General:**

MAIN SOURCE OF INFO FOR THIS SITE IS MAP DETAIL PROVIDED BY USACE. 1980 LIND COLLECTION FROM "FT ORD RESERVE #6 - CRESCENT BLUFF RD" AND 2000 STONE COLLECTION FROM "OFF CRESCENT BLUFF RD..." ALSO ATTRIBUTED TO THIS SITE.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 11 (M) | **Accuracy:** | specific area | **Area (acres):** | 235 |
| **UTM:** | Zone-10 N4055581 E614518 | **Latitude/Longitude:** | 36.63891 / -121.71899 | **Elevation (feet):** | 200 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| LIN80S0001 | LIND, H. - LIND SN PGM #2079 1980-04-27 |
| MAT89U0001 | MATHEWS, M. - LETTER TO LEON PANETTA ATTACHED TO NC37C20 OCC 3. 1989-XX-XX |
| STO00S0005 | STONE, J. & S. BODINE - STONE #3009 SEINET #10948808, MO #1440432 2000-04-15 |
| USA92R0001 | USACE - ARMY CORPS OF ENGINEERS, SACRAMENTO DIST. - FLORA AND FAUNA BASELINE STUDY OF FORT ORD, CALIFORNIA. 290PP. PREPARED BY US ARMY CORPS OF ENGINEERS, AND JONES & STOKES ASSOCIATES. 1992-12-XX |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 68765 | **EO Index:** | 69250 |
| **Key Quad:** | Prunedale (3612176) | **Element Code:** | PMLIL0V0C0 |
| **Occurrence Number:** | 64 | **Occurrence Last Updated:** | 2007-03-30 |

**Scientific Name:** *Fritillaria liliacea*

**Common Name:** fragrant fritillary

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G2
**State:** S2

**Rare Plant Rank:** 1B.2

**Other Lists:** SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
USFS_S-Sensitive

**General Habitat:**

COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND, COASTAL PRAIRIE, CISMONTANE WOODLAND.

**Micro Habitat:**

OFTEN ON SERPENTINE; VARIOUS SOILS REPORTED THOUGH USUALLY ON CLAY, IN GRASSLAND. 3-385 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2002-06-XX | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2002-06-XX | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

RANCHO SAN JUAN AREA, ABOUT 2 AIR MILES SE OF PRUNEDALE.

**Detailed Location:**

"...DISTRIBUTED OVER APPROXIMATELY 3 ACRES...IN THE CENTRAL PORTION OF THE [RANCH SAN JUAN] SPECIFIC PLAN AREA." EXACT LOCATION OF RANCHO SAN JUAN UNKNOWN. MAPPED AS BEST GUESS BY CNDDB ACCORDING TO THE "VICINITY MAP" OF THE PLAN.

**Ecological:**

MIXED NATIVE/NON-NATIVE GRASSLAND.

**Threats:**

**General:**

FEWER THAN 20 PLANTS WERE OBSERVED IN 1998, AND AGAIN IN APRIL AND JUNE OF 2002. NEEDS FIELDWORK TO DETERMINE EXACT LOCATION.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T13S, R03E, Sec. 34 (M) | **Accuracy:** | 1 mile | **Area (acres):** | 0 |
| **UTM:** | Zone-10 N4068933 E621935 | **Latitude/Longitude:** | 36.75832 / -121.63391 | **Elevation (feet):** | |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Natividad (3612165), Salinas (3612166), San Juan Bautista (3612175), Prunedale (3612176) |

**Sources:**

| | |
|---|---|
| TAY05U0004 | TAYLOR, D. - EMAIL FROM DEAN TAYLOR RE: NEW OCCURRENCE REPORTED IN RANCHO SAN JUAN SPECIFIC PLAN EIR. 2005-01-07 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 86359 | **EO Index:** | 87397 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PMPOA041N0 |
| **Occurrence Number:** | 1 | **Occurrence Last Updated:** | 2012-08-08 |

**Scientific Name:** *Agrostis lacuna-vernalis*

**Common Name:** vernal pool bent grass

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

VERNAL POOLS.

**Micro Habitat:**

IN MIMA MOUND AREAS OR ON THE MARGINS OF VERNAL POOLS. 125-150 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2011-05-24 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2011-05-24 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | UNKNOWN | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

BUTTERFLY VALLEY; 1.0 MILE SOUTH OF THE RANGER STATION, FORT ORD.

**Detailed Location:**

MAPPED BY CNDDB ACCORDING TO COORDINATES IN A 2012 STYER EMAIL IN THE SE 1/4 OF THE SE 1/4 OF SECTION 9 AND THE SW 1/4 OF THE SW 1/4 OF SECTION 10.

**Ecological:**

MIMA MOUND AREA.

**Threats:**

**General:**

SITE VISITED IN 2010 AND 2011; POPULATION SIZE UNKNOWN.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 6 |
| **UTM:** | Zone-10 N4054817 E612303 | **Latitude/Longitude:** | 36.63229 / -121.74387 | **Elevation (feet):** | 465 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| MOR10S0001 | MORGAN, R. ET AL. - MORGAN SN US #3621794 (CITED IN PET11A0001) 2010-05-22 |
| PET11A0001 | PETERSON ET AL. - AGROSTIS LACUNA-VERNALIS (POOIDEAE: POEAE: AGROSTIDINAE), A NEW SPECIES FROM CALIFORNIA. JOURNAL OF THE BOTANICAL RESEARCH INSTITUTE OF TEXAS 5(2): 421-426 (2011) 2011-XX-XX |
| STY11S0001 | STYER, D. ET AL. - STYER #1 JEPS (CITED IN PET11A0001) 2011-05-24 |
| STY11S0002 | STYER, D. ET AL. - STYER #2 CAS (CITED IN PET11A0001) 2011-05-24 |
| STY11S0003 | STYER, D. ET AL. - STYER #3 US (CITED IN PET11A0001) 2011-05-24 |
| STY11S0004 | STYER, D. ET AL. - STYER #4 RSA (CITED IN PET11A0001) 2011-05-24 |
| STY12U0001 | STYER, D. - LIST OF COORDINATES IN AN EMAIL FROM STYER FOR AGROSTIS LACUNA-VERNALIS 2012-05-20 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 86360 | **EO Index:** | 87398 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PMPOA041N0 |
| **Occurrence Number:** | 2 | **Occurrence Last Updated:** | 2012-07-18 |

**Scientific Name:** *Agrostis lacuna-vernalis*

**Common Name:** vernal pool bent grass

**Listing Status:** **Federal:** None
**State:** None

**CNDDB Element Ranks:** **Global:** G1
**State:** S1

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

VERNAL POOLS.

**Micro Habitat:**

IN MIMA MOUND AREAS OR ON THE MARGINS OF VERNAL POOLS. 125-150 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2011-05-27 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2011-05-27 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

MACHINE GUN FLATS; 0.8 MILE SSE OF THE RANGER STATION, FORT ORD.

**Detailed Location:**

MAPPED BY CNDDB ACCORDING TO COORDINATES IN A 2012 STYER EMAIL IN THE SW 1/4 OF THE SE 1/4 OF SECTION 9.

**Ecological:**

**Threats:**

**General:**

SITE VISITED IN 2011.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09, SE (M) | **Accuracy:** | specific area | **Area (acres):** | 1 |
| **UTM:** | Zone-10 N4054885 E611690 | **Latitude/Longitude:** | 36.63298 / -121.75072 | **Elevation (feet):** | 480 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

| | |
|---|---|
| PET11A0001 | PETERSON ET AL. - AGROSTIS LACUNA-VERNALIS (POOIDEAE: POEAE: AGROSTIDINAE), A NEW SPECIES FROM CALIFORNIA. JOURNAL OF THE BOTANICAL RESEARCH INSTITUTE OF TEXAS 5(2): 421-426 (2011) 2011-XX-XX |
| STY11S0005 | STYER, D. - STYER SN JEPS, US (CITED IN PET11A0001) 2011-05-27 |
| STY12U0001 | STYER, D. - LIST OF COORDINATES IN AN EMAIL FROM STYER FOR AGROSTIS LACUNA-VERNALIS 2012-05-20 |

# Occurrence Report

## California Department of Fish and Wildlife

## California Natural Diversity Database

| | | | |
|---|---|---|---|
| **Map Index Number:** | 86361 | **EO Index:** | 87399 |
| **Key Quad:** | Salinas (3612166) | **Element Code:** | PMPOA041N0 |
| **Occurrence Number:** | 3 | **Occurrence Last Updated:** | 2012-07-18 |

**Scientific Name:** *Agrostis lacuna-vernalis*

**Common Name:** vernal pool bent grass

**Listing Status:** **Federal:** None

**State:** None

**CNDDB Element Ranks:** **Global:** G1

**State:** S1

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive
SB_SBBG-Santa Barbara Botanic Garden

**General Habitat:**

VERNAL POOLS.

**Micro Habitat:**

IN MIMA MOUND AREAS OR ON THE MARGINS OF VERNAL POOLS. 125-150 M.

| | | | |
|---|---|---|---|
| **Last Date Observed:** | 2011-05-19 | **Occurrence Type:** | Natural/Native occurrence |
| **Last Survey Date:** | 2011-05-19 | **Occurrence Rank:** | Unknown |
| **Owner/Manager:** | BLM-FORT ORD | **Trend:** | Unknown |
| **Presence:** | Presumed Extant | | |

**Location:**

NEAR TRAIL 17 AND TRAIL 57, JUST NORTH OF MACHINE GUN FLATS, ABOUT 0.5 MILE SE OF THE RANGER STATION, FORT ORD.

**Detailed Location:**

MAPPED BY CNDDB AS 2 POLYGONS ACCORDING TO COORDINATES IN A 2012 STYER EMAIL IN THE SW 1/4 OF THE NE 1/4 OF SECTION 9 AND THE SW 1/4 OF THE NW 1/4 OF SECTION 10.

**Ecological:**

**Threats:**

**General:**

SITE VISITED IN 2011.

| | | | | | |
|---|---|---|---|---|---|
| **PLSS:** | T15S, R02E, Sec. 09, NE (M) | **Accuracy:** | specific area | **Area (acres):** | 2 |
| **UTM:** | Zone-10 N4055645 E611963 | **Latitude/Longitude:** | 36.63979 / -121.74755 | **Elevation (feet):** | 420 |

| **County Summary:** | **Quad Summary:** |
|---|---|
| Monterey | Salinas (3612166) |

**Sources:**

STY12U0001 STYER, D. - LIST OF COORDINATES IN AN EMAIL FROM STYER FOR AGROSTIS LACUNA-VERNALIS 2012-05-20

## 7.3 Appendix C: CHRIS Search Record

Prepared by NWIC dated April 14, 2022.

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

**Northwest Information Center**
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

# ACCESS AGREEMENT SHORT FORM

File Number: 21-1461

I, the the undersigned, have been granted access to historical resources information on file at the Northwest Information Center of the Califronia Historical Resources Information System.

I understand that any CHRIS Confidential Information I receive shall not be disclosed to individuals who do not qualify for access to such information, as specified in Section III(A-E) of the CHRIS Information Center Rules of Operation Manual, or in publicly distributed documents without written consent of the Information Center Coordinator.

I agree to submit historical Resource Records and Reports based in part on the CHRIS information released under this Access Agreement to the Information Center within sixy (60) calendar days of completion.

I agree to pay for CHRIS services provided under this Access Agreement within sixty (60) calendar days of receipt of billing.

I understand that failure to comply with this Access Agreement shall be grounds for denial of access to CHRIS Information.

Print Name: Shin Tu Date:

Signature:

Affiliation: Precision Civil Engineering

Address: City/State/ZIP:

Billing Address (if different from above):

Special Billing Information

Telephone: (559) 449-4500 Email: stu@precisioneng.net

Purpose of Access: Project planning

Reference (project name or number, title of study, and street address if applicable):

Alisal Marketplace Rezone

County: MNT USGS 7.5' Quad: Salinas

Sonoma State University Customer ID: credit card

Sonoma State University Invoice No.:

**This is not an invoice. Sonoma State University will send separate Invoice**

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

**Northwest Information Center**
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Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

April 14, 2022 NWIC File No.: 21-1411

Shin Tu, Assistant Planner
Precision Civil Engineering, Inc.
1234 "O" Street
Fresno, CA 93721

Re: Record search results for the proposed Alisal Marketplace Rezone, Salinas, Monterey County, California

Dear Shin Tu:

Per your request received by our office on March 1, 2022, a records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for Monterey County. An Area of Potential Effects (APE) map was not provided; in lieu of this, the location map provided depicting the Alisal Marketplace Rezone project area was used to conduct this records search. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

The proposed project proposes a General Plan Amendment to change land use designation from Retail and General Commercial/Light Industrial to Mixed Use, and a rezone to change zoning from Commercial Retail and Industrial General Commercial to MU-Mixed Use. This would facilitate residential development to expand housing opportunities. The project does not propose physical development. However, the city envisioned the development of a new mixed-use neighborhood integrating housing and services with public open space and education and civic buildings, including a new police station. For the purpose of CEQA analysis, the project assumes the development of 131,414-sf. commercial space and 493 residential dwelling units.

Review of the information at our office indicates that there have been no previous cultural resource studies that cover the Alisal Marketplace Rezone project area. The project area contains no previously recorded archaeological resources. The State Office of Historic Preservation Built Environment Resources Directory (OHP BERD), which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places, lists no previously recorded buildings or structures within or adjacent to the proposed project area. In addition to these inventories, the NWIC base maps show no previously recorded buildings or structures within the proposed project area.

At the time of Euroamerican contact, the Native Americans that lived in the area were speakers of the Mutsun and/or Rumsen languages, both of which are part of the Costanoan subfamily of the Utian language family (Shipley 1978: 89). There are no Native American

resources within or adjacent to the Alisal Marketplace Rezone project area that are referenced in the ethnographic literature (Levy 1976).

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Monterey County have been found near seasonal and perennial waterways and the associated ecotones found nearby. Sites are also found at foothill to valley interfaces and near oak woodland environments. The Alisal Marketplace Rezone project area is located in the broad alluvial fans in proximity to Natividad Creek and its basin. Given the similarity of these environmental factors, there is a moderate potential for unrecorded Native American resources to be within the proposed project area, especially buried deposits that may not show signs on the surface.

Review of historical literature and maps indicated historic-period activity within the Alisal Marketplace Rezone project area for over the last 100 years. The 1912 Salinas 15-minute topographic quadrangle depicts two buildings within the proposed project area. In addition, the area was located along a major east-west transportation corridor, and is located just to the east of the railroad. With this information in mind, there is a moderate potential for unrecorded historic-period archaeological resources to be within the proposed project area.

The 1947 (photorevised 1975) USGS Salinas 7.5-minute topographic quadrangle depicts numerous buildings or structures within the Alisal Marketplace Rezone project area. These unrecorded buildings or structures meet the Office of Historic Preservation's minimum age standard that buildings, structures, and objects that are 45 years of age or older may be of historical value.

**RECOMMENDATIONS:**

1) As per the project description, there is to be no ground disturbance at this time. When proposed, we recommend further study for the possibility of identifying Native American and historic-period archaeological resources as there is a moderate potential for Native American archaeological resources and a moderate potential for historic-period archaeological resources to be within the project area. In the future, we recommend a qualified archaeologist conduct further archival and field study to identify cultural resources. Field study may include, but is not limited to, pedestrian survey, hand auger sampling, shovel test units, or geoarchaeological analyses as well as other common methods used to identify the presence of archaeological resources. Please refer to the list of consultants who meet the Secretary of Interior's Standards at http://www.chrisinfo.org.

2) We recommend the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/373-3710.

3) If the proposed project area contains buildings or structures that meet the minimum age requirement, prior to commencement of project activities, it is recommended that the unrecorded building or structure be documented on Office of Historic Preservation's DPR 523 resource recordation forms by a professional familiar with the architecture and history of Monterey County. Furthermore, the potential impacts of the proposed project activities on this building or structure should be assessed, and project-specific recommendations provided, as warranted. Please refer to the list of consultants who meet the Secretary of Interior's Standards at http://www.chrisinfo.org.

4) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

5) If archaeological resources are encountered **during construction,** work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

6) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: https://ohp.parks.ca.gov/?page_id=28351

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. If you have any questions, please contact our office at nwic@sonoma.edu or at (707) 588-8455.

Sincerely,

Bryan Much
Coordinator

**LITERATURE REVIEWED**

In addition to archaeological maps and site records on file at the Northwest Information Center of the Historical Resources Information System, California Archaeological Inventory, the following literature was reviewed:


Barrows, Henry D., and Luther A. Ingersoll
2005 *Memorial and Biographical History of the Coast Counties of Central California*. Three Rocks Research, Santa Cruz, CA (Digital Reproduction of The Lewis Publishing Company, Chicago, IL: 1893.)

Breschini, Gary S., Trudy Haversat, and Mona Gudgel
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Clark, Donald Thomas
1991 *Monterey County Place Names: A Geographical Dictionary*. Kestrel Press, Carmel Valley, CA.

Gudde, Erwin G.
1969 *California Place Names: The Origin and Etymology of Current Geographical Names*. Third Edition. University of California Press, Berkeley and Los Angeles.

Hart, James D.
1987 *A Companion to California*. University of California Press, Berkeley and Los Angeles.

Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, revised by William N. Abeloe
1966 *Historic Spots in California*. Third Edition. Stanford University Press, Stanford, CA.

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2005 *Caltrans Statewide Historic Bridge Inventory Update*. Caltrans, Division of Environmental Analysis, Sacramento, CA.

Howard, Donald M., Esq.
1979 *Prehistoric Sites Handbook: Monterey & San Luis Obispo Counties*. Angel Press, Monterey, CA.

Kroeber, A.L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C. (Reprint by Dover Publications, Inc., New York, 1976)

Levy, Richard
1978 Costanoan. In *California*, edited by Robert F. Heizer, pp. 485-495. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Monterey County Historical Society, Inc.
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1988 *Discover Historic California*. Gem Guides Book Co., Pico Rivera, CA.

Ryan, Nicki
1981 Historic Resources in Monterey County.

State of California Department of Parks and Recreation
1976 *California Inventory of Historic Resources*. State of California Department of Parks and Recreation, Sacramento.

State of California Department of Parks and Recreation and Office of Historic Preservation
1988 *Five Views: An Ethnic Sites Survey for California*. State of California Department of Parks and Recreation and Office of Historic Preservation, Sacramento.

State of California Office of Historic Preservation **
2021 *Built Environment Resources Directory*. Listing by City (through September 15, 2021). State of California Office of Historic Preservation, Sacramento.

Works Progress Administration
*1984 The WPA Guide to California.* Reprint by Pantheon Books, New York. (Originally published as California: A Guide to the Golden State in 1939 by Books, Inc., distributed by Hastings House Publishers, NY.)

Works Progress Administration
*1989 The WPA Guide to the Monterey Peninsula.* Reprint by the University of Arizona Press, Tucson, AZ. (Originally published in 1941 as Monterey Peninsula.)

**Note that the Office of Historic Preservation's *Historic Properties Directory* includes National Register, State Registered Landmarks, California Points of Historical Interest, and the California Register of Historical Resources as well as Certified Local Government surveys that have undergone Section 106 review.

## 7.4 Appendix D: NAHC SLF Results Letter

Prepared by NAHC dated April 8, 2022.

# NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
*Luiseño*

VICE CHAIRPERSON
Reginald Pagaling
*Chumash*

PARLIAMENTARIAN
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Isaac Bojorquez
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Buffy McQuillen
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*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

April 8, 2022

Shin Tu
Precision Civil Engineering

Via Email to: stu@precisioneng.net

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, Alisal Marketplace Rezone Project, Monterey County

Dear Shin Tu:

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 positive. Please contact the tribes on the attached list for more information.

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

## 7.5 Appendix E: Noise Assessment

Prepared by WJV Acoustics, Inc., on February 25, 2023.

# ENVIRONMENTAL NOISE ASSESSMENT

## MIXED-USE GENERAL PLAN AMENDMENT & REZONE PROJECT
**SALINAS, CALIFORNIA**

## WJVA Project No. 22-64

**PREPARED FOR**

**PRECISION ENGINEERING**
**1234 O Street**
**Fresno, California 93721**

**PREPARED BY**

**WJV ACOUSTICS, INC.**
**VISALIA, CALIFORNIA**

wjv acoustics

**FEBRUARY 25, 2023**

# INTRODUCTION

The Mixed-Use General Plan Amendment and Rezone Project ("Project") pertains to five (5) separate sites within the City of Salinas, Monterey County, California and proposes to change the designated land use and zoning of the sites from their current base designations and districts to "Mixed Use" and MX – Mixed Use, respectively. This acoustical analysis analyzes the potential impacts that could result from the proposed designated land uses and zoning changes for the sites and provides the results of an ambient noise survey in the project areas.

The proposed designated land use and zoning changes pertain to five individual sites. In most cases each site is comprised of multiple parcels. Figure 1 through Figure 5 provide graphics of the five project site areas. A brief description of each of the five sites are provided below:

- **Alisal Marketplace:** The proposed project is generally located adjacent to East Alisal Street, between Front Street and Griffin Street. The Project site consists of 18 parcels that total approximately 12.1 acres. The project site is currently zoned CR (Commercial Retail) and IGC (Industrial General Commercial).

- **Edge of Downtown:** The proposed project is generally located north and south to John Street between Front Street and Abbott Street. The Project site consists of eight (8) parcels that total approximately 3.7 acres. The project site is currently zoned CR (Commercial Retail).

- **Foods Co Shopping Center:** The proposed project is generally located south of East Alisal Street between South Sanborn Road and John Street. The Project site consists of eight (8) parcels that total approximately 13.5 acres. The project site is currently zoned CR (Commercial Retail).

- **Laurel West Shopping Center:** The proposed project is generally located east of North David Road between West Laurel Drive/Calle Del Adobe and Larkin Street at 1040 North Davis Road, Salinas, CA 93907. The Project site consists of six (6) parcels that total approximately 16.2 acres. The project site is currently zoned CR (Commercial Retail).

- **Sears/Northridge Mall:** The proposed project is generally located on the northwest corner of North Main Street and Madrid Street at 1700 N Main St, Salinas, CA 93906 ("Large Shopping Centers/Sears. The Project site consists of one (1) parcel that totals approximately 10.2 acres. The project site is currently zoned CR (Commercial Retail).

This environmental noise assessment has been prepared to determine if significant noise impacts will be produced by the project and to describe mitigation measures for noise if significant impacts are determined. The environmental noise assessment, prepared by WJV Acoustics, Inc. (WJVA), is based upon the project information (including project traffic volumes) provided by Precision Engineering, Inc. Revisions to the project traffic information or other project-related information available to WJVA at the time the analysis was prepared may require a reevaluation of the findings and/or recommendations of the report.

Specifically, this environmental noise assessment addresses the potential changes in traffic noise exposure to existing sensitive receptor locations, that would likely occur as a result of the proposed project. The analysis also discusses noise sources and noise levels typical of single- and multi-family residential and mixed-use residential developments as well as a discussion of potential noise impacts to proposed residential land uses within the mixed-use zoning areas.

Appendix A provides definitions of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise. Appendix B provides examples of sound levels for reference.

In terms of human perception, a 5 dB increase or decrease is considered to be a noticeable change in noise levels. Additionally, a 10 dB increase or decrease is perceived by the human ear as half as loud or twice as loud. In terms of perception, generally speaking the human ear cannot perceive an increase (or decrease) in noise levels less than 3 dB.

# NOISE EXPOSURE CRITERIA

The CEQA Guidelines apply the following questions for the assessment of significant noise impacts for a project:

a. Would the project result in 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. Would the project result in 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?

## City of Salinas

**General Plan**

The Noise Element of the City of Salinas General Plan (adopted September 2002) establishes land use compatibility criteria in terms of the Day-Night Average Level ($L_{dn}$/DNL) for transportation noise sources. The $L_{dn}$ is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m. to 7:00 a.m.). The $L_{dn}$ represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon *annual average* conditions.

The General Plan Noise Element states *"To ensure that noise producers do not adversely affect sensitive receptors, the City uses land use compatibility standards when planning and making development decisions. Table N-2 summarizes the City noise standards for various types of land uses. The standards represent the maximum acceptable noise level as measured at the property boundary, which is used to determine noise impacts."* Table N-2 of the General Plan Noise Element is presented below as Table I

**Table 1**
**Exterior Noise Standards**

| Designation/District of Property Receiving Noise | Maximum Noise Level, Ldn or CNEL, dBA |
|---|---|
| Agricultural | 70 |
| Residential | 60 |
| Commercial | 65 |
| Industrial | 70 |
| Public and Semipublic | 60 |

While not explicitly stated in the General Plan, exterior noise standards are typically applied at outdoor activity areas of residential (and otherwise sensitive) land uses. Outdoor activity areas generally include backyards of single-family residences and individual patios or decks and common outdoor activity areas of multi-family developments. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation.

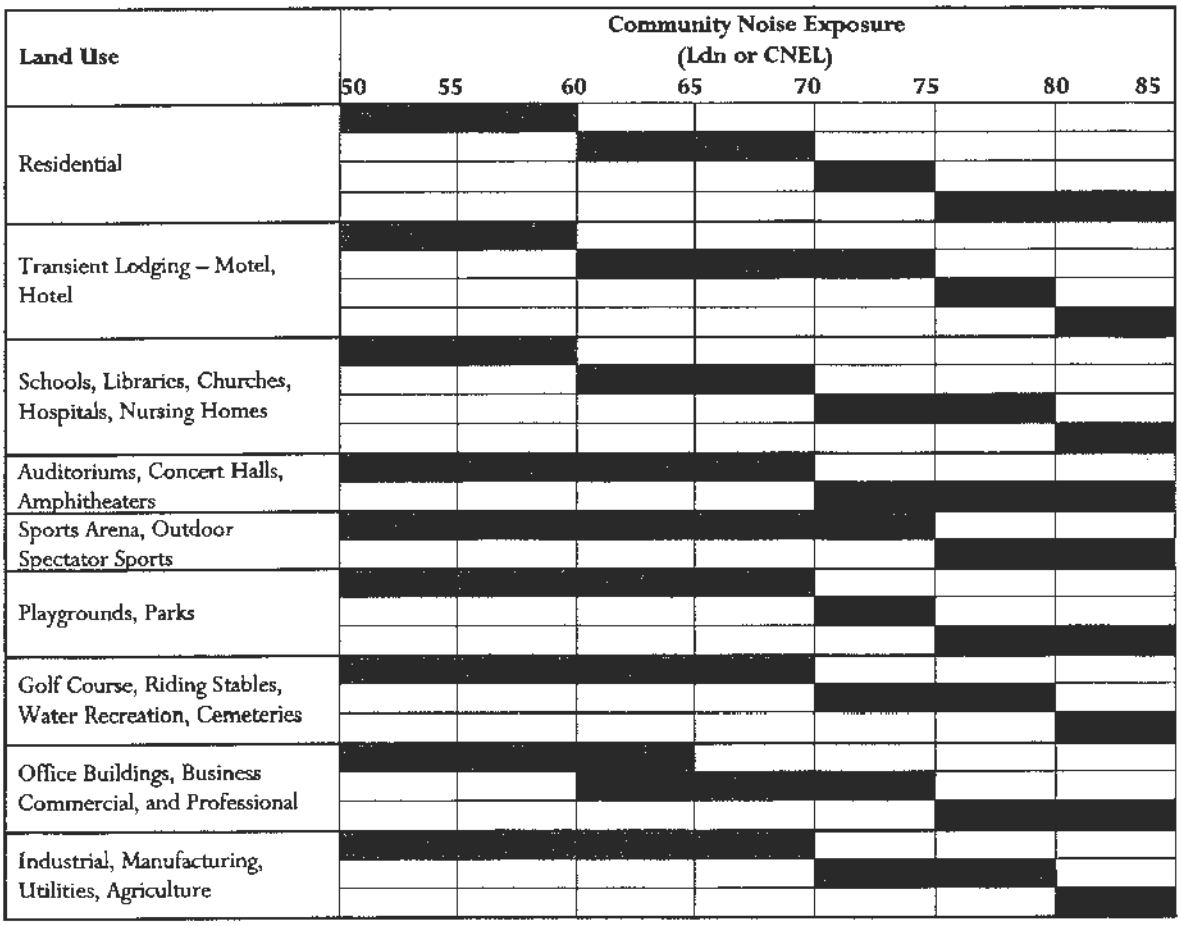
The General Plan Noise Element further states *"These noise standards are the basis for development of the land use compatibility guidelines presented in Table N-3. If the noise level of a project falls within Zone A or Zone B, the project is considered compatible with the noise environment. Zone A implies that no mitigation will be needed. Zone B implies that minor mitigation may be required to meet the City's and Title 24 noise standards. All development project proponents are required to demonstrate that the noise standards will be met prior to human occupation of a building.*

*If the noise level falls within Zone C, substantial mitigation is likely needed to meet City noise standards. Substantial mitigation may involve construction of noise barriers and substantial building sound insulation. Projects in Zone C can be successfully mitigated; however, project proponents with a project in Zone C must demonstrate that the noise standards can be met prior to issuance of a building permit.*

*If noise levels fall outside of Zones A, B and C, projects are considered clearly incompatible with the noise environment and should not be approved."* Table N-3 of the General Plan Noise Element is presented below as Table II.

Table II

## Noise/Land Use Compatibility Matrix




Source: Modified by CBA from 1998 State of California General Plan Guidelines.

**ZONE A - Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.

**ZONE B - Conditionally Acceptable:** New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.

**Zone C- Normally Unacceptable:** New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.

**ZONE D- Clearly Unacceptable:** New construction or development clearly should not be undertaken.

The City of Salinas General Plan also provides an interior noise standard of 45 dB CNEL/$L_{dn}$. The interior standard is to ensure interior noise levels attributable to exterior sources not exceed 45 dB CNEL (or $L_{dn}$) within residential land uses. This is consistent with Title 24 of the California Code of Regulations for residential construction and consistent with U.S. Department of Housing and Urban Development (HUD). The intent of the interior noise level guideline is to provide an acceptable noise environment for indoor communication and sleep.

Additionally, Section 1207.4 of the California Building Code states *"Interior noise levels attributable to exterior sources should not exceed 45 dB in any inhabitable room. The noise metric shall be the day-night average sound level ($L_{dn}$) or the community noise equivalent level (CNEL), consistent with the noise level of the local general plan."* The section of the California Building Code applies to Hotels and Motels.

# EXISTING AMBIENT NOISE LEVELS

WJVA conducted measurements of existing ambient noise levels in the project vicinity on February 1 and February 2, 2023. Long-term (24-hour) ambient noise level measurements were conducted at ten (10) locations (sites LT-1 through LT-10). Two (2) ambient noise measurement sites were located in each of the five (5) overall project areas.

The intent of the ambient noise survey was to document existing noise levels in the overall project area. A general description of each of the ten ambient noise measurement sites is provided below. The locations of the ten ambient noise survey locations are provided as Figure 6 through Figure 10.

**Alisal Marketplace**

- LT-1: Ambient noise measurement site LT-1 was located near the intersection of JD Alvarado Circle and Alisal Street. LT-1 was exposed to noise associated with vehicle traffic along both roadways as well as noise associated with nearby commercial/industrial activities (car wash, automotive repair shops) and occasional aircraft overflights.

- LT-2: Ambient noise measurement site LT-2 was located on Griffin Street, between Alisal Street and Rianda Street. LT-2 was exposed to noise associated with vehicle traffic along local roadways as well U.S. Route 101 (US 101). Site LT-2 was also exposed to noise associated with nearby commercial/retail activities and occasional aircraft overflights.

**Edge of Downtown**

- LT-3: Ambient noise measurement site LT-3 was located along Summer Street, between Front Street and Abbot Street. LT-3 was exposed to noise associated with vehicle traffic along nearby roadways as well as noise associated with nearby commercial/industrial activities (lumber yard) and occasional aircraft overflights and railroad operations on the Union Pacific line.

- LT-4: Ambient noise measurement site LT-4 was located on Front Street, between John Street and Winham Street. LT-4 was exposed to noise associated with vehicle traffic along local roadways, noise associated with nearby commercial and retail land uses along John Street as well as occasional aircraft overflights.

**Foods Co Shopping Center**

- LT-5: Ambient noise measurement site LT-5 was located along McGowan Drive, east of Sanborn Road. LT-5 was exposed to noise associated with vehicle traffic along nearby roadways as well as noise associated with nearby commercial/retail activities and occasional aircraft overflights.

- LT-6: Ambient noise measurement site LT-6 was located along Alisal Street, east of Sanborn Road. LT-6 was exposed to noise associated with vehicle traffic along local roadways, noise associated with nearby commercial/retail land uses as well and occasional aircraft overflights.

**Laurel West Shopping Center**

- LT-7: Ambient noise measurement site LT-7 was located along Davis, south of Laurel Drive. LT-7 was exposed to noise associated with vehicle traffic along Davis Road as well as noise associated with nearby commercial/retail activities and occasional aircraft overflights.

- LT-8: Ambient noise measurement site LT-8 was located within the northeast portion of the project site, in an existing retail center parking lot, south of Laurel Road and west of US 101. LT-8 was exposed to noise associated with vehicle traffic along Laurel Road and US 101, noise associated with nearby commercial/retail land uses as well and occasional aircraft overflights.

**Sears/Northridge Mall Shopping Center**

- LT-9: Ambient noise measurement site LT-9 was located northwest of the intersection of Main Street and Madrid Street, and was exposed to noise associated with vehicle traffic along both roadways, as well occasional aircraft overflights.

- LT-10: Ambient noise measurement site LT-10 was located along the access road located along the western portion of the project site. LT-10 was exposed to noise associated with vehicle traffic accessing the roadway as well as noise associated with nearby residential land uses (landscaping activities, barking dogs, voices, etc.) as well as occasional aircraft overflights.

Ambient noise levels were measured for a period of 24 continuous hours at each ambient noise measurement location. Noise monitoring equipment consisted of Larson-Davis Laboratories Model LDL-820 sound level analyzers equipped with B&K Type 4176 1/2" microphones. The equipment complies with the specifications of the American National Standards Institute (ANSI) for Type I (Precision) sound level meters. The meters were calibrated with a B&K Type 4230 acoustic calibrator to ensure the accuracy of the measurements.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-1 ranged from a low of 55.4 dB between 2:00 a.m. and 3:00 a.m. to a high of 68.7 dB between 2:00 p.m. and 3:00 p.m. Hourly maximum ($L_{max}$) noise levels at site LT-1 ranged from 72.1 to 86.2 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 50.0 to 61.1 dB. The $L_{90}$ is a statistical descriptor that defines the noise level exceeded 90% of the time during each hour of the sample period. The $L_{90}$ is generally considered to represent the residual (or background) noise level in the absence of identifiable single noise events from traffic, aircraft and other local noise sources. **The measured $L_{dn}$ value at site LT-1 during the 24-hour noise measurement period was 69.1 dB.** Figure 11 graphically depicts hourly variations in ambient noise levels at the LT-1 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-2 ranged from a low of 60.0 dB between 2:00 a.m. and 3:00 a.m. to a high of 68.3 dB between 7:00 a.m. and 8:00 a.m. Hourly maximum ($L_{max}$) noise levels at site LT-2 ranged from 69.4 to 83.1 dB. Residual

noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 56.8 to 63.7 dB. **The measured $L_{dn}$ value at site LT-2 during the 24-hour noise measurement period was 70.9 dB.** Figure 12 graphically depicts hourly variations in ambient noise levels at the LT-2 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-3 ranged from a low of 50.3 dB between 3:00 a.m. and 4:00 a.m. to a high of 70.9 dB between 10:00 a.m. and 11:00 a.m. Hourly maximum ($L_{max}$) noise levels at site LT-3 ranged from 63.7 to 84.0 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 46.2 to 57.5 dB. **The measured $L_{dn}$ value at site LT-3 during the 24-hour noise measurement period was 66.8 dB.** Figure 13 graphically depicts hourly variations in ambient noise levels at the LT-3 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-4 ranged from a low of 48.6 dB between 3:00 a.m. and 4:00 a.m. to a high of 63.7 dB between noon and 1:00 p.m. Hourly maximum ($L_{max}$) noise levels at site LT-4 ranged from 66.6 to 79.4 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 44.9 to 54.8 dB. **The measured $L_{dn}$ value at site LT-4 during the 24-hour noise measurement period was 62.2 dB.** Figure 14 graphically depicts hourly variations in ambient noise levels at the LT-4 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-5 ranged from a low of 53.0 dB between 2:00 a.m. and 3:00 a.m. to a high of 69.7 dB between 4:00 p.m. and 5:00 p.m. Hourly maximum ($L_{max}$) noise levels at site LT-5 ranged from 66.9 to 96.4 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 47.7 to 58.6 dB. **The measured $L_{dn}$ value at site LT-5 during the 24-hour noise measurement period was 65.9 dB.** Figure 15 graphically depicts hourly variations in ambient noise levels at the LT-5 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-6 ranged from a low of 58.9 dB between 3:00 a.m. and 4:00 a.m. to a high of 68.4 dB between 8:00 a.m. and 9:00 a.m. Hourly maximum ($L_{max}$) noise levels at site LT-6 ranged from 77.2 to 88.8 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 51.0 to 58.6 dB. **The measured $L_{dn}$ value at site LT-6 during the 24-hour noise measurement period was 70.2 dB.** Figure 16 graphically depicts hourly variations in ambient noise levels at the LT-6 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-7 ranged from a low of 53.8 dB between 3:00 a.m. and 4:00 a.m. to a high of 66.3 dB between 8:00 p.m. and 9:00 p.m. Hourly maximum ($L_{max}$) noise levels at site LT-7 ranged from 73.6 to 83.2 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 49.2 to 60.9 dB. **The measured $L_{dn}$ value at site LT-7 during the 24-hour noise measurement period was 66.3 dB.** Figure 17 graphically depicts hourly variations in ambient noise levels at the LT-7 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-8 ranged from a low of 50.1 dB between 3:00 a.m. and 4:00 a.m. to a high of 61.1 dB between 2:00 p.m. and 3:00 p.m. Hourly maximum ($L_{max}$) noise levels at site LT-8 ranged from 62.2 to 77.7 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 46.8 to 54.9 dB. **The measured $L_{dn}$ value at site LT-8 during the 24-hour noise measurement period was 60.0 dB.** Figure 18 graphically depicts hourly variations in ambient noise levels at the LT-8 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-9 ranged from a low of 52.0 dB between 3:00 a.m. and 4:00 a.m. to a high of 65.0 dB between 8:00 a.m. and 9:00 a.m. Hourly maximum ($L_{max}$) noise levels at site LT-9 ranged from 68.2 to 83.6 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 48.8 to 58.1 dB. **The measured $L_{dn}$ value at site LT-9 during the 24-hour noise measurement period was 65.2 dB.** Figure 19 graphically depicts hourly variations in ambient noise levels at the LT-9 long-term monitoring site as well as a site photograph.

- Measured hourly energy average noise levels ($L_{eq}$) at site LT-10 ranged from a low of 47.2 dB between 4:00 a.m. and 5:00 a.m. to a high of 65.5 dB between 3:00 p.m. and 4:00 p.m. Hourly maximum ($L_{max}$) noise levels at site LT-10 ranged from 56.6 to 63.6 dB. Residual noise levels at the monitoring site, as defined by the $L_{90}$ statistical descriptor ranged from 42.2 to 58.3 dB. **The measured $L_{dn}$ value at site LT-10 during the 24-hour noise measurement period was 65.2 dB.** Figure 20 graphically depicts hourly variations in ambient noise levels at the LT-10 long-term monitoring site as well as a site photograph.

In addition to the above-described long-term (24-hour) ambient noise level measurements, WJVA conducted ten (10) additional short-term (15-minute) noise level measurements. Two (2) short-term measurements were conducted within each of the five (5) individual project areas. The noise measurement data includes energy average ($L_{eq}$) and maximum ($L_{max}$) noise levels measured at the ten short-term noise measurement sites. Observations were made of the dominant noise sources affecting the measurements.

**TABLE III**

**SUMMARY OF SHORT-TERM NOISE MEASUREMENT DATA**
**MIXED-USE GPA & REZONE PROJECT, SALINAS**
**FEBRUARY 1 & 2, 2023**

| Site | Time | A-Weighted Decibels, dBA | | Sources |
|---|---|---|---|---|
| | | $L_{eq}$ | $L_{max}$ | |
| ST-1 | 10:10 a.m. | 58.7 | 73.4 | TR, AC, I |
| ST-2 | 10:40 a.m. | 68.7 | 81.4 | TR, I |
| ST-3 | 11:45 a.m. | 64.4 | 76.2 | TR |
| ST-4 | 12:50 p.m. | 66.8 | 77.7 | TR |
| ST-5 | 2:10 p.m. | 63.6 | 82.0 | TR, BD |
| ST-6 | 2:40 p.m. | 53.8 | 69.2 | TR, BD |
| ST-7 | 10:25 a.m. | 51.4 | 59.0 | TR, C |
| ST-8 | 11:05 a.m. | 53.2 | 61.5 | TR, C |
| ST-9 | 12:15 p.m. | 62.1 | 68.8 | TR |
| ST-10 | 1:20 p.m. | 60.3 | 66.9 | TR, V |

TR: Traffic AC: Aircraft V: Voices D: Dogs Barking BD: Birds I: Industrial/Commercial Activities
C: Construction Activiteis
Source: WJV Acoustics, Inc.

The long- and short-term ambient noise measurements indicate the dominant source of noise within the overall project site areas is associated with vehicle traffic on roadways and highways. Fluctuations in noise levels in the project areas is almost entirely driven by fluctuation in traffic volumes. Additional sources of noise observed at the majority of locations included train operations, industrial/commercial activities and occasional aircraft overflights.

# PROJECT-RELATED NOISE ANALYSIS

The project would rezone several parcels of land within five (5) areas within the City of Salinas. The parcels are currently zoned a mixture of Commercial Retail (CR) and Industrial General Commercial (IGC), and would be rezoned as Mixed Use (MX). The change in zoning density would result in a decrease in traffic volumes along roadways in the vicinity of the various mixed-use zoned parcels. However, existing (and future) traffic noise exposure levels adjacent to several parcels would likely exceed City of Salinas exterior noise exposure levels for residentially zoned land uses.

## Traffic Noise Exposure

**Project-Related Changes in Traffic Volumes-**
A project-specific traffic study was not available at the time this analysis was prepared. However, WJVA was provided annual average daily traffic (ADT) volumes associated with the existing zoning (CR and IGC) as well as the proposed zoning (MX). Table IV provides the ADT volumes for the five project areas for both existing and proposed land use zoning.

**TABLE IV**

**MIXED-USE GPA & REZONE PROJECT, SALINAS**
**ANNUAL AVERAGE TRAFFIC (ADT) VOLUMES**

| PROJECT AREA | EXISTING ADT | PROPOSED ADT | CHANGE |
|---|---|---|---|
| ALISAL MARKETPLACE | 8,262 | 1,771 | -6,491 |
| EDGE OF DOWNTOWN | 3,821 | 1,018 | -2,803 |
| FOODS CO SHOPPING CENTER | 5,441 | 1,982 | -4,547 |
| LAUREL WEST SHOPPING CENTER | 6,529 | 2,378 | -4,151 |
| SEARS/NORTHRIDGE MALL | 10,496 | 1,497 | -8,999 |

Source: Precision Engineering

The above-described ADT volumes represent the trip generation volumes associated with the land use zoning designations (both existing and proposed), parcel size and estimated number of residential dwelling units (for proposed MX zoning designation). The distribution of these traffic volumes along nearby roadways was not available at the time this analysis was prepared. However, WJVA calculated theoretical changes in traffic noise associated with these ADT changes, with the assumption that these volumes would occur on one individual roadway for each of the five project areas. This analysis is intended to provide a generalized/qualitative snapshot of overall changes in traffic noise exposure associated with project implementation.

WJVA utilized the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA Model is a standard analytical method used for roadway traffic noise calculations. The model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavy trucks (3 or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the

acoustical characteristics of the site. The FHWA Model was developed to predict hourly $L_{eq}$ values for free-flowing traffic conditions, and is generally considered to be accurate within ±1.5 dB. To predict $L_{dn}$ values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Table V provides the theoretical noise exposure levels associated with project-related traffic only, and is not intended to provide actual cumulative (project plus non-project related traffic volumes) traffic noise exposure levels. The traffic noise exposure levels described in Table V were calculated at a reference setback distance of 100 feet from the centerline of a roadway.

**TABLE V**

**MIXED-USE GPA & REZONE PROJECT, SALINAS**
**ANNUAL AVERAGE TRAFFIC (ADT) VOLUMES**

| PROJECT AREA | EXISTING | PROPOSED MX | CHANGE |
|---|---|---|---|
| ALISAL MARKETPLACE | 60 | 53 | -7 |
| EDGE OF DOWNTOWN | 56 | 51 | -5 |
| FOODS CO SHOPPING CENTER | 58 | 54 | -4 |
| LAUREL WEST SHOPPING CENTER | 59 | 54 | -5 |
| SEARS/NORTHRIDGE MALL | 61 | 52 | -9 |

Source: Precision Engineering

Traffic noise exposure levels associated with current zoning of the project areas versus the proposed zoning of the project areas are intended only to demonstrate that traffic volumes associated with the parcels would decrease as a result of project implementation. However, based upon existing ambient noise levels (as described above), the decrease in traffic volumes would likely not result in any significant overall reduction in traffic noise exposure levels near the five project areas. Table V should not be interpreted as such that the overall noise exposure within these areas would decrease by the described "change", as a result of project implementation.

**Traffic Noise Exposure at Proposed Residential Land Uses-**

The City of Salinas exterior noise level standard for residential land uses is 60 dB $L_{dn}$. Existing noise exposure at the ten ambient noise survey sites ranged from approximately 60-71 dB $L_{dn}$. These noise levels represent those at the measurement location only, often in close proximity to nearby roadways. Site specific acoustical analyses will be required once specific site plan design and construction details are provided. Typically, the exterior noise standard would apply at the outdoor activity areas (backyards of single-family residential land uses and outdoor common areas and individual balconies and patios of multi-family residential land uses). When these locations are known, a site-specific determination of exterior noise exposure and required mitigation measures should be prepared.

Based upon the ambient noise survey, mitigation measures would likely be required at several proposed residential land use sites. Exterior noise mitigation measures would typically include

increase of setbacks, strategic placement of outdoor activity areas as well as sound walls. The exact location and heights of sound walls cannot be determined without the preparation of site-specific acoustical analyses.

Additionally, the City of Salinas interior noise level standard is 45 dB $L_{dn}$. Depending on proximity to roadways, interior noise level standards may exceed the interior noise level standard. Interior noise mitigation would typically be accomplished by means of increased STC-rated windows, doors and wall assemblies.

## Noise From Residential Sources

Noise associated with residential land uses is typically minimal compared to other land uses such as commercial, industrial, etc. Noise sources associated with residential land uses would typically include vehicle movements, noise associated with landscaping activities, human voices, barking dogs, etc. None of these sources would be considered a potential significant noise impact at any existing or planned noise-sensitive land uses.

## Noise Impacts At Proposed Mixed-Use Developments

Mixed-use land uses would typically include a variety of land uses including residential, commercial, retail and office uses. A wide variety of noise sources can be associated with commercial and retail land uses. The noise levels produced by such sources can also be highly variable and could potentially impact existing on-site and off-site sensitive receptors. From the perspective of the City's noise standards, noise sources not associated with transportation sources are considered stationary noise sources. Typical examples of stationary noise sources include:

- Fans and blowers
- HVAC/Mechanical equipment
- Truck deliveries
- Loading Docks
- Compactors
- Amplified Drive-Thru Menu Board Speakers
- Automated Car Wash Operations

Noise levels from new stationary noise sources cannot be predicted with any certainty at this time since specific uses have not yet been proposed and the locations of stationary noise sources relative to the locations of noise sensitive uses are not known. However, under some circumstances there is a potential for such uses to exceed the City's noise standards for stationary noise sources at the locations of sensitive receptors.

Noise levels from new stationary noise sources may be effectively reduced by incorporating noise mitigation measures into the project design that consider the geographical relationship between the noise sources of concern and potential receptors, the noise-producing characteristics of the

sources and the path of transmission between noise sources and sensitive receptors. Options for noise mitigation include the use of building setbacks, the construction of sound walls and the use of noise source equipment enclosures.

When specific uses within the project areas are proposed that could result in a noise-related conflict between a commercial or other stationary noise source and existing or proposed noise-sensitive receptor, an acoustical analysis may be required that quantifies project-related noise levels and recommends appropriate mitigation measures to achieve compliance with the City's noise standards.

## CONCLUSIONS AND RECOMMENDATIONS

The propped Mixed-Use General Plan Amendment and Rezone project would decrease traffic volumes (and potentially decrease overall noise exposure levels) in the vicinity of the five project areas. However, proposed residential land uses included in the mixed-use zoning areas could potentially be exposed to exterior and interior noise levels that exceed the City of Salinas noise standards for residential land uses. Additionally, non-residential land uses associated with mixed-zoning land use designations could include noise sources that could result in compatibility concerns with both existing and proposed residential land uses in the project areas. When site-specific uses are proposed, site-specific acoustical analyses (noise studies) may be required if there are potential noise impacts at existing or proposed noise-sensitive land uses. However, the project itself would not specifically be expected to result in any significant noise impacts to existing noise-sensitive receptors.

The conclusions and recommendations of this acoustical analysis are based upon the best information known to WJV Acoustics Inc. (WJVA) at the time the analysis was prepared concerning the proposed project. Any significant changes to the project may require a reevaluation of the findings of this report. Additionally, any significant future changes in motor vehicle technology, noise regulations or other factors beyond WJVA's control may result in long-term noise results different from those described by this analysis.

Respectfully submitted,

Walter J. Van Groningen
President

WJV:wjv

## FIGURE 1: ALISAL MARKETPLACE

Source: City of Salinas, County of Monterey Open Data; Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 0.05 0.1 0.2 0.3 Miles

PRECISION CIVIL ENGINEERING, INC

CITY OF SALINAS - ALISAL MARKETPLACE GENERAL PLAN AMENDMENT AND REZONE
INITIAL STUDY

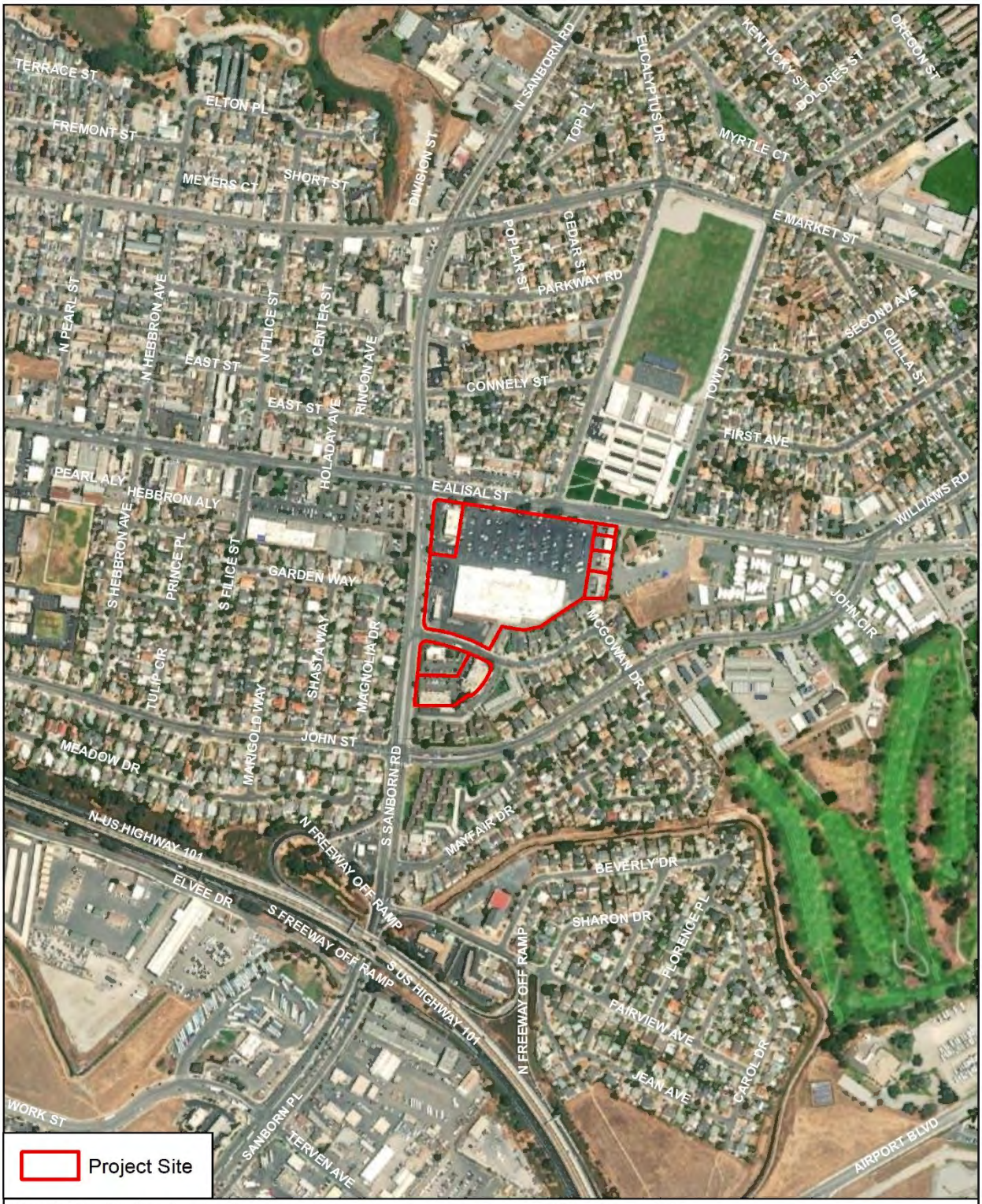
Created 4/11/2022

## FIGURE 2: EDGE OF DOWNTOWN

CITY OF SALINAS - EDGE OF DOWNTOWN/FRONT AND JOHN STREETS GENERAL PLAN AMENDMENT AND REZONE INITIAL STUDY

Created 11/23/2022

## FIGURE 3: FOODS CO SHOPPING CENTER




Source: City of Salinas, County of Monterey Open Data; Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 0.05 0.1 0.2 0.3 Miles

PRECISION CIVIL ENGINEERING, INC

CITY OF SALINAS - LARGE SHOPPING CENTER/FOODS CO GENERAL PLAN AMENDMENT AND REZONE INITIAL STUDY

Created 7/18/2022

## FIGURE 4: LAUREL WEST SHOPPING CENTER

Source: City of Salinas, County of Monterey Open Data; Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 0.05 0.1 0.2 0.3 Miles

PRECISION CIVIL ENGINEERING, INC

CITY OF SALINAS - LARGE SHOPPING CENTER/LAUREL WEST SHOPPING CENTER
GENERAL PLAN AMENDMENT AND REZONE
INITIAL STUDY

Created 7/18/2022

## FIGURE 5: SEARS/NORTHRIDGE MALL

CITY OF SALINAS - LARGE SHOPPING CENTER/SEARS (NORTHRIDGE MALL) GENERAL PLAN AMENDMENT AND REZONE INITIAL STUDY

Created 9/12/2022

## FIGURE 6: ALISAL MARKETPLACE AMBIENT NOISE MEASUREMENT SITES

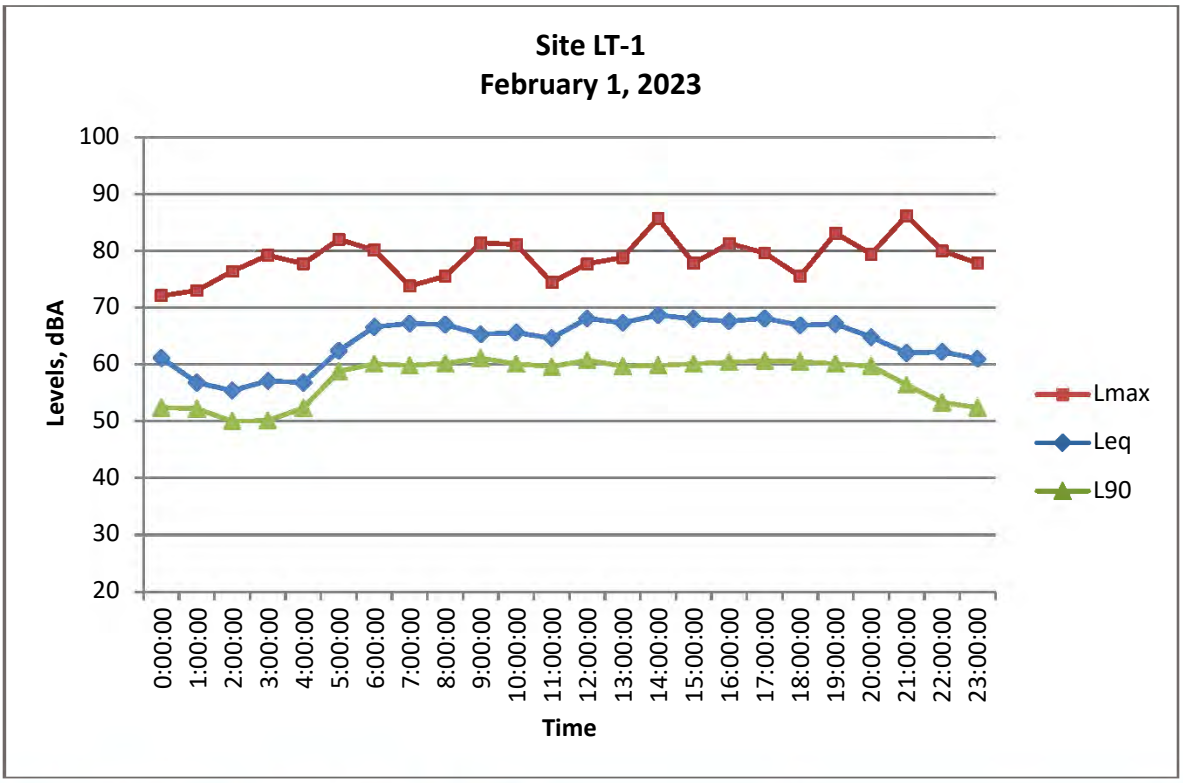
## FIGURE 7: EDGE OF DOWNTOWN AMBIENT NOISE MEASUREMENT SITES

## FIGURE 8: FOODS CO SHOPPING CENTER AMBIENT NOISE MEASUREMENT SITES

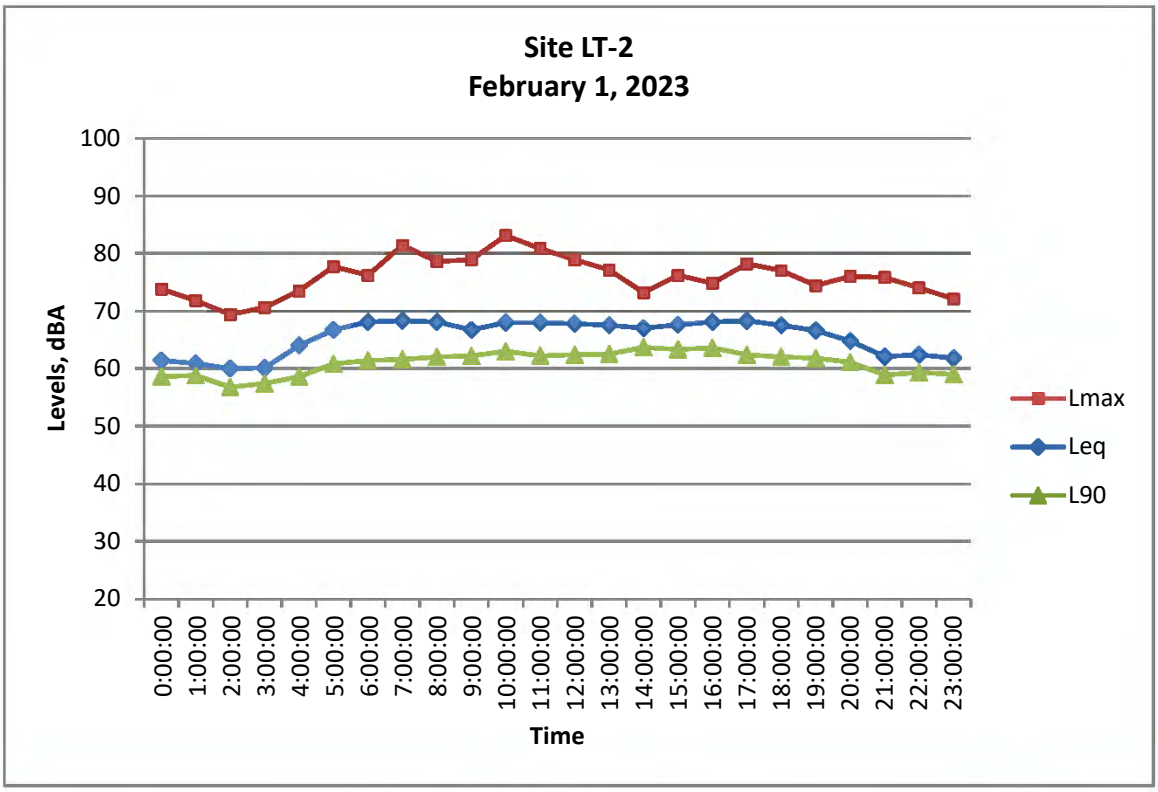
## FIGURE 9: LAUREL WEST SHOPPING CENTER AMBIENT NOISE MEASUREMENT SITES

**FIGURE 10: SEARS/NORTHRIDGE MALL AMBIENT NOISE MEASUREMENT SITES**

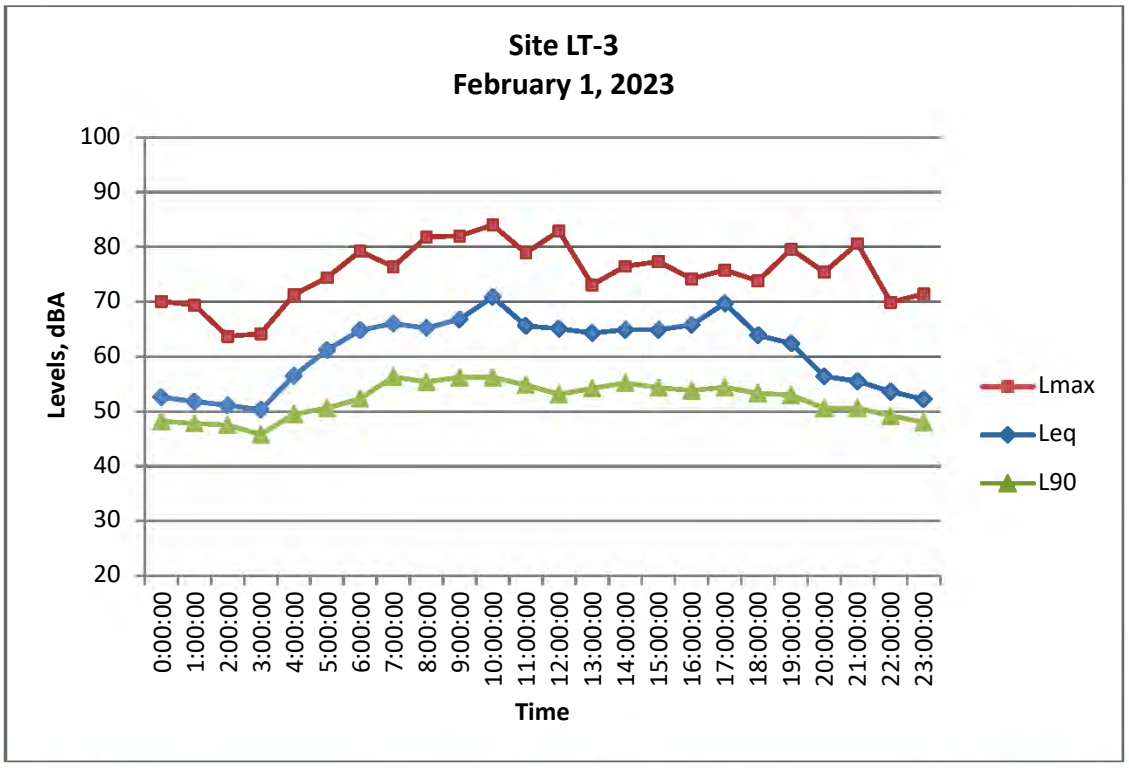
## FIGURE 11: LT-1



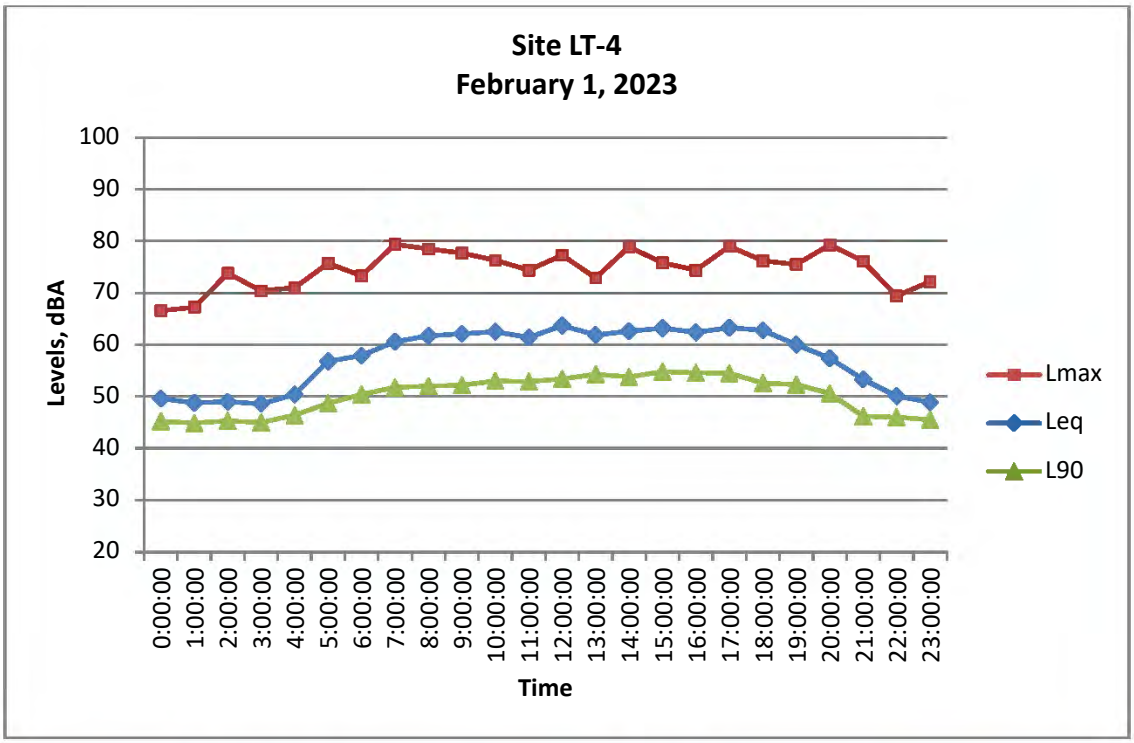
## FIGURE 12: LT-2



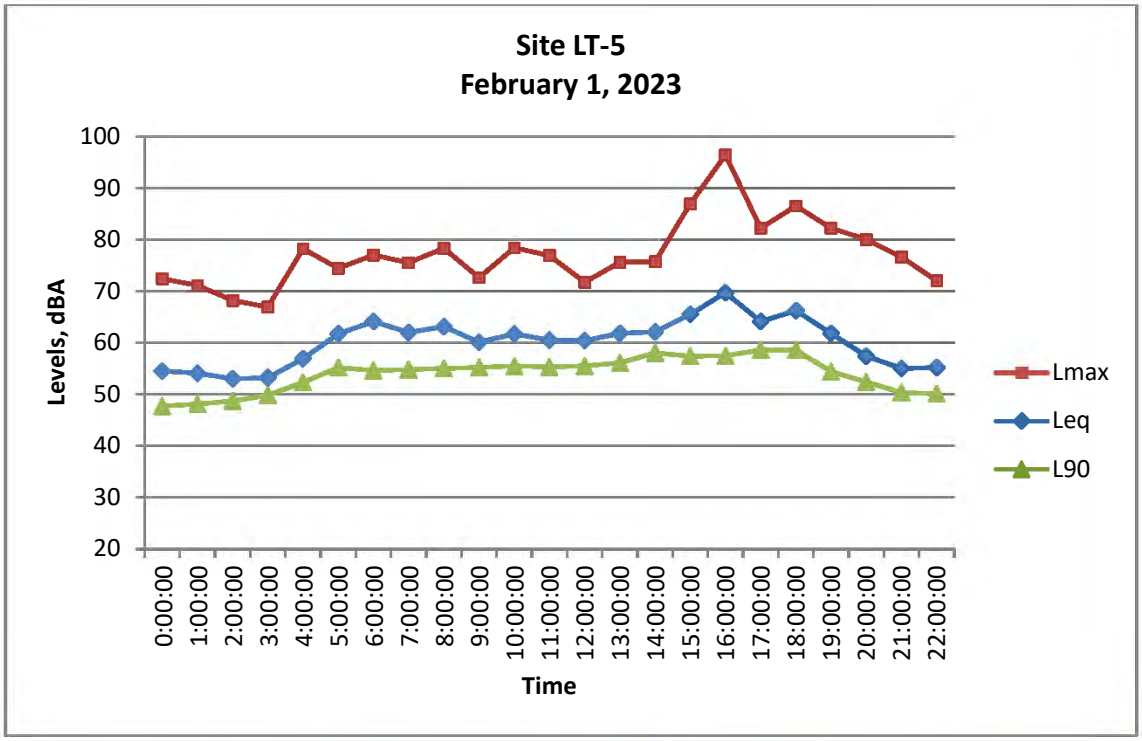
## FIGURE 13: LT-3



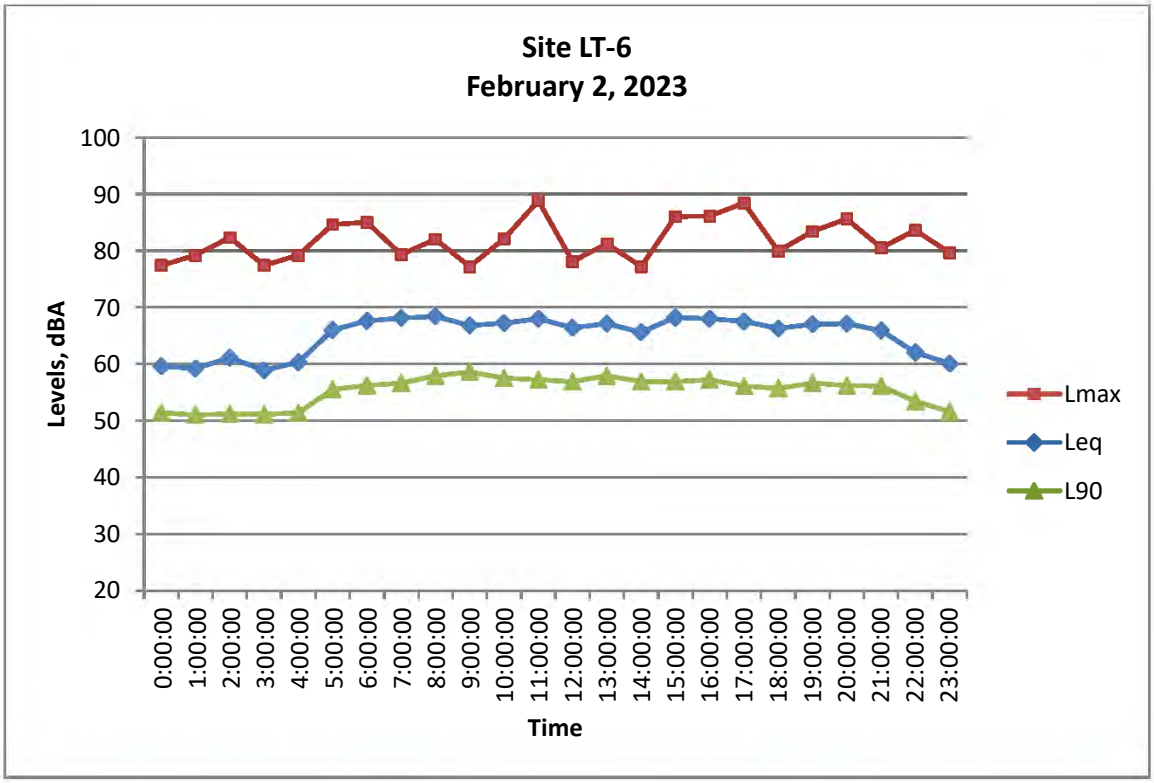
## FIGURE 14: LT-4



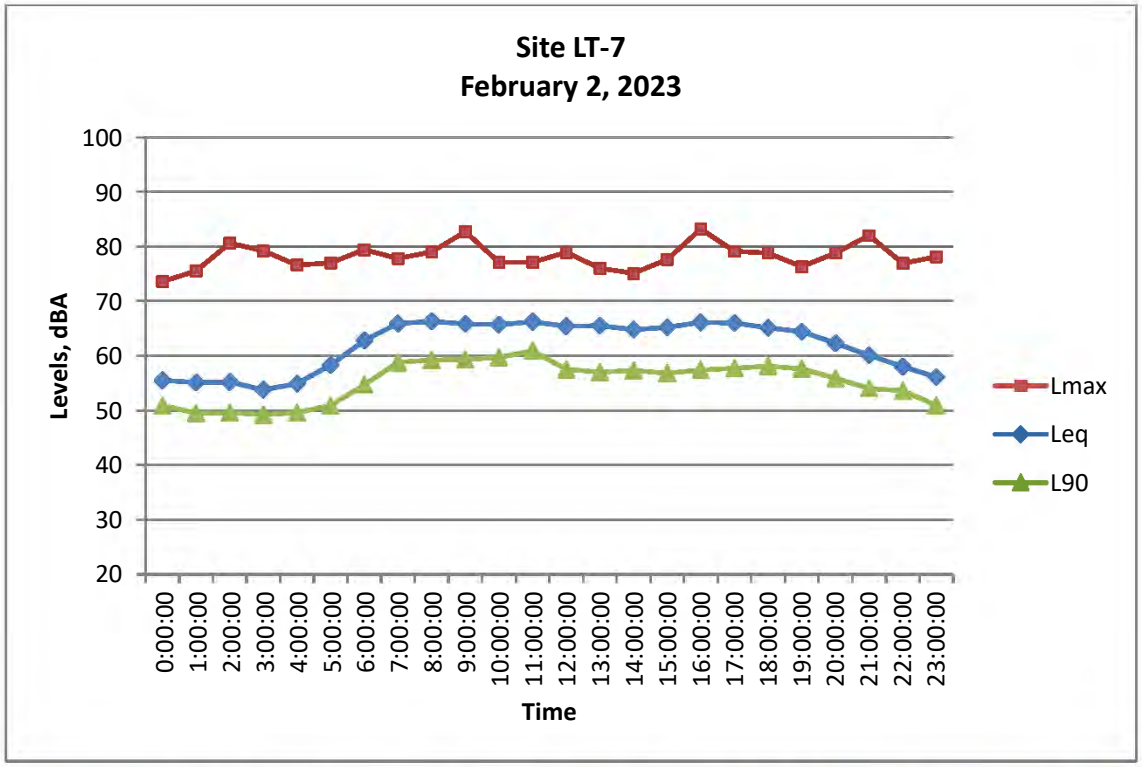
## FIGURE 15: LT-5



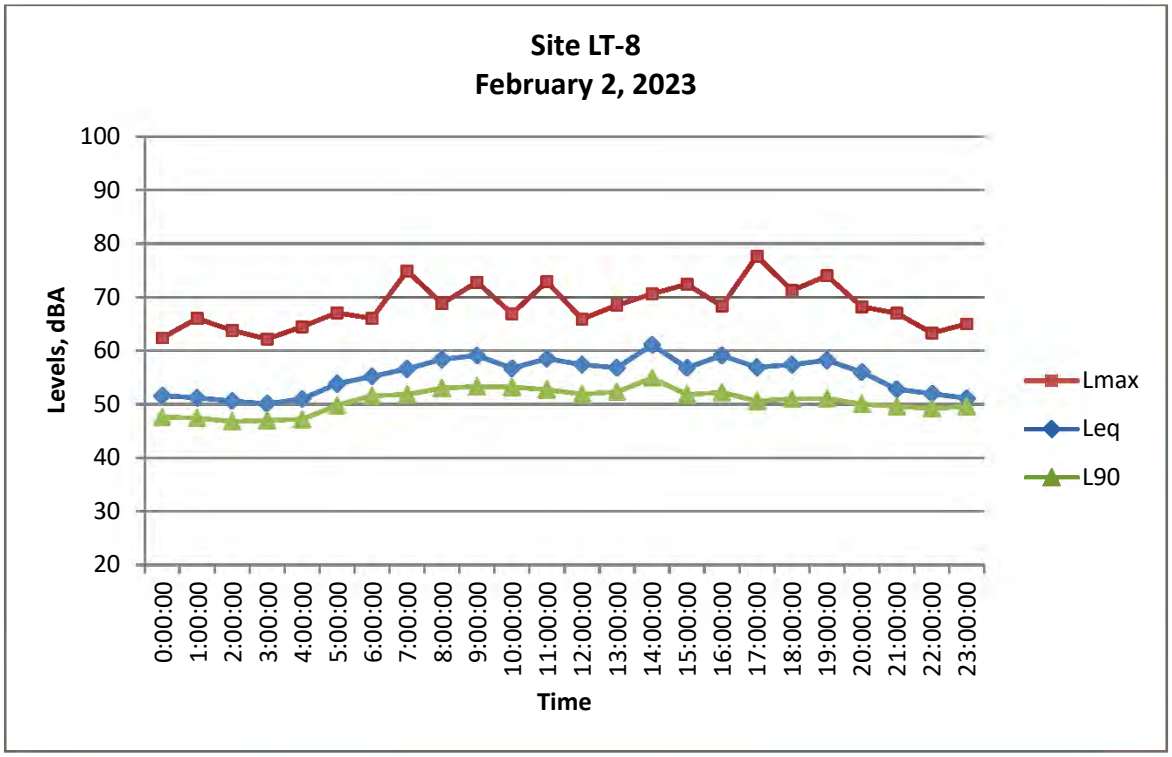
## FIGURE 16: LT-6



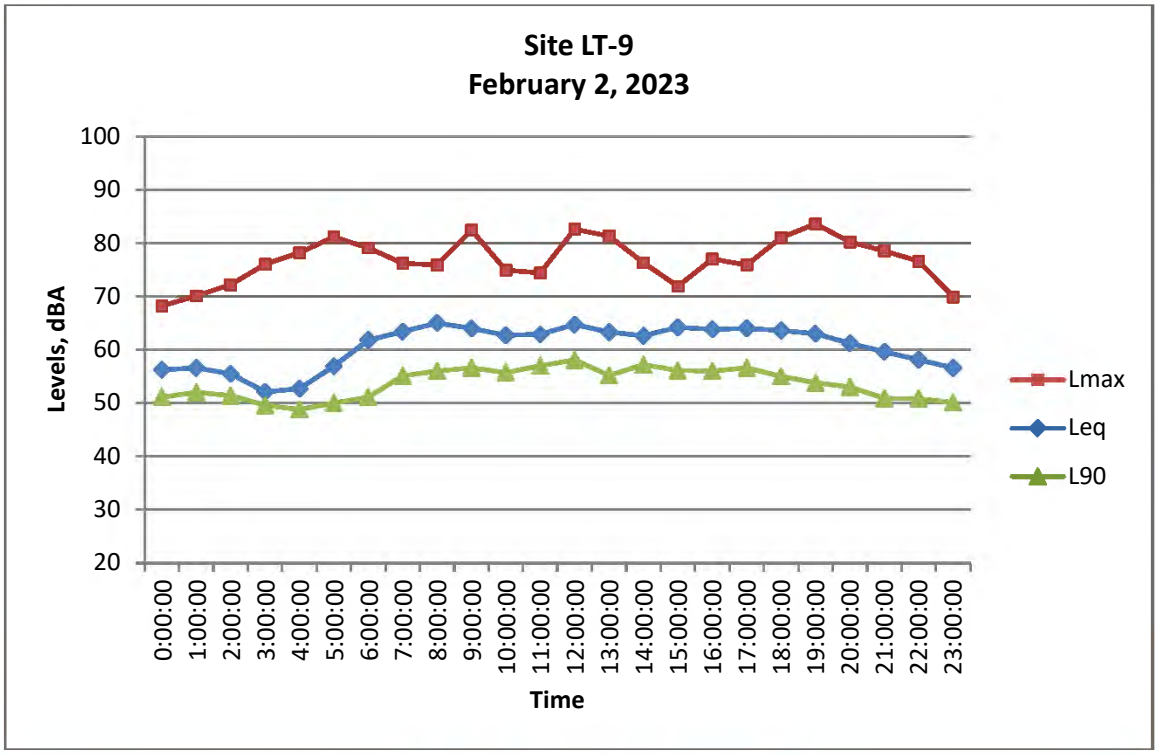
## FIGURE 17: LT-7



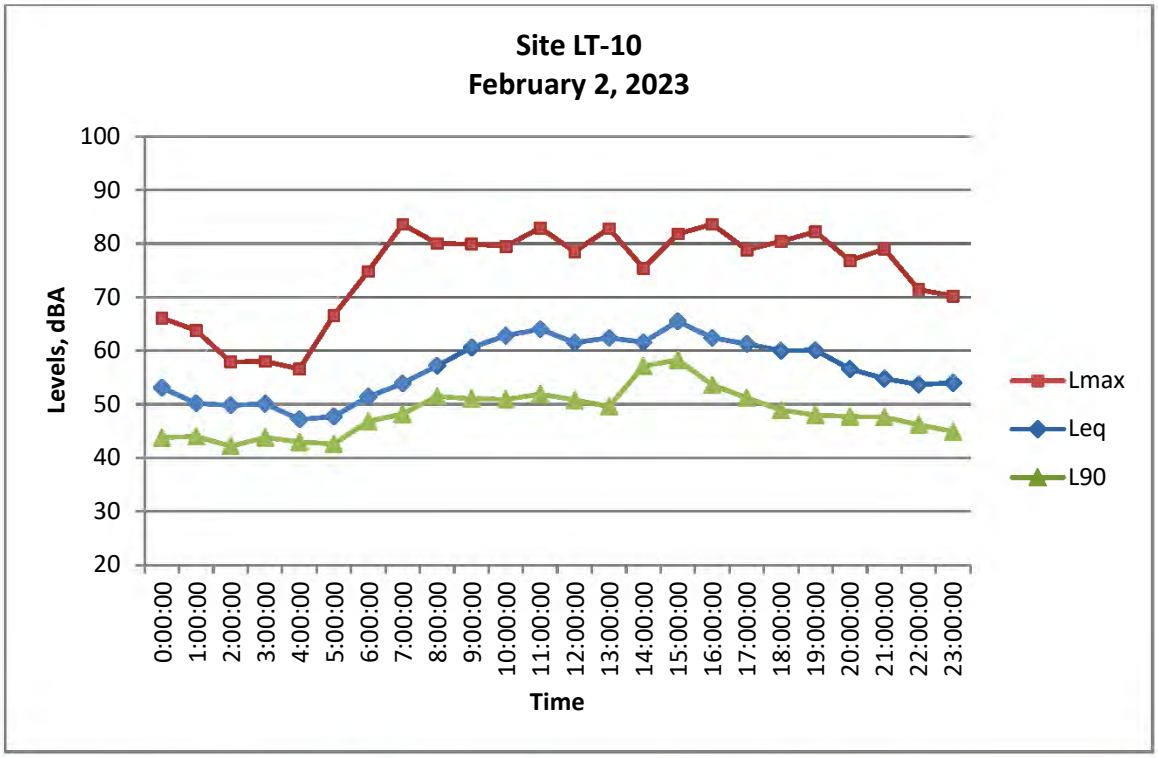
## FIGURE 18: LT-8



## FIGURE 19: LT-9



## FIGURE 20: LT-10



# APPENDIX A

## ACOUSTICAL TERMINOLOGY

**AMBIENT NOISE LEVEL:** The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

**CNEL:** Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

**DECIBEL, dB:** A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

**DNL/$L_{dn}$:** Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

**$L_{eq}$:** Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. $L_{eq}$ is typically computed over 1, 8 and 24-hour sample periods.

**NOTE:** The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while $L_{eq}$ represents the average noise exposure for a shorter time period, typically one hour.

**$L_{max}$:** The maximum noise level recorded during a noise event.

**$L_n$:** The sound level exceeded "n" percent of the time during a sample interval ($L_{90}$, $L_{50}$, $L_{10}$, etc.). For example, $L_{10}$ equals the level exceeded 10 percent of the time.

## A-2

## ACOUSTICAL TERMINOLOGY

**NOISE EXPOSURE CONTOURS:** Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

**NOISE LEVEL REDUCTION (NLR)**: The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of "noise level reduction" combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

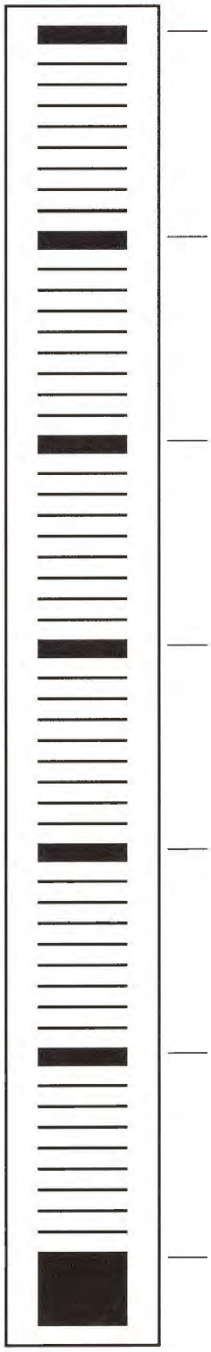
**SEL or SENEL:** Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

**SOUND LEVEL:** The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

**SOUND TRANSMISSION CLASS (STC):** The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

# APPENDIX B
## EXAMPLES OF SOUND LEVELS

| NOISE SOURCE | SOUND LEVEL | SUBJECTIVE DESCRIPTION |
|---|---|---|
| AMPLIFIED ROCK 'N ROLL | 120 dB | |
| JET TAKEOFF @ 200 FT | | DEAFENING |
| | 100 dB | |
| BUSY URBAN STREET | | VERY LOUD |
| | 80 dB | |
| FREEWAY TRAFFIC @ 50 FT | | LOUD |
| CONVERSATION @ 6 FT | 60 dB | |
| TYPICAL OFFICE INTERIOR | | MODERATE |
| SOFT RADIO MUSIC | 40 dB | |
| RESIDENTIAL INTERIOR | | FAINT |
| WHISPER @ 6 FT | 20 dB | |
| HUMAN BREATHING | | VERY FAINT |
| | 0 dB | |



## 7.6 Appendix F: Trip Generation Memo

Prepared by Precision Civil Engineering, Inc., on March 3, 2023.

1234 O Street
Fresno, CA 93721
(559) 449-4500

TO: City of Salinas

FROM: Bonique Emerson, AICP, Precision Civil Engineering
Shin Tu, AICP Candidate, Precision Civil Engineering

RE: Trip Generation Analysis for Alisal Mixed Use Rezone

DATE: March 3, 2023

The following memo summarizes the trip generation for existing operations on site and the proposed Project. The Average Daily Vehicle Trips (ADT) for this memo were calculated using data published by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition and 11th Edition.

## Existing Trip Generation

**Table 1** provides the land uses and size of all existing structures on the Project site, as well as the trip generation of each use. 13 different ITE land use codes were used to describe the site's existing restaurants, pharmacy, commercial services, grocery store, convenience store, gas station, car wash, etc. The existing operations of the Project site is estimated to generate 8,262 ADT.

**Table 1 Existing Trip Generation**

| Unit of Measurement | ITE Code - Description | Average Weekday Rate | | Trip Generation (ADT) |
|---|---|---|---|---|
| 8,307 sf. | 816 - Hardware/Paint Store | 8.07 | per 1,000 sf. | 67 |
| 5,155 sf. | 930 - Fast Casual Restaurant | 97.14 | per 1,000 sf. | 501 |
| 2,658 sf. | 932 - High Turnover (Sitdown) Restaurant | 107.2 | per 1,000 sf. | 285 |
| 28,539 sf. | 881 - Pharmacy/Drugstore with Drive-Through Window | 108.4 | per 1,000 sf. | 3,094 |
| 24,821 sf. | 890 - Furniture Store | 6.3 | per 1,000 sf. | 156 |
| 21,322 sf. | 942 - Automobile Care Center | 2.25 | per 1,000 sf. | 48 |
| 10,356 sf. | 822 - Strip Retail Plaza (<40k) | 54.45 | per 1,000 sf. | 564 |
| 8,686 sf. | 843 - Automobile Parts Sales | 54.57 | per 1,000 sf. | 474 |

| | | | | |
|---|---|---|---|---|
| 9,720 sf. | 560 - Church | 7.6 | per 1,000 sf. | 74 |
| 15,767 sf. | 130 - Industrial Park | 3.37 | per 1,000 sf. | 53 |
| 10,205 sf. | 879 - Arts and Crafts Store | 6.85 | per 1,000 sf. | 70 |
| 8 pumps | 945 - Convenience Store/Gas Station | 265.12 | per station | 2,121 |
| 7 wash stalls | 947 - Self-Service Car Wash | 108 | per stall | 756 |
| | | | **TOTAL** | **8,262** |

## Trip Generation of Proposed Project

**Table 2** provides the Project trip generation pursuant to the proposed project description. The ITE land use that was used for this analysis is the Mid Rise with Ground Floor Commercial land use (ITE Code 231, 10th Edition). A Mid Rise with Ground Floor Commercial is a mixed-use multifamily housing building with between four and 10 floors of residential living space and commercial space open to the public on the ground level. The proposed Project is anticipated to generate 1,771 ADT.

**Table 2 Trip Generation of Proposed Project**

| ITE Land Use | Residential (DU) | Trip Generation (ADT) | Trip Generation (ADT) |
|---|---|---|---|
| 231- Mid Rise with Ground Floor Commercial | 515 | 3.44 | 1,771 |

## Conclusion

Full buildout under the implementation of the proposed Project will generate 6,491 less ADT than existing operations on the Project site.