

ADDENDUM TO THE CANNERY PARK EIR

SCH # 2003042022

OCTOBER 2023

Prepared for:

City of Stockton
345 N. El Dorado Street
Stockton, CA 95202
(209) 937-8266

Prepared by:

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D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm

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1.0 INTRODUCTION

This Addendum was prepared in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This document has been prepared to serve as an Addendum to the previously certified EIR (State Clearinghouse [SCH] # 2003042022) for the Cannery Park Project (Original Project). The City of Stockton is the lead agency for the environmental review of the proposed Project refinements (Revised Project).

This Addendum addresses the proposed refinements that have occurred to the tentative map, General Plan Amendment, and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. CEQA Guidelines Section 15164 defines an Addendum as:

The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

....A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record.

Information and technical analyses from the Original Project are utilized throughout this Addendum. Relevant passages from this document are cited and available for review at:

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1.1 BACKGROUND AND PURPOSE OF THE EIR ADDENDUM

The Cannery Park Environmental Impact Report (EIR) was certified by the Stockton City Council in September 2004. The Original Project included certification of the EIR for Cannery Park, General Plan land use amendments, rezoning, approval of a tentative subdivision map, approval of a Development Agreement, and an amendment to the Eight Mile Road Specific Plan.

In determining whether an Addendum is the appropriate document to analyze the proposed refinements to the Cannery Park, CEQA Guidelines Section 15164 states:

- a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.
- d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

- e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

2.2 PROJECT DESCRIPTION

2.1 ORIGINAL PROJECT

Project Location

The Original Project site consists of the approximately 448.4-acre site, located at northeastern boundary of the City of Stockton in an area of very active urban development, within the City of Stockton at its northeastern limits. The Original Project site is immediately southwest of the intersection of SR 99 and Eight Mile Road. The Project site's regional location is shown on Figure 1.

Project Characteristics

The Original Project involved the annexation of 489.40 acres located in the unincorporated county adjacent to the City of Stockton at its northeastern limits to establish a mixed-use development consisting of industrial, commercial, and residential uses. In addition to the annexation, the Original Project required amendments to the City's General Plan, rezoning, approval of a tentative subdivision map, approval of a Development Agreement, and an amendment to the Eight Mile Road Specific Plan.

As part of the General Plan Amendments, the Original Project eliminated an existing Industrial designation located south of Bear Creek in favor of Low-Medium Density Residential, replaced an existing Administrative/Professional designation north of Bear Creek with Commercial, expanded the existing Commercial designation at Eight Mile Road/SR 99, and eliminated an existing High Density Residential designation in favor of a relocated, larger designation. The Original Project tentative subdivision map created a total of 1,287 parcels which would facilitate the future development of up to 2.5 million square feet of industrial and commercial uses and up to 1,287 residential units, consisting of up to 1,077 single family and 210 multi-family residential units.

2.2 REVISED PROJECT

Project Location

The Revised Project site is a portion of the Original Project site, and is comprised of 99.88 acres located in the northeast corner of the City of Stockton southeast of the intersection of East Eight Mile Road and Holman Road. The Project site is generally bound by East Eight Mile Road to the north, the 99 Frontage Road/State Route 99 to the east, Holman Road to the west, and single-family residential uses to the south. Bear Creek bisects the Revised Project site flowing southwest from the northeast corner of the Revised Project site continuing under Holman Road. PFC Jesse Mizener Street also bisects the southern portion of the Revised Project site. The City limits and Sphere of Influence run conterminous with Eight Mile Road and State Route 99, adjacent to the northern and eastern boundaries of the Revised Project site, and the City limits run conterminous with a portion of the southern boundary of the Revised Project site. Figures 1 and 2 show the Project site's regional

location and vicinity. Figure 3 provides the APN map, Figure 4 provides a topographic map, and Figure 5 provides an aerial photo of the Revised Project site.

Project Characteristics

The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.87-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. Over the past 14 years the market has not shown an interest in these land uses, while at the same time the demand for housing has reached a crisis status in the State of California. As a result, the Revised Project seeks to reverse some of the 2004 approvals by changing commercial land uses to residential land uses to better reflect the market demand, and to assist in the current housing crisis.

The General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses.

The Rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses.

The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

Figure 6 and Figure 7 show the existing General Plan land use designations and Zoning districts, and Figure 8 and Figure 9 show the proposed General Plan land use designations and Zoning districts. Additionally, Table 2 provides a summary of the proposed General Plan Amendments and Table 3 provides a summary of the rezone.

TABLE 2: REVISED PROJECT GENERAL PLAN AMENDMENTS SUMMARY

EXISTING LAND USES	EXISTING ACREAGE	PROPOSED ACREAGE
Commercial	88.61	19.76
Low Density Residential	0.00	67.78
High Density Residential	11.27	12.34
Total	99.88	99.88

TABLE 3: REVISED PROJECT REZONE SUMMARY

EXISTING ZONING	EXISTING ACREAGE	PROPOSED ACREAGE
Commercial	88.61	19.76
Low Density Residential	0.00	67.78
High Density Residential	11.27	12.34
Total	99.88	99.88

EIR ADDENDUM – CANNERY PARK EIR

The General Plan Amendment, rezone, and Tentative Map would allow for the subdivision of the 99.88-acre Revised Project site into 15 commercial development lots, 331 single family residential lots, and one 12.34-acre high density residential remainder lot for future development of between 162 and 296 units (assumes 13.2-24 units/acre gross). The 15 commercial development lots are proposed on 19.76 acres of land that has existing General Plan and Zoning for commercial uses. This area is part of the Tentative Map, but is not part of the General Plan Amendment or Rezone. The proposed tentative subdivision map is shown in Figure 10.

As shown on Figure 10, the 15 commercial development lots and 12.34-acre high density residential parcel is located north of Bear Creek while the 331 single family residential lots are located south of Bear Creek. As part of the Original Project, the Collector A bridge shown on the approved Tentative Map was proposed over Bear Creek to provide access from Eight Mile Road to the commercial area south of Bear Creek; however, as part of this proposed tentative subdivision map, the applicant is seeking to revise the circulation map to omit the bridge over Bear Creek and instead rely on existing streets and new internal roadways, as well as the new Holman Road bridge located just west of the Revised Project site.

Commercial Component

The proposed tentative subdivision map subdivides the 19.76-acre commercial portion of the Revised Project site into 15 development lots. The applicant is proposing to process site plan reviews prior to developing the 15 commercial lots. It is not known what exactly would be developed on the commercial lots, but examples of allowed commercial uses include: quick serve restaurants with drive thru, gas station and convenience store, medical office/clinic, office, hotel, and other commercial businesses. At some future time when the applicant knows the actual uses and building needs, they will prepare site plan review applications for consideration by the City. Table 4 provided the lot size for each of the 15 commercial lots.

TABLE 4: REVISED PROJECT COMMERCIAL DEVELOPMENT

<i>PARCEL</i>	<i>LOT SIZE</i>
1	113,021
2	43,328
3	62,789
4	65,759
5	73,162
6	40,901
7	47,048
8	70,067
9	39,281
10	35,726
11	35,060
12	30,293
13	25,649
14	27,570
15	27,692
TOTAL	737,346

As shown in Figure 10, northern site access would be via a proposed north-south street (Collector A) connecting to Eight Mile Road and western site access would be via a new east-west street (Tri-Valley Drive) connecting to Holman Road. Both new streets include a traffic circle at the end of the public street. Site circulation is provided by new internal driveways along the eastern and southern boundary of the site, as well as driveways connecting the parking lots.

Low Density Residential Component

The proposed tentative subdivision map subdivides the 67.78-acre portion of the Revised Project site proposed to be designated Low Density Residential into 331 single family residential lots. The proposal results in a density of approximately 4.88 units per gross acre, which is consistent with the General Plan's low-density residential density range.

It is anticipated that 267 of the single-family residential lots would be located on 55.88 acres generally bound by Bear Creek to the north, SR 99 Frontage Road to the east, PFC Jesse Mizener Street to the south, and the WID South Main Canal to the west. As shown on Figure 10, site access would be provided by two new north-south streets connecting to PFC Jesse Mizener Street and site circulation would be provided by new residential streets with the lots oriented in a grid-like pattern.

The remaining 64 single-family residential lots would be located on 11.90 acres generally bound by PFC Jesse Mizener Street to the north, SR 99 Frontage Road to the east, residential development to the west, and single family residential to the south. As shown on Figure 10, northern site access would be provided by a new north-south street connecting to PFC Jesse Mizener Street and western site access would be provided by an extension of Jennings Lane from Village C in the Original Project. Jennings Lane provides east-west internal circulation of this village.

High Density Residential Component

The proposed tentative subdivision map would create a 12.34-acre parcel to be developed for high density residential uses. The General Plan's density range for this use ranges from 13.2 to 24 units per gross acre. As such, the 12.34-acre site would be anticipated to result in between 162 and 296 residential units.¹ A specific site plan and development proposal has not been developed for this site at this time.

Community Facilities District 2019-1 (Cannery Park II)

The City Council adopted a resolution and ordinance forming a new community facilities district ("CFD") covering a portion of the Cannery Park development. The new CFD (CFD 2019-1) facilitates the completion of the Cannery Park development, the remaining portion of which was expected to

¹ It should be noted that, due to constraints associated with commercial noise in the vicinity of the High Density Residential component of the Revised Project, the number of high density residential units are likely to be at the lower end (or even below) this range of units. Nevertheless, for the sake of a conservative analysis, this Addendum analyzes the Revised Project with the higher end of the range (i.e., 296 units) for high density residential units.

include approximately 511 single-family homes, 210 multi-family units and 128 acres of commercial/light industrial property.

The Rate and Method of Apportionment includes a Special Tax A of \$1,600 per single-family home, \$7,500 per acre for multifamily, and from \$4,145 to \$4,500 for light industrial and commercial that will support the debt service on the bonds until the bonds are paid in full. At the payoff of bonds, a transition component will be added to the Special Tax B to pay for the City's ongoing maintenance of that infrastructure. Special Tax A is not intended to generate revenue for the City, rather it is intended to pay debt service on the bonds.

The Rate and Method of Apportionment also includes a Special Tax B of \$520 per single-family parcel and \$343.20 for multi-family parcel that addresses the City's costs to service the new homes and to maintain the City's infrastructure. Special Tax B will generate $(331 \text{ single family units} \times \$520) + (300 \text{ multi-family units} \times \$343.20)$ or $\$172,120 + \$102,960$ or $\$275,080$ the first year and then increasing by 4% per year thereafter to keep pace with inflation and the City's service delivery costs.

GENERAL PLAN AND ZONING DESIGNATIONS

Existing City of Stockton General Plan Land Use Designations

The Envision Stockton 2040 General Plan Land Use Map designates the Project site as Commercial and High Density Residential. Figure 6 depicts the Envision 2040 Stockton General Plan land use designations for the Project site and the surrounding areas. The General Plan contains the following standards to guide development for the land uses within the Project site:

Commercial (C): This designation allows for a wide variety of retail, service, and commercial recreational uses; business, medical, and professional offices; residential uses; public and quasi-public uses; and other similar and compatible uses. Community or regional commercial centers as well as freestanding commercial establishments are permitted. In addition, limited industrial uses are allowed, provided that they are indoors and compatible with surrounding uses. The maximum FAR ranges differ based on the geographic area. Outside the Greater Downtown, the maximum FAR is 0.30.

High Density Residential (HDR): This designation allows for multi-family residential units, apartments, dormitories, group homes, guest homes, public and quasi-public uses, and other similar and compatible uses. This designation also allows neighborhood serving retail, commercial service, and mixed uses in appropriate locations that provide residents with easy access to daily services and necessities within their neighborhood, provided that they are compatible with surrounding uses. The allowable density and intensity ranges differ based on the geographic area. Outside of the Greater Downtown, this designation allows 13.2 to 24 units per gross acre and 17.5 to 30 units per net acre. Additionally, the maximum FAR for neighborhood serving retail uses is 0.30.

Existing City of Stockton Zoning Designations

Figure 7 depicts the City's zoning districts for the Project site and the surrounding areas. The Project site is zoned CG (Commercial, General), and RH (Residential, High Density). Below is a general description of the zoning districts within the Project site.

CG (Commercial, General) District: This zone is applied to areas appropriate for a wide variety of general commercial uses, including retail, personal and business services; commercial recreational uses; and a mix of office, commercial, and/or residential uses. The CG zoning district is consistent with the commercial land use designation of the General Plan.

RH (Residential, High Density) District: This zone is applied to high-density residential neighborhoods. Allowable housing types may include multifamily and various types of group housing, as well as high density single-family residential development. The RH zoning district is consistent with the High Density Residential land use designation of the General Plan. Consistent with the General Plan, allowable densities for land Outside the Greater Downtown is 17.5 to 30 dwelling units per net acre and 13.2 to 24 dwelling units per gross acre. Additionally, the maximum floor area ratio (FAR) for neighborhood-serving retail uses is 0.30.

Surrounding General Plan Designations

Within San Joaquin County, lands to the north are designated Limited Agricultural (A/L) and Freeway Service Commercial (C/FS); lands to the east are designated Freeway Service Commercial (C/FS), Community Commercial (C/C), Rural Residential (R/R), and Very Low Density Residential (R/VL); and land to the south is designated Low Density Residential (R/L). Within the City, lands to the west are designated Industrial and Low Density Residential and lands to the south are designated Low Density Residential. The City's General Plan also designates land within unincorporated San Joaquin County to the north as Open Space/Agriculture, to the east as Residential Estate, and to the south as Low Density Residential. The City of Stockton and San Joaquin County General Plan land use designations for the Project site and surrounding areas are shown on Figure 6.

Entitlements Requested: The entitlements requested include: General Plan Amendment, Rezone, and Tentative Map Approval. The EIR Addendum is being prepared to reflect the lack of demand for the commercial uses, and the need to provide residential uses, within the 99.88-acre Revised Project site.

2.3 BASIS FOR DECISION TO PREPARE AN ADDENDUM

When an environmental impact report has been certified for a project, Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15164 set forth the criteria for determining whether a subsequent EIR, subsequent negative declaration, addendum, or no further documentation be prepared in support of further agency action on the project. Under these Guidelines, a subsequent EIR or negative declaration shall be prepared if any of the following criteria are met:

- (a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:*
 - (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
 - (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*

- (3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*
- (A) *The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
 - (B) *Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
 - (C) *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
 - (D) *Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*
- (b) *If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, and addendum, or no further documentation.*

In determining whether an Addendum is the appropriate document to analyze the proposed refinements to the project and its approval, CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration) states:

- a) *The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*
- b) *An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*
- c) *An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.*
- d) *The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*
- e) *A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.*

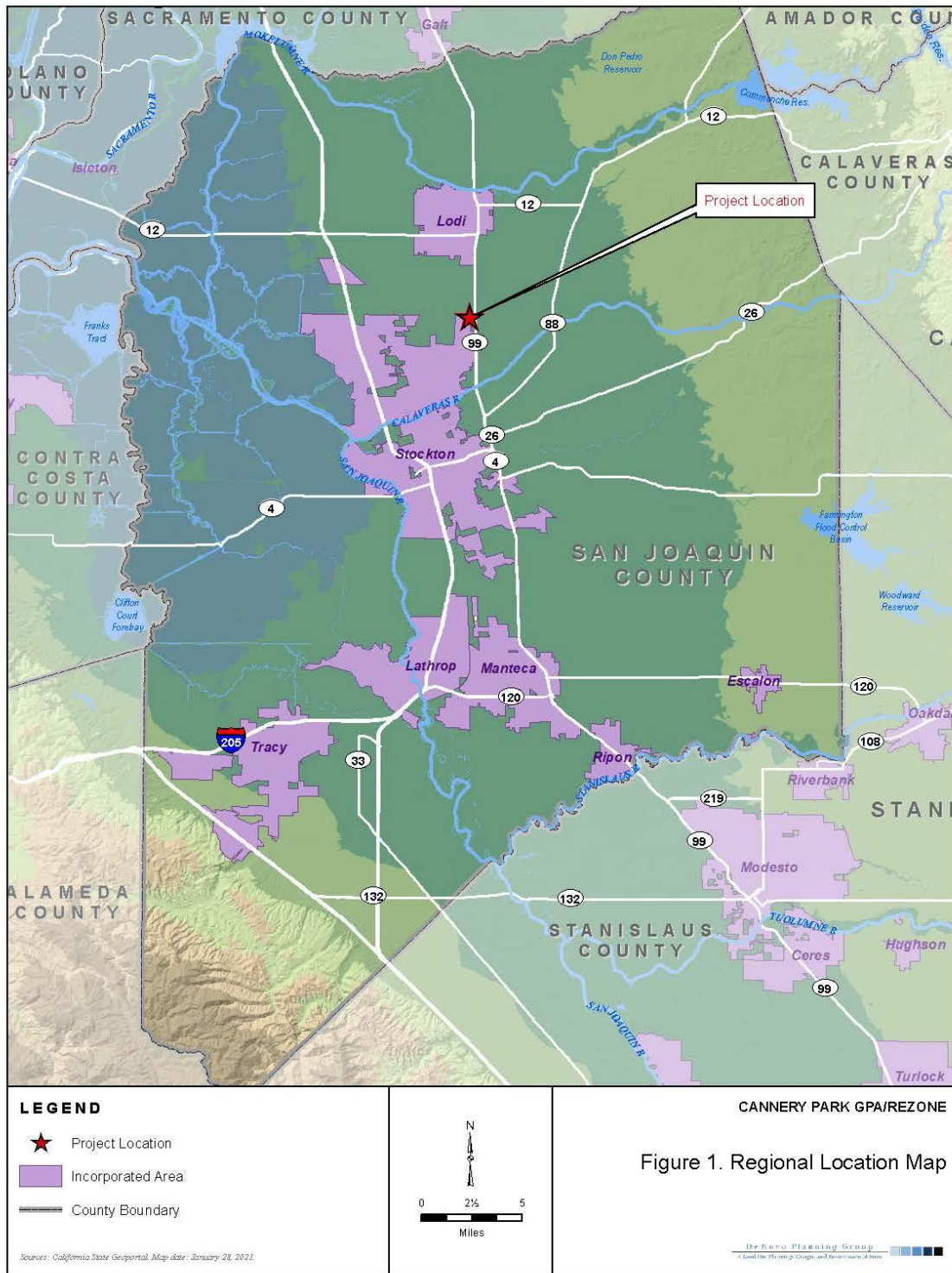
Based on a detailed review and analysis of the Revised Project by the City, it was determined that there was no evidence that there would be any new significant environmental effects, a substantial increase in the severity of previously identified environmental effects, or new information of substantial importance that would require major changes to the certified Cannery Park EIR pursuant to CEQA Guidelines Section 15162(a). Therefore, a Subsequent EIR is not warranted for this project.

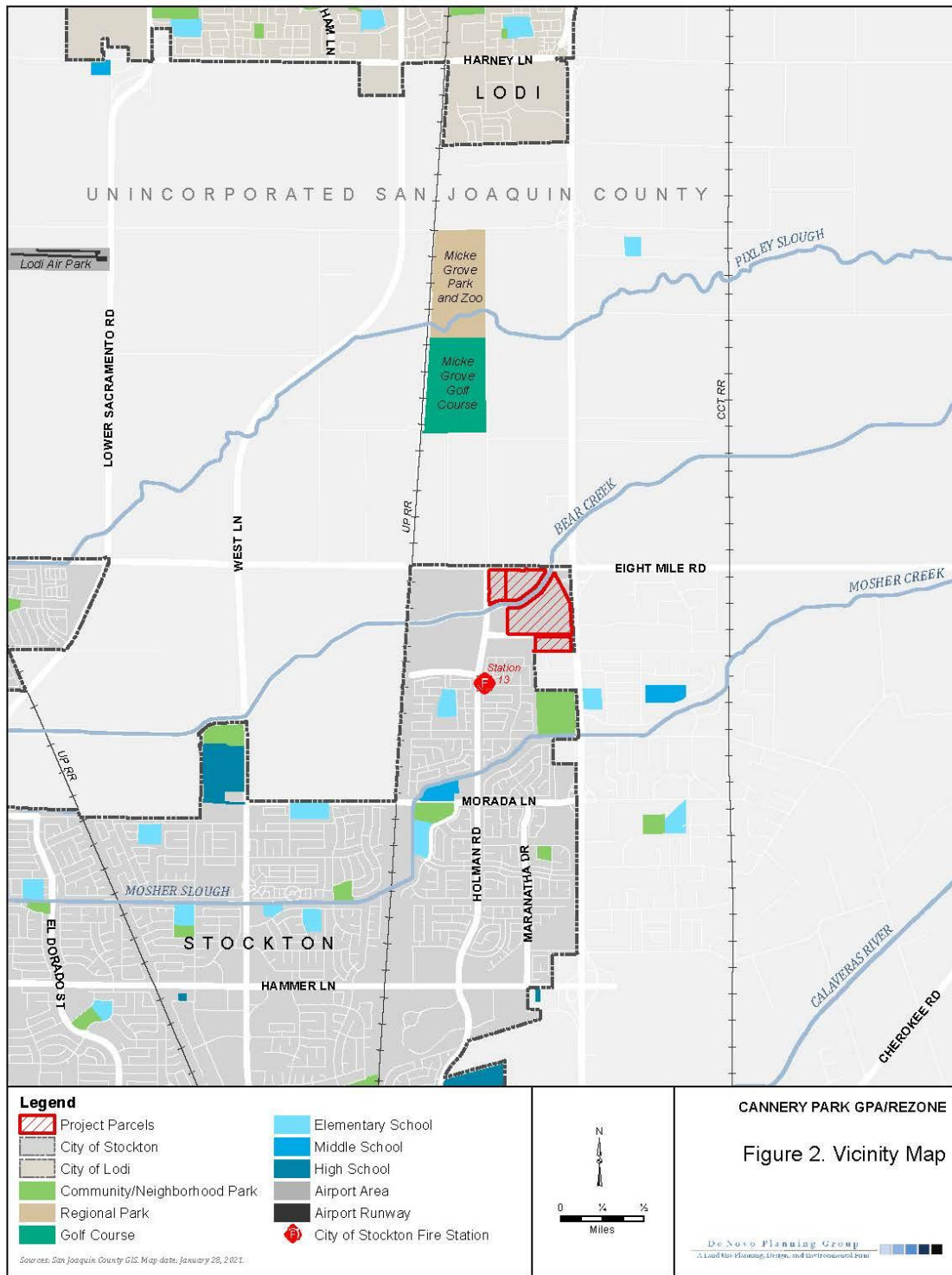
It should be noted that one of the rationales associated with Original EIR Statement of Overriding Considering was that the Original Project included an expectation that 1.9 million square feet of commercial development, including significant anchor shopping stores, would be developed to generate jobs and revenue for the community. This was a major consideration for the override of

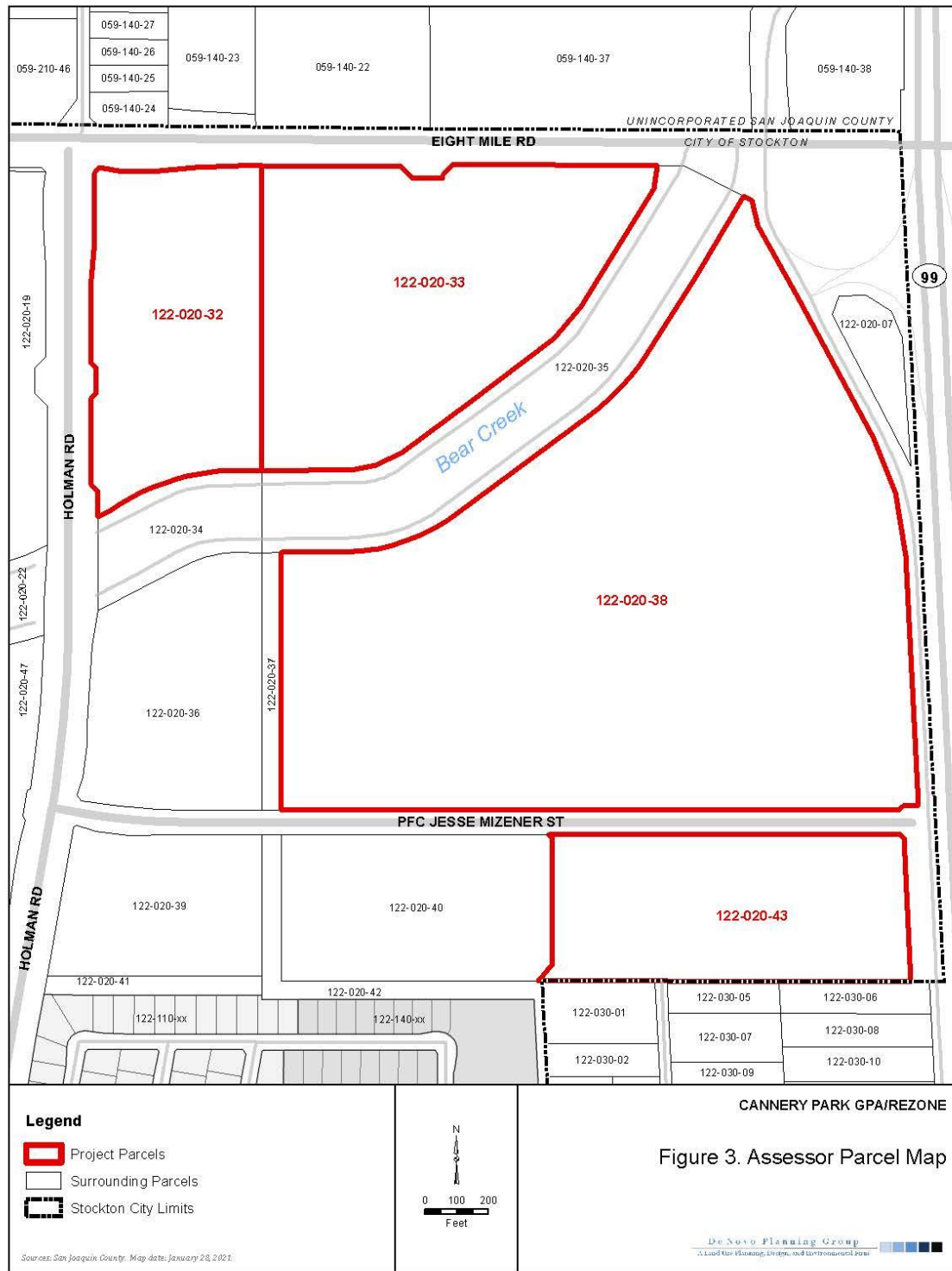
environmental impacts caused by the Original Project. The City, however, recognizes that over the past 14 years the market has not shown an interest in these land uses for the originally anticipated commercial uses, while at the same time the demand for housing for the community has become a major consideration. While the creation of jobs and revenue remains important, over the last few years the housing demand has reached crisis status in the State of California, with the legislation passing the “The Housing Crisis Act of 2019” (HCA). HCA establishes a statewide “housing emergency” until January 1, 2030. During the housing emergency, the Housing Crisis Act suspends certain restrictions on the development of new housing and expedites the permitting of housing. In response to this declaration by the State, the City seeks to develop the appropriate housing stock to meet demand for the community. As a result, the Revised Project presents the City with an opportunity to establish additional residential uses to better reflect the housing emergency status, while acknowledging the jobs and revenues that are generated its development in the immediate future. In doing so, the City recognizes that the construction and sale of new homes on the Project site will result in immediate new jobs and revenue, which is in alignment with the City’s original consideration for approving the Original EIR. Sales jobs for the new homes are anticipated to be in the range of \$6-8 million at buildout of the Project, with additional long-term revenue from the resale of homes in perpetuity. These jobs are anticipated to be largely from the local community. Construction jobs for the development are anticipated to be in the range of \$40-60 million in labor, with additional long-term labor revenue from the local contractors, renovators, maintenance workers, and landscapers in perpetuity. These jobs are also anticipated to be largely from the local community. There are also jobs that are created in the supply of materials to build the project (i.e. contractor supplies), as well as to long terms jobs to provide services to the new residents. Because the emergency status of housing (i.e., lack of housing stock), it is anticipated that the Revised Project will develop in the immediate future and that the sales, construction, and service jobs associated with its development and long-term operation will be imminent. For these reasons, the City’s prior considerations for overriding the environmental impacts due to the new jobs and revenue generating benefits would still hold true under the Revised Project.

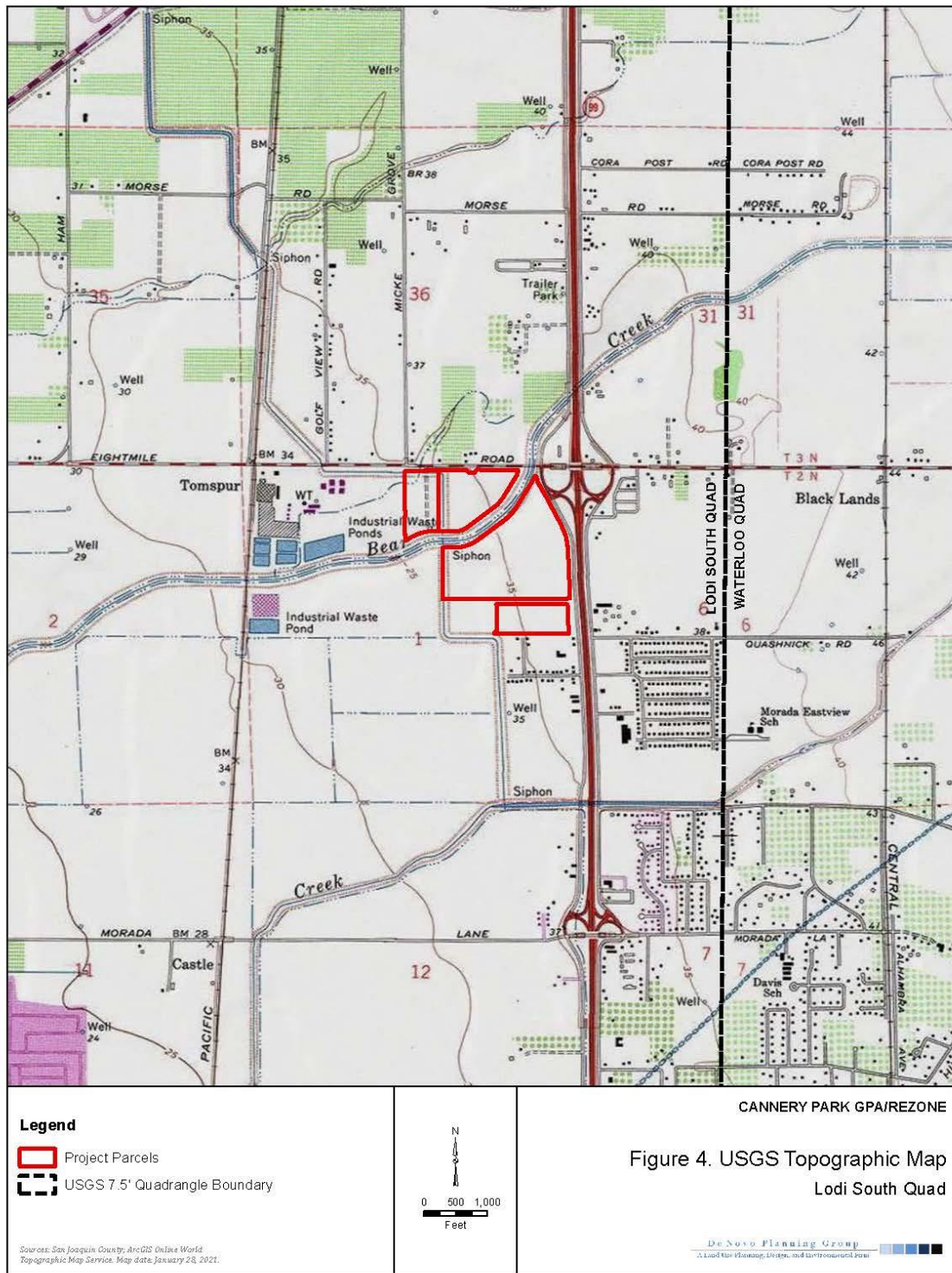
As part of this document, additional technical analysis was performed to determine if there were any new environmental impacts not known at the time of the original approval. No new significant impacts or an increase in the severity of environmental impacts have been identified as a result of the additional technical analysis. Instead, the Revised Project includes modifications to the land uses within the Revised Project site, which would replace commercial uses with residential uses, which do not have any additional significant detrimental environmental effects. The beneficial impacts of the Revised Project are related to reductions in air quality, greenhouse gas, and energy impacts, compared to the Original Project.

As demonstrated in the environmental analysis provided in Section 3.0 (Environmental Analysis), the proposed changes do not meet the criteria for preparing a subsequent EIR or negative declaration. An addendum is appropriate here because, as explained in Section 3.0, none of the conditions calling for preparation of a subsequent EIR or negative declaration have occurred.

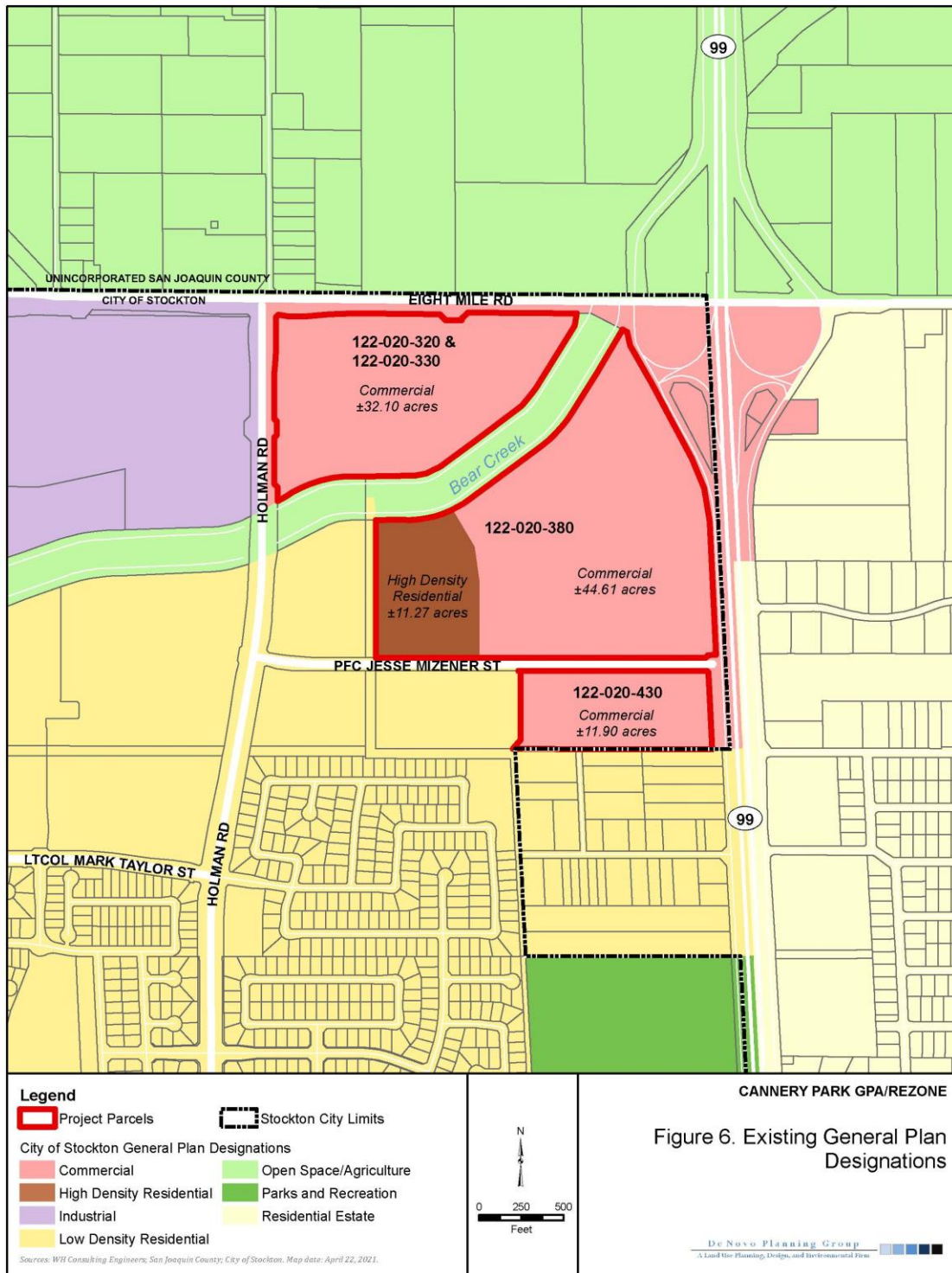


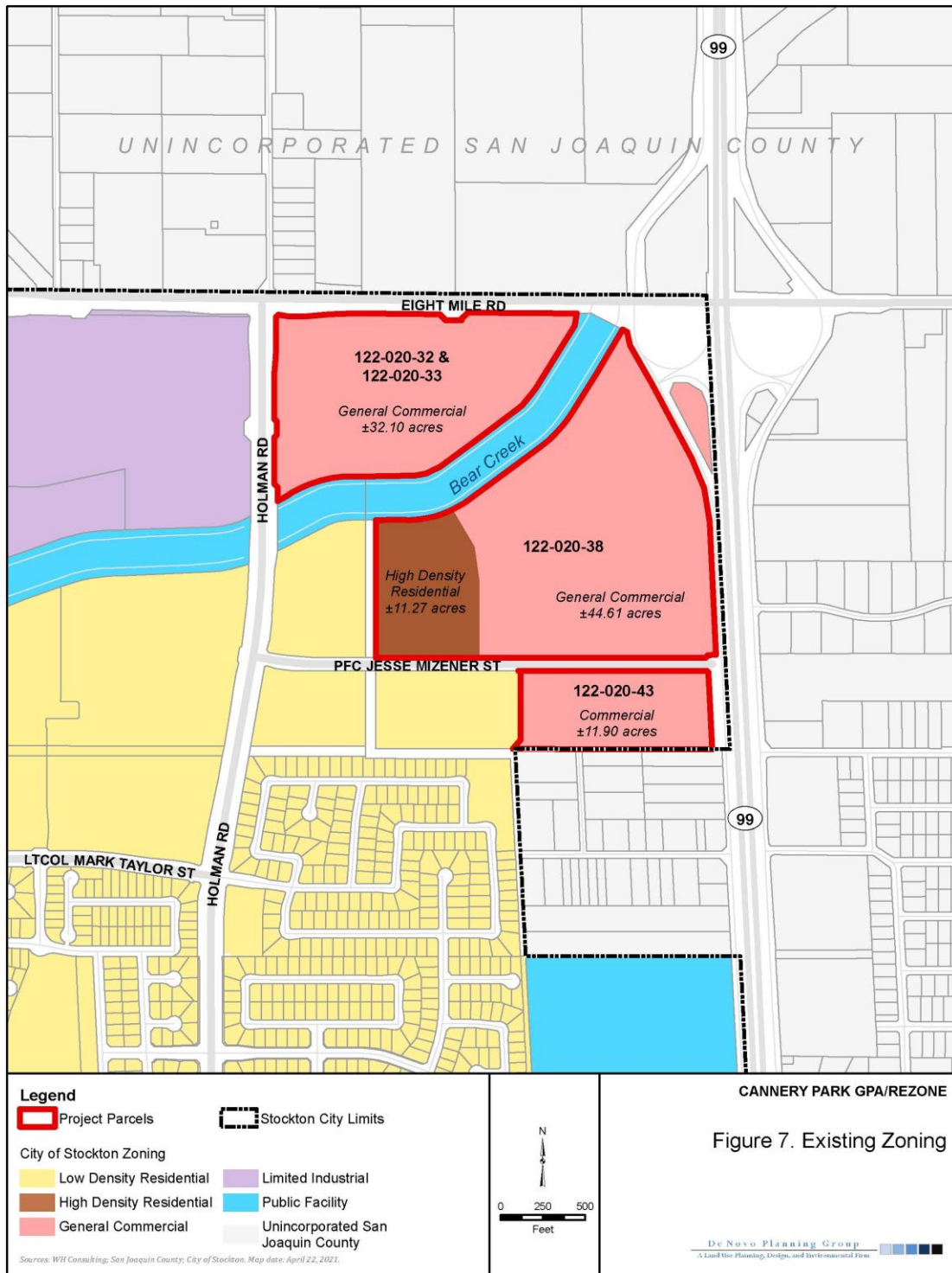


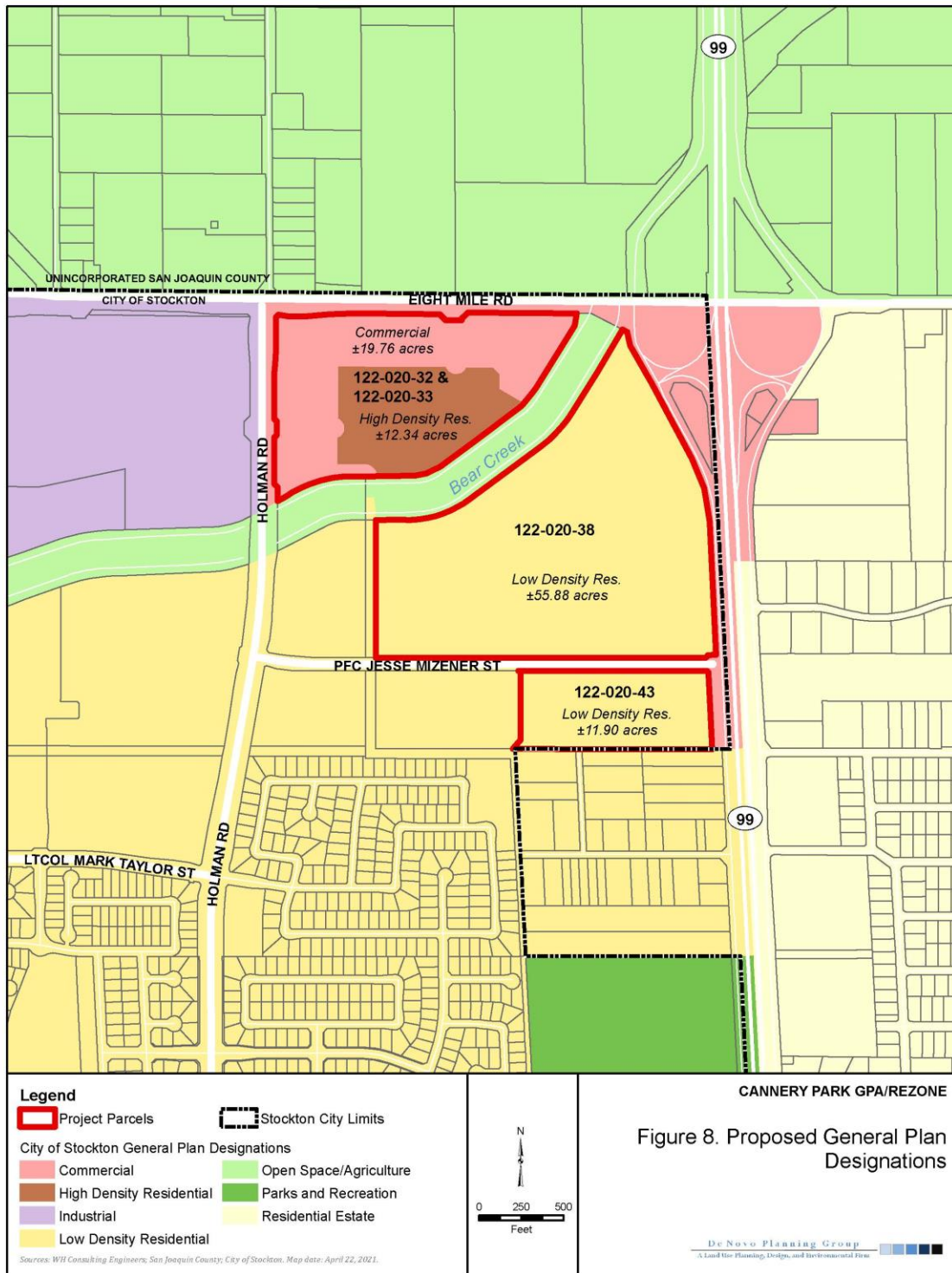


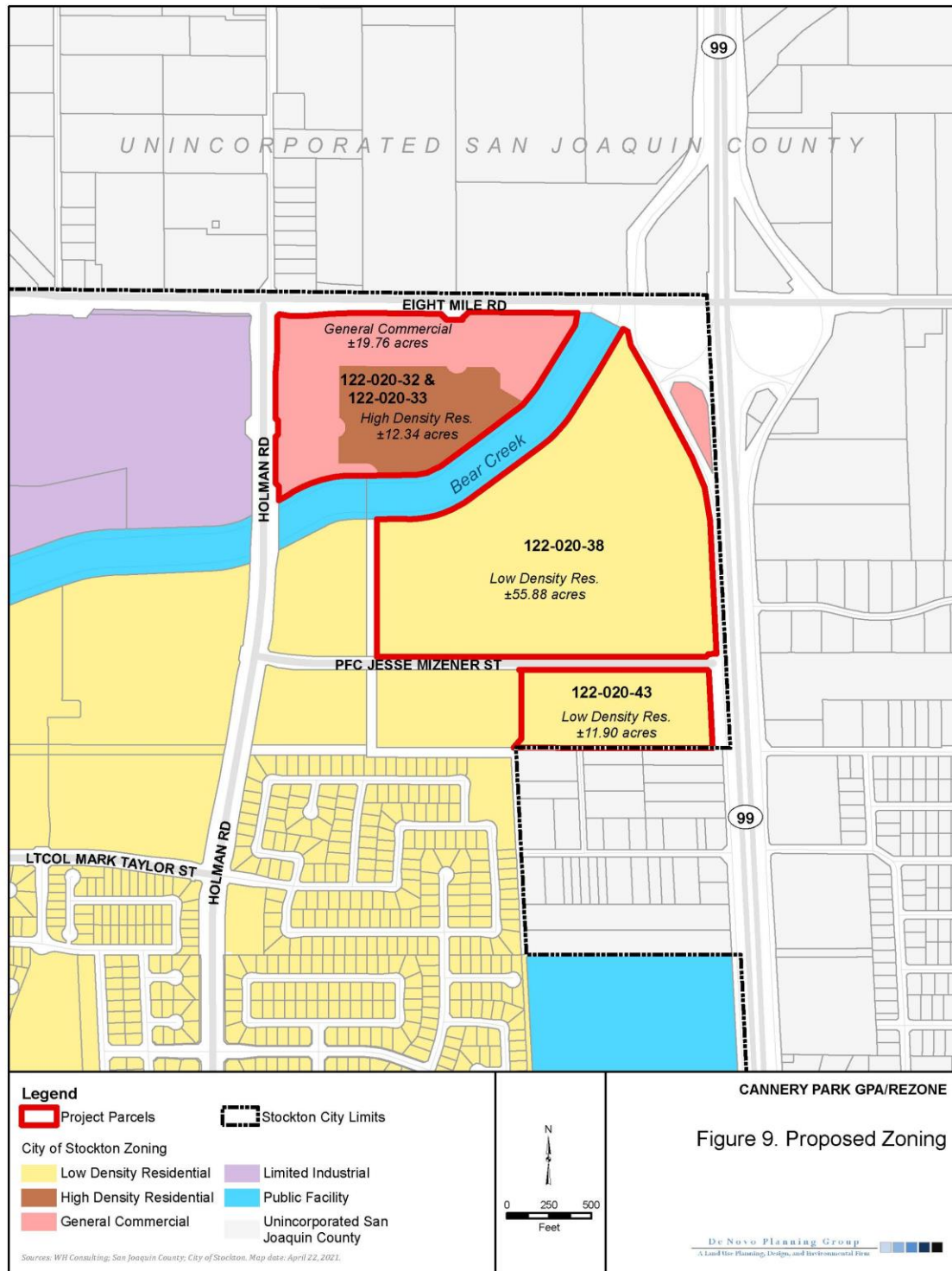


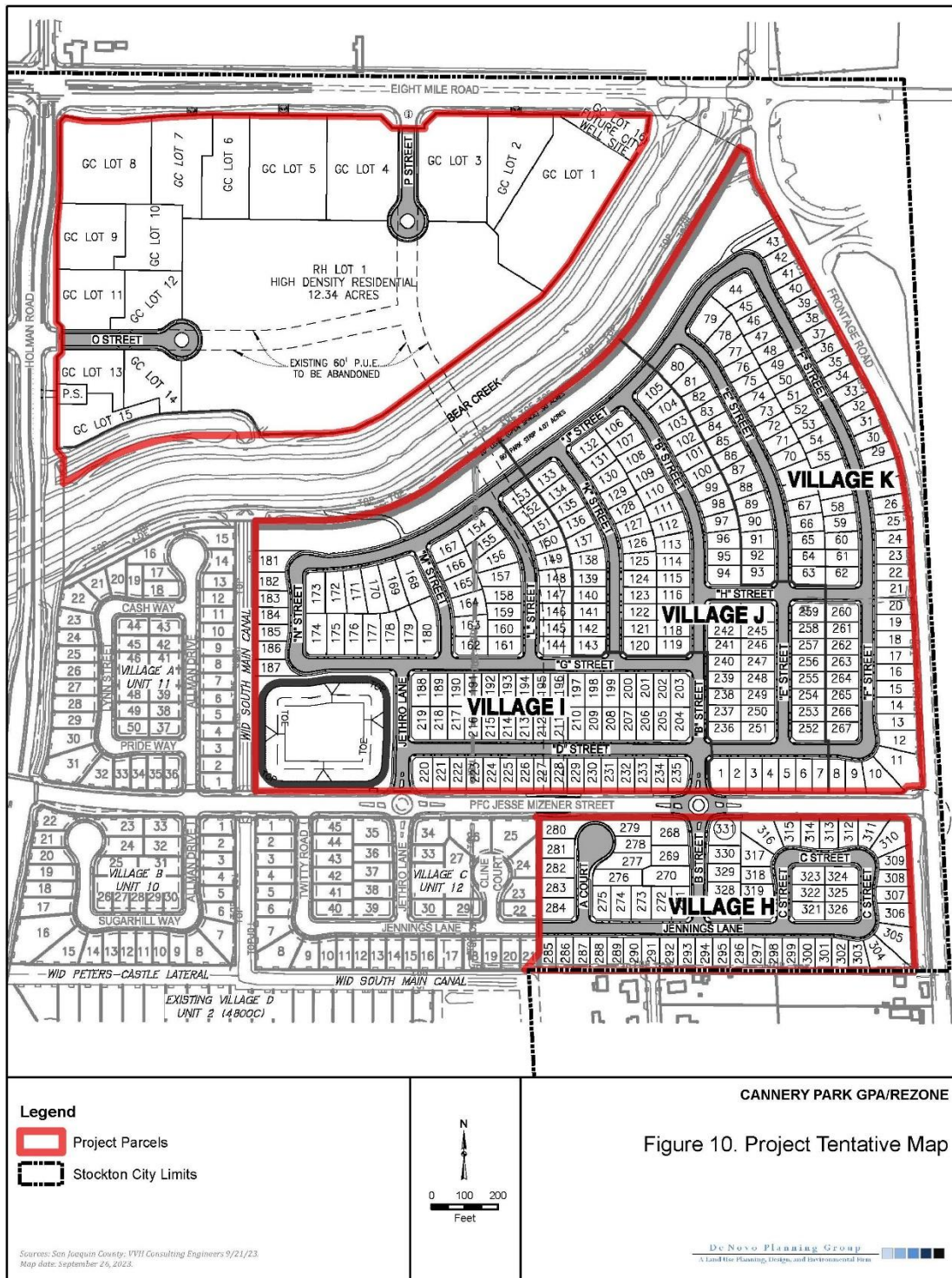




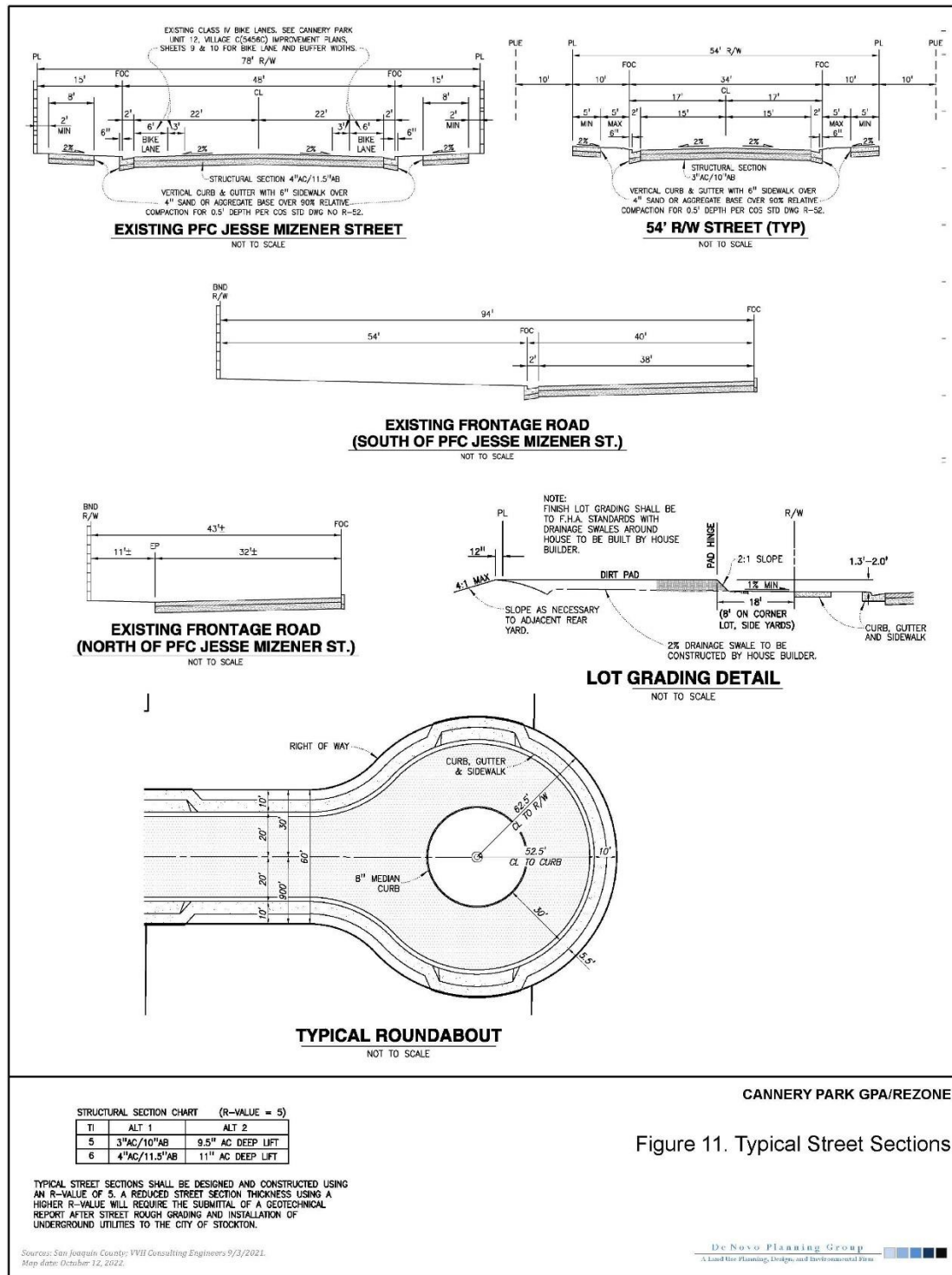


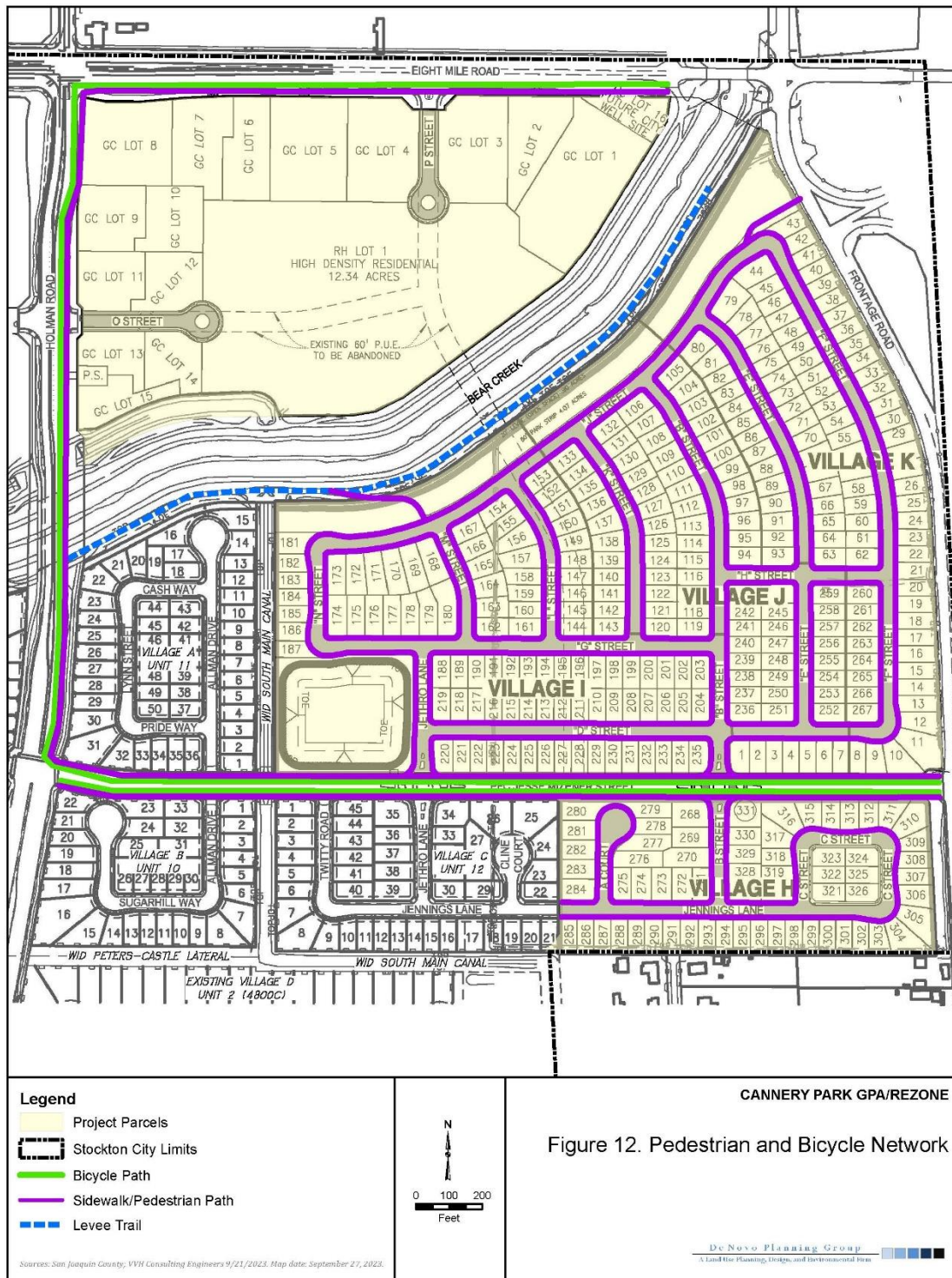






EIR ADDENDUM – CANNERY PARK EIR





3.0 ENVIRONMENTAL ANALYSIS

This section of the Addendum provides analysis and cites substantial evidence that support's the City's determination that the proposed refinements to the Cannery Park Project (Original Project) do not meet the criteria for preparing a subsequent or supplemental EIR under CEQA Guidelines Section 15162.

The proposed changes do not cause a new significant impact or substantially increase the severity of a previously identified significant impact, and there have been no other changes in the circumstances that meet this criterion (CEQA Guidelines Section 15162[a][2]). There have been no changes in the environmental conditions on the property not contemplated and analyzed in the EIR that would result in new or substantially more severe environmental impacts. There is no new information of substantial importance (which was not known or could not have been known at the time of the application, that identifies: a new significant impact (condition "A" under CEQA Guidelines Section 15162[a][3]); a substantial increase in the severity of a previously identified significant impact (condition "B" CEQA Guidelines Section 15162[a][3]); mitigation measures or alternatives previously found infeasible that would now be feasible and would substantially reduce one or more significant effects; or mitigation measures or alternatives which are considerably different from those analyzed in the EIR which would substantially reduce one or more significant effects on the environment (conditions "C" and "D" CEQA Guidelines Section 15162[a][3]). None of the "new information" conditions listed in the CEQA Guidelines Section 15162[a][3] are present here to trigger the need for a Subsequent or Supplemental EIR.

CEQA Guidelines Section 15164 states that "The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." An addendum is appropriate here because, as explained above, none of the conditions calling for preparation of a subsequent EIR have occurred.

The section below identifies the environmental topics addressed in the EIR, provides a summary of impacts associated with the Original Project, as described in the EIR, and includes a brief analysis of the potential impacts associated with the Revised Project when compared to the Original Project.

3.1 AESTHETICS, LIGHT, AND GLARE

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact AES-1: Scenic Resources	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AES-2: Scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AES-3: Visual Character and Quality	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AES-4: Light and glare	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect to aesthetics and visual resources. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The Cannery Park EIR required the implementation of several mitigation measures (listed below), which require compliance with the Stockton Citywide Design Guidelines, and which ensure that design specifications for the new industrial or commercial developments to require that all outdoor lighting be shielded to prevent glare onto, or excessive illumination of, adjoining residential areas. These mitigation measures would still be required and enforced. The changes associated with the Revised Project, which would reduce the number of commercial uses and increase the number of

residential uses, would not generate any new impacts. No new mitigation measures are required for the project revisions associated with the Revised Project.

Mitigation Measures adopted with the Cannery Park EIR

Aesthetic Effects of Commercial Development

Mitigation Measure 1: The owners, developers and/or successors-in-interest shall submit site plans, elevations and other materials for design review and approval in conjunction with permit applications for development, as required by the Stockton Citywide Design Guidelines.

Aesthetic Effects of Residential Development

Mitigation Measure 1: Design of rear and side facades of residential structures shall be subject to the requirements of the City's Citywide Design Guidelines, as applicable.

Light and Glare impacts

Mitigation Measure 1: Design specifications for new industrial or commercial development associated with the project shall require that all outdoor lighting be shielded to prevent glare onto or excessive illumination of, adjoining residential areas.

Environmental Impacts and Mitigation Measures

Responses AES-1, AES-3): The General Plan does not designate scenic vistas. However, the General Plan identifies open space, agricultural fields, and riparian areas, particularly along the San Joaquin River and the Calaveras River, as significant visual features. Given the relatively flat topography of the city, views within the core of the city are generally limited to the built environment. Views along the periphery can be more expansive with fewer developed features blocking views of surrounding open space, agricultural fields, and riparian areas.

Although the Revised Project site is not designated as a scenic vista by the General Plan, the site does contain some of the visual features discussed in the General Plan, such as agricultural fields and riparian area along Bear Creek. The above-referenced public views are primarily available to motorists traveling along the major transportation corridors, some of which travel at highway speed (such as along SR 99). In addition, these public views of agricultural fields and riparian areas are characteristic of San Joaquin County, and they exist throughout the region.

Implementation of the Revised Project would change the existing visual character of the site from a primarily agricultural site to an urbanized site. Impacts related to a change in visual character are largely subjective and very difficult to quantify. People have different reactions to the visual quality of a project or a project feature, and what is considered "attractive" to one viewer may be considered "unattractive" to other viewers. The agricultural lands on the Revised Project site provide visual relief from urban and suburban developments, and help to define the character of a region. The loss of agricultural lands can have an adverse cumulative impact on the overall visual character and quality of a region. However, the change in character of the Revised Project site from agricultural lands to urban uses was previously anticipated and approved for the Original Project.

Project implementation would introduce residential and commercial uses, as well as supporting infrastructure into an area that was planned and approved for primarily commercial uses. The proposed uses are unlikely to degrade the existing character of the Revised Project site in comparison

to the approved uses under the Original Project. All habitat along Bear Creek would remain unchanged.

In order to reduce visual impacts, development within the Project site is required to be consistent with the General Plan and the Stockton Zoning Ordinance which includes design standards in order to ensure quality and cohesive design of the Revised Project site and ensure the public views from the transportation corridors would be of high quality. These standards include specifications for exterior lighting, landscaping, and architectural design and compatibility. Implementation of the City's design standards would ensure quality design throughout the Revised Project site, and result in a project that would be internally cohesive while maintaining aesthetics similar to surrounding uses. With implementation of the mitigation measures provided in the Cannery Park EIR, implementation of the Revised Project would ensure a ***less than significant*** impact relative to this topic.

Response AES-2): The Revised Project site is not located within view of a state scenic highway. Only one highway section in San Joaquin County is listed as a Designated Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of Interstate 580 (I-580) from Interstate 5 to Interstate 205. This route traverses the edge of the Coast Range to the west and Central Valley to the east. The City of Stockton, including the Revised Project site, is not visible from this roadway segment, which is located approximately 27 miles southwest of the site. Therefore, there is ***no impact*** related to a state scenic highway.

Response AES-4): Implementation of the Revised Project would introduce new sources of light and glare that are common in new development. New sources of glare would occur primarily from the windshields of vehicles travelling to and from the Revised Project site. There is also the potential for reflective building materials and windows to result in increases in daytime glare. Lighting in the residential portion of the Project site would be consistent with other residential areas throughout Stockton.

The City controls the potential for lighting impacts through existing regulations in the Municipal Code. Section 16.32.070, Light and Glare, of Chapter 16.32, General Performance Standards, of the City Municipal Code contains standards and provisions related to exterior lighting for both commercial and residential development. The primary purpose of this section is to regulate exterior lighting to balance the safety and security needs for lighting with the City's desire to prevent emissions of light or glare beyond the property line, or upward into the sky.

A lighting plan will be prepared for future development of each component of the project. The lighting plan will be submitted to the City for review and approval during site plan review (for Commercial and High Density Residential parcels) or during improvement plan review (for single family residential development). All proposed outdoor lighting must meet applicable city standards regulating outdoor lighting in order to minimize any impacts resulting from outdoor lighting on adjacent properties. Lighting and glare guidelines provided in the City of Stockton's Municipal Code for Design and Development require that all light sources be shielded and directed downwards so as to minimize trespass light and glare to adjacent residences. Additionally, all outdoor lighting sources of 1,000 lumens or greater shall be fully shielded.

Consistency with the existing ordinance requiring a detailed lighting plan will ensure that the proposed Project would have a ***less than significant*** impact relative to this topic.

EIR ADDENDUM – CANNERY PARK EIR**3.2 AGRICULTURAL RESOURCES**

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact AG-1: Conversion of Farmland	Significant and Unavoidable Even with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AG-2: Williamson Act Contracts	Less than Significant	No	No	No	No
Impact AG-3: Conflict with zoning for forest land/timberland	Less than Significant	No	No	No	No
Impact AG-4: Conversion of Forest Land	Less than Significant	No	No	No	No
Impact AG-5: Indirect conversion of farmland or forest land	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect to agricultural resources. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The proposed project changes would not result in any new or altered impacts with respect to agricultural and forest resources. The area of disturbance of the Revised Project would not be larger than that analyzed within the Original Project, and the Revised Project would not result in any increased impacts to agricultural lands or resources beyond those addressed in the Cannery Park EIR. The Revised Project would still be subject to the requirements of the mitigation measures included within the Cannery Park EIR (listed below), which requires the payment of agricultural land conversion fees, as required. This mitigation measure contained within the Cannery Park EIR would

still be required and enforced. No new mitigation measures are required for the Revised Project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Conversion of Agricultural Land

Mitigation Measure 1: The owners, developers and/or successors-in-interest shall participate in an equitable program for payment of agricultural land conversion mitigation fees if such system is adopted by the City of Stockton.

Williamson Act Contracts

Mitigation Measure 1: The owners, developers and/or successors-in-interest shall participate in an equitable program for payment of agricultural land conversion mitigation fees if such system is adopted by the City of Stockton.

Agricultural Access and Irrigation

Mitigation Measure 1: The owners, developers and/or successors-in-interest shall coordinate proposed relocation of the South Main Canal and crossings of this and other canals with WID and City staff. Improvement plans for aspects of the project that would impact WID facilities shall be subject to the review and approval of WID and City staff.

Environmental Impacts and Mitigation Measures

Response AG-1): The Revised Project represents a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The potential for the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) was addressed in the EIR for the Original Project.

The Revised Project is consistent with the City's General Plan policies related to this topic, and the Revised Project does not cause an impact greater than what has already been considered in the Cannery Park EIR for the Original Project.

The Revised Project is subject to the City's agricultural mitigation fee program and the SJMSCP. Payment of these fees is standard for the conversion of farmland in the City of Stockton. Different types of land require different levels of mitigation. The entirety of San Joaquin County is mapped according to each land use category so that landowners, project proponents and project reviewers are aware of the applicable SJMSCP fees for the proposed development. The appropriate fees are collected by the City and remitted to SJCOG for administration. SJCOG uses the funds to preserve open space land of comparable types throughout the County, often coordinating with other private or public land trusts to purchase conservation easements or buy land outright for preservation. Fees are automatically adjusted on an annual basis. It is noted that the Project applicant has already paid the SJMSCP fees for the entire Revised Project site as part of the Original Project.

The Project applicant will be required to pay the established agricultural mitigation fees for loss of agricultural land. Fees paid toward the City's program at the building permit stage are used to fund conservation easements on comparable or better agricultural lands to provide compensatory mitigation. The impact conclusion in the EIR for the Original Project was **significant and unavoidable**. The Revised Project would not create a new impact, and would not increase the severity of the original impact on farmland.

Response AG-2): The Project site is not under a Williamson Act contract. The Revised Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Implementation of the Revised Project would have ***no impact*** relative to this issue.

Response AG-3): The Project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the Revised Project would have ***no impact*** relative to this issue.

Response AG-4): The Revised Project site is not forest land. The Revised Project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the Revised Project would have ***no impact*** relative to this issue.

Response AG-5): The Revised Project site does not contain forest land, and there is no forest land in the vicinity of the Revised Project site. The Project site would result in a conversion of the land to non-farmland. The Revised Project does not involve any other changes in the existing environment not disclosed under the previous responses 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. Implementation of the Revised Project would have a ***less than significant*** impact relative to this issue.

3.3 AIR QUALITY

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan?	Significant and Unavoidable Even with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AQ -2: 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?	Significant and Unavoidable Even with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AQ -3: Expose sensitive receptors to substantial pollutant concentrations?	Significant and Unavoidable Even with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact AQ -4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to air quality. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential

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land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The proposed project changes would not result in any new or altered impacts with respect to air quality. The area of disturbance of the Revised Project would not be larger than that analyzed within the Original Project. Additionally, the Revised Project would result in reduced impacts to air quality compared with the impacts addressed in the Cannery Park EIR. Additionally, the Revised Project would still be subject to the requirements of the mitigation measures included within the Cannery Park EIR. These mitigation measures contained within the Cannery Park EIR would still be required and enforced. No new mitigation measures are required for the Revised Project.

Mitigation Measures adopted with the Cannery Park EIR**Construction Related Emissions**

Mitigation Measure 1: During construction, the owners, developers and/or successors-in-interest will comply with SJVAPCD Regulation VIII (Fugitive Dust Rules).

Mitigation Measure 2: The owners, developers and/or successors-in-interest shall implement the following dust control practices, drawn from Tables 6-2 and 6-3 of GAMAQI, during construction:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all materials shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. {The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.}(Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Limit traffic speeds on unpaved roads to 15 mph; and
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Ozone Precursor Emissions

Mitigation Measure 1: Subdivision improvements shall incorporate the following features, consistent with adopted City improvement standards.

- Bus turnouts and transit improvements where requested by SMART.
- Continuous public sidewalks adjacent to all proposed public streets.
- Pedestrian/bicycle path along the south Bear Creek levee.
- Pavements and striping for bike lanes/paths consistent with Stockton Bikeways Plan.
- Direct pedestrian connections between proposed residential and commercial areas.

- Street lighting per City standards.
- Pedestrian signalization, signage and safety designs at signalized intersections.
- Include shade trees to shade sidewalks in street-side landscaping areas.
- Incorporate traffic calming measures consistent with adopted City standards.

Mitigation Measure 2: The owners, developers and/or successors-in-interest of commercial development projects within Cannery Park shall prepare and implement a transportation demand management (TOM) plan that incorporates feasible TDMs, potentially including but not limited to measures listed below. The plan shall be subject to City review and approval.

- Provide secure bicycle parking in conjunction with retail commercial development.
- Provide designated van pool parking spaces close to the employment center entry locations.
- Provide preferential car pool parking spaces close to the employment center entry locations.
- Offer flex time and compressed work week work schedule options.
- Provide on-site amenities that encourage alternative transportation modes such as locker, shower, secure bike storage facilities.
- Provide on-site services such as personal mail boxes and day care that reduce mid-day trip generation.
- Provide telecommuting options.
- Provide transit vouchers.
- Provide information to employees on carpooling, ride sharing and other available programs.

Mitigation Measure 3: Retail commercial development adjacent to Eight Mile Road and SR 99 West Frontage Road shall incorporate sufficient parking to permit park-and-ride use and shall make said parking available for that purpose, as required by the City Department of Public Works.

Mitigation Measure 4: Residential development shall incorporate the following features:

- Install central water heaters.
- No wood stoves or fireplaces,
- Orient proposed residential lots north/south to permit solar siting.

Carbon Monoxide Emissions

Mitigation Measure 1: The owners, developers and/or successors-in-interest shall design and construct, or pay proportionate share costs as appropriate, for the transportation improvements identified in Chapter 16.0 Transportation/Circulation.

Environmental Impacts and Mitigation Measures

Responses AQ-1- AQ-2): Air quality emissions would be generated during construction and during operation of the Revised Project. Operational emissions would come primarily from vehicle emissions from vehicle trips generated by the Revised Project and from the use of energy (i.e., electricity and natural gas) within the Revised Project buildings. Since the Revised Project is a General Plan amendment and a rezone of the Original Project, the following discussion includes an analysis of the Revised Project's construction and operational-related emissions in comparison to the Original Project's construction and operational-related emissions. It is noted that the impact conclusion in the EIR for the Original Project was *significant and unavoidable*.

Construction-Related Emissions

The SJVAPCD's approach to analysis of construction impacts is to require implementation of effective and comprehensive control measures, rather than to require detailed quantification of emission concentrations for modeling of direct impacts. PM₁₀ emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making quantification difficult. Despite this

variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM₁₀ emissions from construction activities. The SJVAPCD has determined that, on its own, compliance with Regulation VIII for all sites and implementation of all other control measures indicated in Tables 6-2 and 6-3 of the SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts (as appropriate) would constitute sufficient mitigation to reduce construction PM₁₀ impacts to a level considered less than significant.

Construction would result in numerous activities that would generate dust. The fine, silty soils in the Project site and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Impacts would be localized and variable. Construction impacts are anticipated to last for approximately eight years. The initial phase of Project construction would involve grading and site preparation activities, followed by building construction. Construction activities that could generate dust and vehicle emissions are primarily related to grading, soil excavation, and other ground-preparation activities, as well as building construction.

Control measures are required and enforced by the SJVAPCD under Regulation VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM₁₀ fugitive dust rules and equipment exhaust emissions controls are implemented. The Revised Project would be required to comply with all applicable measures from SJVAPCD Rule VIII.

Table AIR-1 (below) provides the maximum construction-related criteria pollutant emissions modeling results for both the Original Project (i.e., the existing condition) and the Revised Project from CalEEMod in comparison to the SJVAPCD thresholds for criteria air pollutants. It should be noted that the results below include the SJVAPCD-recommended PM₁₀ fugitive dust rules and equipment exhaust emissions controls within the CalEEMod modeling, and are therefore considered 'mitigated' within CalEEMod, even though no mitigation (as defined by CEQA) was applied to the Revised Project.

As shown in Table AIR-1, none of the Revised Project's maximum construction-related emissions modeling results would exceed the SJVAPCD criteria pollutant thresholds. Moreover, the Original Project's maximum construction-related emissions modeling results for each of the criteria pollutants exceed the results for the Revised Project. Therefore, the Revised Project is anticipated to generate a net reduction in construction-related emissions as compared with the Original Project (i.e., as compared with the existing condition). That is, the Revised Project is anticipated to have a net beneficial impact with regard to construction-related criteria pollutant emissions, when compared to the existing condition.

TABLE AIR-1: ORIGINAL & PROPOSED PROJECT MAXIMUM CONSTRUCTION EMISSIONS (TONS/YEAR)

<i>Emissions Type</i>	<i>Original Project Emissions</i>	<i>Proposed Project Emissions</i>	<i>Proposed Project Net Emissions</i>	<i>SJVAPCD Threshold</i>	<i>Above Threshold in Proposed Project?</i>
ROG	6.9403	6.4169	-0.5234	10	N
NO _x	3.8720	3.5280	-0.344	10	N
CO	4.0409	3.6355	-0.4054	100	N
PM ₁₀	0.8125	0.6870	-0.1255	15	N
PM _{2.5}	0.3419	0.3088	-0.0331	15	N
SO _x	0.0141	0.0100	-0.0041	27	N

Source: CalEEMod, v. 2020.4.0

Operational Emissions

For the purposes of this operational air quality analysis, actions that violate Federal standards for criteria pollutants (i.e., primary standards designed to safeguard the health of people considered to be sensitive receptors while outdoors and secondary standards designed to safeguard human welfare) are considered significant impacts. Additionally, actions that violate State standards developed by the CARB or criteria developed by the SJVAPCD, including thresholds for criteria pollutants, are considered significant impacts.

SJVAPCD Rule 9510 Indirect Source Review

District Rule 9510 requires developers of large residential, commercial and industrial projects to reduce smog-forming (NO_x) and particulate (PM₁₀ and PM_{2.5}) emissions generated by their projects. The Rule applies to many project types, including to projects which, upon full build-out, will include 50 residential units or more. Project developers are required to reduce:

- 20 percent of construction-exhaust nitrogen oxides;
- 45 percent of construction-exhaust PM₁₀;
- 33 percent of operational nitrogen oxides over 10 years; and
- 50 percent of operational PM₁₀ over 10 years.

Developers are encouraged to meet these reduction requirements through the implementation of on-site mitigation; however, if the on-site mitigation does not achieve the required baseline emission reductions, the Project applicant will mitigate the difference by paying an off-site fee to the District. Fees reduce emissions by helping to fund clean-air projects in the District. The Revised Project would be required to consult with the SJVAPCD regarding the applicability of Rule 9510 Indirect Source Review including the fees.

Criteria Pollutant Emissions and Thresholds

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The Revised Project and Original Project's operational emissions are provided in Table AIR-2 (below) (further detail is provided in Appendix A), in comparison to the SJVAPCD criteria pollutant thresholds. As shown in Table AIR-2, the Revised Project would have fewer emissions for each of the criteria air pollutants. Therefore, the Revised Project is anticipated to generate a net reduction in operational-related emissions as compared with the Original Project (i.e., as compared with the existing condition).

TABLE AIR-2: PROJECT OPERATIONAL CRITERIA POLLUTANT EMISSIONS (TONS/YEAR)

<i>Emissions Type</i>	<i>Original Project Emissions</i>	<i>Proposed Project Emissions</i>	<i>Proposed Project Net Emissions</i>	<i>Above Emissions Anticipated with Original Project?</i>
ROG	19.7133	13.6729	-6.0404	N
NO _x	18.1799	9.3529	-8.827	N
CO	114.3351	70.8541	-43.481	N
PM ₁₀	30.0409	14.6232	-15.4177	N
PM _{2.5}	8.2135	5.8222	-2.3913	N
SO _x	0.2550	0.1586	-0.0964	N

Source: CalEEMod, v.2020.4.0

As shown above, the Revised Project would not exceed the applicable SJVAPCD thresholds associated with operational emissions. Therefore, the Revised Project would have a ***less than significant*** impact with regard to operational emissions.

Conclusion

The impact conclusion in the EIR for the Original Project was ***significant and unavoidable***. The Revised Project would not conflict with or obstruct implementation of the applicable air quality plan, or to 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 based on an analysis of the Revised Project against the SJVAPCD thresholds.

Response AQ-3): Sensitive receptors are those parts of the population that can be severely impacted by air pollution. Sensitive receptors include children, the elderly, and the infirm. Although there are existing residences located to the north, south, and east of the Revised Project site, there are no schools located adjacent to the Revised Project site. The nearest school (Aspire Vincent Shalvey Academy) is located approximately 0.27 miles to the southeast of the Revised Project site, at its closest point.

The impact conclusion in the EIR for the Original Project was ***significant and unavoidable***. Implementation of the Revised Project would not expose these sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction and operational phases of the Revised Project. The construction phase of the Revised Project would be temporary and short-term, and the implementation of all State, Federal, and SJVAPCD requirements would greatly reduce pollution concentrations generated during construction activities. Moreover, as described under Responses a) and b), previously, the Revised Project's construction and operational-related

emissions would be below the emissions for the Original Project, thereby generating a net beneficial impact. Overall, the Revised Project would not create a new impact, and would not increase the severity of the original impact on air quality.

Response AQ-4): The Revised Project would not generate objectionable odors. People in the immediate vicinity of construction activities may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration.

Examples of facilities that are known producers of operational odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g., auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant. If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted.

The Revised Project does not include any of the aforementioned uses. Additionally, construction activities would be temporary and minor. Lastly, other emissions are evaluated in responses a-c), as provided above. As such, implementation of the Revised Project would have a ***less than significant*** impact relative to this topic.

EIR ADDENDUM – CANNERY PARK EIR

3.4 BIOLOGICAL RESOURCES

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact BIO-1: 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?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Less than Significant	No	No	No	No
Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact BIO-4: 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	No	No	No	No
Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant	No	No	No	See Cannery Park EIR Mitigation Measures
Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to biological resources. The Revised Project requests a General Plan Amendment and rezone to revise the land

use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site.

The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project Rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The proposed project changes would not result in any new or altered impacts with respect to biological resources. The area of disturbance of the Revised Project would not be larger than that analyzed within the Original Project. Additionally, the Revised Project would not result in increased impacts to biological resources compared with the impacts addressed in the Cannery Park EIR. Additionally, the Revised Project would still be subject to the requirements of the mitigation measures included within the Cannery Park EIR (listed below). These mitigation measures contained within the Cannery Park EIR would still be required and enforced. No new mitigation measures are required for the Revised Project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Impacts on Heritage Oaks

Mitigation Measure 1: Project improvement plans shall identify the species, location and diameter of existing individual oak trees greater than six inches in diameter at breast height (DBH), including all Valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*) and interior live oak (*Quercus wislizenii*) trees. Improvement plans shall identify all oak trees meeting the Heritage Tree definition (trunk diameter of 16 inches or greater as measured at twenty-four (24) inches above actual grade). An Arborist's report shall be submitted with the improvement plans identifying the retention value of all Heritage Trees.

Mitigation Measure 2. The owners, developers, and/or successors-In-Interest shall be responsible for avoidance of impacts to Heritage Trees, or mitigation of impacts as follows:

- a) A permit shall be obtained for any necessary removal of a Heritage Tree, pursuant to the Stockton Heritage Tree Ordinance.
- b) Grading of proposed lots that include Heritage Trees to be preserved should be designed to preserve existing grade to the drip line surrounding the Heritage Tree, in order to enhance survivability.
- c) Prior to construction, temporary barriers shall be placed around the drip lines of any Heritage Trees to be preserved that are within 25 feet of any planned grading or construction activity. No storage or operation of any equipment will occur within these barriers. No construction materials or fill will be stockpiled within these barriers, and trespassing will be prohibited.
- d) If Heritage Tree removal is unavoidable, mitigation in the form of replacement plantings for trees lost shall be provided, consistent with the Stockton Heritage Tree Ordinance and Mitigation Measure 3 below.
- e) The owners, developer, and/or successors-In-interest shall implement remedial pruning or other recommendations set forth in the Arborist's report for existing Heritage Trees that will be retained so as to preserve the existing tree(s) and protect the general public.

Mitigation Measure 3. Replacement oak trees shall be planted on the same site as removed, if at all possible, otherwise an alternate site shall be selected by the applicant and submitted to the City Parks and Recreation Department for approval. The size of replacement trees shall be based on the original tree's retention value (as determined by a certified Arborist retained by the owner/developer as follows:

Retention Value	Replacement Oak Size
Low	One 15-gallon
Moderate	Two 15-gallon
Moderate-high	Five 15-gallon
High	Eight 15-gallon

Mitigation Measure 4. Where possible, removal of non-heritage oak trees shall also be avoided. If avoidance is not feasible, replacement oak trees shall be planted.

Mitigation Measure 5. The owners, developers, and/or successors-in-interest shall provide the resources necessary to ensure that the newly planted trees become established in their new location. The owner/developer shall retain the services to a certified Arborist for a period of three years. Site inspections will be made by the Arborist once per week within the first six months of planting and once per month for the remaining thirty months. The Arborist's function will be to monitor the condition of the newly planted trees and report to the City and owner/developer any trees that are in need of attention or replacement. The owner/developer shall be responsible for purchasing and planting any trees for which replacement may be deemed necessary by the Arborist over the three-year period. Any newly planted trees in need of attention, as so-deemed by the Arborist, shall be properly cared for by the owner/developer until the Arborist finds that they are in satisfactory condition.

Impacts on Wetlands and Waters of the US

Mitigation Measure 1: A wetland delineation shall be conducted and submitted to the Corps of Engineers for verification in order to determine jurisdiction.

Mitigation Measure 2. If on-site wetlands are determined to be jurisdictional, the owners, developers and/or successors-in-interest shall design the project to avoid wetland impacts wherever practicable.

Mitigation Measure 3. Where it is not practicable to avoid wetland impacts, the owners, developers and/or successors-in-interest shall obtain any required permits for stream or wetland encroachment from agencies with jurisdiction, including the US Army Corps of Engineers, State Reclamation Board, California Department of Fish and Game and Regional Water Quality Control Board.

Mitigation Measure 4. The owners, developers and/or successors-in-interest shall provide mitigation for wetland losses as specified in required permits through payment of SJMSCP fees or mitigation bank fees acceptable to the regulatory agencies with jurisdiction.

Impacts on Sensitive Fish and Wildlife Species

Mitigation Measure 1: The owners, developers, and/or successors-in-interest shall mitigate for the proportionate loss of potential wildlife habitat from the project site by paying any required fee, implementing required "take avoidance" measures and taking any other actions required by the adopted San Joaquin County Multi-Species Habitat Conservation and Open Space Plan.

Environmental Impacts and Mitigation Measures

Response BIO-1): The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants, and the U.S. Fish and Wildlife

Service's (USFWS) records of listed endangered and threatened species from the IPAC database. The background search was regional in scope and focused on the documented occurrences within 1 mile of the Project site.

Special Status Wildlife Species

Plants: There are no special-status plants that are documented within a 1-mile radius of the Revised Project site. The conditions of the Revised Project site are highly disturbed due to the active agricultural operations and there is very little potential for any vegetation growth outside the agriculturally planted vegetation. Implementation of the individual phases, and the Revised Project as a whole, will have a less than significant impact on special status plants.

Invertebrates: There are three special-status invertebrates that are documented within a 1-mile radius of the Project site according to the CNDDDB including: California linderiella (*Linderiella occidentalis*), vernal pool tadpole shrimp (*Lepidurus packardii*) and midvalley fairy shrimp (*Branchinecta mesoamericana*). Separately, the Vernal pool fairy shrimp (*Branchinecta lynchi*) and Vernal pool tadpole shrimp (*Lepidurus packardii*) are documented in the USFWS IPAC database as potentially occurring within the region.

California linderiella is not a federal or state listed species. They are commonly found in vernal pools throughout the Central Valley region. The documented occurrence is located along the SR 99 frontage road immediately south of Bear Creek. The record indicates that there were 1,000s of adults observed on March 25, 2009 in an approximately 30x15-foot seasonal wetland. This is an area that is not proposed for development under the proposed Project. This area would remain intact and the habitat would not be disturbed.

Vernal pool fairy shrimp (VPFS) is a federal threatened invertebrate found in the Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County. They are commonly found in vernal pools and in sandstone rock outcrop pools. VPFS is not anticipated to be directly affected by any individual phase or component of the proposed Project because there is not appropriate vernal pool habitat on the Project site.

Vernal pool tadpole shrimp (VPTS) is a federal endangered invertebrate found in vernal pools and stock ponds from Shasta County south to Merced County. VPTS is not anticipated to be directly affected by any individual phase or component of the proposed Project because there is not appropriate vernal pool habitat on the Project site.

Valley elderberry longhorn beetle (VELB) is a federal threatened insect, proposed for delisting. Elderberry (*Sambucus* sp.), which is a primary host species for VELB. VELB is not anticipated to be directly affected by the proposed project.

Essential habitat for Molestan blister beetle and Sacramento anthicid beetle is not present on the Revised Project site.

No special-status invertebrates are expected to be affected by the Revised Project. Nevertheless, the Project applicant would be required to seek coverage under the SJMSCP to mitigate habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species.

These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Reptile and amphibian species: There are no special-status amphibians that are documented within a 1-mile radius of the Revised Project site according to the CNDDDB including: However, the California red-legged frog (*Rana aurora draytoni*) and Giant garter snake (*Thamnophis couchi gigas*) are documented in the USFWS IPAC database as potentially occurring within the region. There is no essential habitat for any of these species within the Revised Project site.

No special-status reptiles or amphibians are expected to be affected by the Revised Project. Nevertheless, the Project applicant to seek coverage under the SJMSCP to mitigate habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Birds: The only special-status bird that is documented in the CNDDDB within a 1-mile radius of the Project site is Swainson's Hawk (*Buteo swainsoni*). The CNDDDB shows three records of Swainson's hawk nesting in the eastern portion of the Project site. Records were recorded by Caltrans as early as 1990 and as late as 2002. The records indicate three nest trees including: 1) a valley oak in mixed trees on a demolished farmstead, 2) a 28' eucalyptus tree, and 3) a 35' valley oak tree. The surrounding crops were wheat (2003). The breeding pair fledged 3 young in 1990, one in 1991. The nest was active in 1992, but there are no records of fledging. A pair and two young were recorded in 1994. The nest was active in 2000 and 2001, but there are no records of fledging. One fledged in 2003. Mating, nest building, and nest defense was observed in 2009, although details are not provided in the records beyond these notes. An April 22, 2022 survey was performed to determine if Swainson's hawk continues to nest in the trees on the Revised Project site. There was no evidence of nesting on the Revised Project site. There was a single adult Swainson's hawk observed flying over the field. There were no observations of a second, potential pair to the observed adult individual.

Separately, Aleutian goose (*Branta canadensis leucopareia*), Yellow-headed blackbird (*Xanthocephalus xanthocephalus*), Swainson's hawk (*Buteo swainsoni*), song sparrow (Modesto population) (*Melospiza melodia*), Merlin (*Falco columbarius*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), burrowing owl (*Athene cunicularia*), Tricolored blackbird (*Agelaius tricolor*). In addition, the bald eagle (*Haliaeetus leucocephalus*), black rail (*Laterallus jamaicensis*), fox sparrow (*Passerella iliaca*), least bittern (*Ixobrychus exilis*), lesser yellowlegs (*Tringa flavipes*), Lewis's woodpecker (*Melanerpes lewis*), loggerhead shrike (*Lanius ludovicianus*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), mountain plover (*Charadrius montanus*), Nuttalls woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), peregrine falcon (*Falco peregrinus*), short-eared owl (*Asio flammeus*), western grebe (*Aechmophorus occidentalis*), Williamson's sapsucker (*Sphyrapicus thyroideus*), and yellow-billed magpie (*Pica nuttalli*) are documented in the USFWS IPAC database as potentially occurring within the region. The Project site may provide suitable foraging habitat for a variety of potentially occurring special-status birds, including those listed above. Potential nesting habitat is very limited located within the Project site,

but may be found in the vicinity. There is also the potential for other special-status birds that do not nest in this region and represent migrants or winter visitants to forage on the Revised Project site.

Year-round birds: Special-status birds that can be present in the region throughout the year include: bald eagle (*Haliaeetus leucocephalus*), black rail (*Laterallus jamaicensis*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), Nuttalls woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), song sparrow (Modesto population) (*Melospiza melodia*), tricolored blackbird (*Agelaius tricolor*), Williamson's sapsucker (*Sphyrapicus thyroideus*), yellow-billed magpie (*Pica nuttalli*), among others. Some of these species are migratory, but also reside year-round in California.

Summering Birds: Special-status birds that are only present in the region in the spring and summer months include: Aleutian goose (*Branta canadensis leucopareia*), least bittern (*Ixobrychus exilis*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and yellow-billed magpie (*Pica nuttalli*).

Overwintering Birds: Special-status birds that are only present in the region in the fall and winter months include: fox sparrow (*Passerella iliaca*), lesser yellowlegs (*Tringa flavipes*), Lewis's woodpecker (*Melanerpes lewis*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), merlin (*Falco columbarius*), mountain plover (*Charadrius montanus*), peregrine falcon (*Falco peregrinus*), short-eared owl (*Asio flammeus*), and western grebe (*Aechmophorus occidentalis*).

Nesting Raptors (Birds of Prey): All raptors (owls, hawks, eagles, falcons), including species and their nests, are protected from take pursuant to the Fish and Game Code of California Section 3503.5, and the federal Migratory Bird Treaty Act, among other federal and State regulations. Special-status raptors that are known to occur in the region include: bald eagle (*Haliaeetus leucocephalus*), burrowing owl (*Athene cunicularia*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo rega*), golden eagle (*Aquila chrysaetos*), great horned owl (*Bubo virginianus*), prairie falcon (*Falco mexicanus*), red-tailed hawk (*Buteo jamaicensis*), short-eared owl (*Asio flammeus*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Elanus leucurus*), among others.

Analysis: The Revised Project site has historical records of Swainson's hawk nesting in the trees associated with the old farmstead near the SR 99 frontage road. An April 22, 2022 survey was performed to determine if Swainson's hawk continues to nest in the trees on the Project site. The survey revealed 11 valley oak trees in the area of the old farmstead. This is the area that was previously identified with nesting Swainson's hawks. There were no eucalyptus trees as referenced in the CNDDB records. It is noted that there are no structures in this area beyond remnants of an old driveway to the old farmstead area. There were also two valley oak trees located on the south side of Bear Creek adjacent to the SR 99 frontage road. There was no evidence of nesting in the valley oak trees.

There was a single adult Swainson's hawk observed flying over the field. There were no observations of a second, potential pair to the observed adult individual, which means one of two things. It is not paired and nesting this season, or it is foraging in the area for food to bring back to a nest within its foraging radius. Time was spent trying to locate a nest in the general vicinity, but one was not located. Swainson's hawk nesting in the region is quite common, and it would be expected that a foraging Swainson's hawk could be foraging as far as 10 miles from a nest, although a nest could also be inside of a mile from the Revised Project site.

The trees, as well as powerlines/poles represent potentially suitable nesting habitat for a variety of special-status birds. Additionally, the agricultural land within the Revised Project site represents potentially suitable nesting habitat for the ground-nesting birds where disturbance is less frequent. In general, most nesting occurs from late February and early March through late July and early August, depending on various environmental conditions. The CNDDDB currently contains nesting records for Swainson's hawk in the vicinity of the Revised Project site. In addition to the species described above, common raptors such may nest in or adjacent to the Revised Project site.

New sources of noise and light during the construction and operational phases of the Revised Project could adversely affect nesters if they are located adjacent to the Revised Project site in any given year. Additionally, the Revised Project would eliminate the agricultural areas on the Revised Project site, which serve as potential foraging habitat for birds throughout the year. The Revised Project requires participation in the SJMSCP. As part of the SJMSCP, SJCOG requires preconstruction surveys for projects that occur during the avian breeding season (March 1 – August 31). When active nests are identified, the biologists develop buffer zones around the active nests as deemed appropriate until the young have fledged. SJCOG also uses the fees to purchase habitat as compensation for the loss of foraging habitat. Implementation of the proposed project would ensure that potential impacts to special status birds are reduced.

Mammal: No special-status mammals are documented within a 1-mile radius of the Revised Project site.

Riparian (San Joaquin Valley) woodrat and riparian brush rabbit: The Revised Project site does not contain appropriate habitat for riparian (San Joaquin Valley) woodrat and riparian brush rabbit. It is unlikely that the Revised Project site is used by American badger, San Joaquin kit fox, or San Joaquin pocket mouse and these species have not been observed during recent or previous field surveys.

Special-status bats: The Revised Project site provides potential habitat for several special-status bats, including: Greater western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillei*), small-footed myotis/bat (*Myotis ciliolabrum*), long-eared myotis/bat (*Myotis evotis*), fringed myotis/bat (*Myotis thysanodes*), long-legged myotis/bat (*Myotis volans*), and Yuma myotis/bat (*Myotis yumanensis*). These species are not federal, or state listed; however, they are tracked by the CNDDDB. Development of the Revised Project site would eliminate foraging habitat for special status bats by removing the agricultural areas. Additionally, special status bats can establish roosts within the structures and/or trees located on the Project site. Bats can establish roosts even when absent in prior years. These special status bat species are covered by the SJMSCP.

Conclusion: The SJMSCP is administered by a Joint Powers Authority consisting of members of the SJCOG, the CDFW, and the USFWS. According to the SJMSCP, adoption and implementation by local planning jurisdictions provides full compensation and mitigation for impacts to plants, fish and wildlife. Adoption and implementation of the SJMSCP also secures compliance pursuant to the state and federal laws such as CEQA, the National Environmental Policy Act (NEPA), the Planning and Zoning Law, the State Subdivision Map Act, the Porter-Cologne Act and the Cortese-Knox Act in regard to species covered under the SJMSCP. Applicants pay mitigation fees on a per-acre basis. The entire County is mapped according to these categories so that landowners, project proponents and project reviewers are easily aware of the applicable SJMSCP fees for the proposed development. The appropriate fees are remitted to SJCOG for administration. SJCOG uses the funds to preserve open space land of comparable types throughout the County, often coordinating with other private or public land trusts to purchase conservation easements or buy land outright for preservation. The fees

are automatically adjusted on an annual basis. The fees have been designed to sufficiently mitigate the impacts of projects on candidate, sensitive, and special status species.

Coverage also involves implementation of incidental take and minimization Measures (ITMMs), which is intended to ensure avoidance of individual species. Obtaining coverage for a Project serves as an incidental take authorization (permit) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA.

The Revised Project site has already received SJMSCP coverage. SJCOG issued Incidental Take Minimization Measures (ITMM) for the Original Project on August 11, 2005, and the Applicant paid the appropriate fees on October 7, 2005. ITMM coverage for the Revised Project site is for the physical development rather than the type of use, therefore, the ITMMs coverage remains in effect for the parcels that are proposing to change the land use.

No special-status species are expected to be affected by the Revised Project, especially with the implementation of ITMMs. The Project applicant to implement the ITMMs issued for the Project site by SJCOG. Therefore, the proposed Project would have a ***less than significant*** impact relative to this topic.

Responses BIO-2): There is no riparian habitat on the Project site. The Project site does not include the immediate area surrounding Bear Creek. The CNDDDB record search did not reveal the occurrence of any sensitive habits within 1 mile of the Project site. Therefore, implementation of the proposed Project would have a ***less than significant*** impact on riparian habitats or natural communities.

Response BIO-3): Bear Creek is an anthropogenically modified riverine system that generally bisects the Project site. Bear Creek conducts base flow and storm runoff from its upstream drainage area, which includes foothill and lowland agricultural areas north and east of the Project site. Bear Creek is also used to distribute irrigation water. Outside the Stockton urban area, Bear Creek drains more than 92 square miles in eastern San Joaquin and western Calaveras counties. Bear Creek contains levees on the north and south side of the channel, and it is used as a flood control facility as it crosses through the incorporated City of Stockton. Bear Creek is a jurisdictional area given that it is a tributary to the San Joaquin River, a Traditional Navigable Water. However, Bear Creek is within a swath of land that is a gap that will not be developed or disturbed by the proposed Project.

There is also a seasonal wetland located just west of the SR 99 frontage road, and south of Bear Creek that is also part of the swath of land bisecting the Project site that will not be developed. These areas will remain intact and no fill activities warranting a permit are necessary.

The agricultural irrigation ditches along the boundaries of some of the fields are man-made isolated facilities with the sole purpose of agricultural irrigation. These ditches are exempt from permitting. Absent any fill activities in wetlands or jurisdictional waters, implementation of the proposed Project would have ***less than significant*** impact relative to this topic.

Response BIO-4): The CNDDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the Project site. Bear Creek, however, naturally serves as an open corridor for wildlife to move through the area. This area will not be disturbed, as it is part of the gap bisecting the Project site.

Special status fish species documented within the region include: Delta smelt (*Hypomesus transpacificus*), Hardhead (*Mylopharodon conocephalus*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley fall- /late fall-run Chinook salmon (*Oncorhynchus tshawytscha*), and Longfin smelt (*Spirinchus thaleichthys*). The closest major natural movement corridor for native fish that are documented in the region is the San Joaquin River, located to the west of the Project site. Bear Creek is a tributary to the San Joaquin River; however, there will be no disturbance to Bear Creek.

The ongoing operational phase of the proposed Project requires discharge of stormwater into the municipal storm drainage system, which ultimately discharges into the Delta. The discharge of stormwater could result in indirect impacts to special status fish and wildlife if stormwater was not appropriately treated through BMPs prior to its discharge to the Delta. The Stockton Municipal Code establishes minimum storm water management requirements and controls. Storm water drainage is managed through the implementation of BMPs to the extent they are technologically achievable to prevent and reduce pollutants. The City requires reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses. The management of water quality through BMPs is intended to ensure that water quality does not degrade to levels that would interfere or impede fish or wildlife. Implementation of these required measures would ensure that this potential impact is reduced to a ***less than significant*** level.

Responses BIO-5): The proposed Project is subject to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The proposed Project does not conflict with the SJMSCP. Therefore, the proposed Project would have a ***less than significant*** impact relative to this topic.

Responses BIO-6): The Land Use and Safety Elements of the General Plan establish numerous policies and implementation measures related to biological resources as listed below:

Land Use Element Policies

LU-5.2. Protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.

- ***Consistent:*** *There are no known cultural or historic resources on site which would be encroached on or destroyed by the proposed Project. Nevertheless, Section V, Cultural and Tribal Resources includes mitigation measures to be followed should cultural resources be found on-site during construction. Additionally, the City has initiated Tribal Consultation, which includes a 90-day period for tribal organizations to comment and request formal consultation. Natural resources areas, habitat, and agricultural lands are found on-site. Further, the proposed Project would be subject to the City and County Right-to-Farm ordinances, which would ensure that the proposed Project does not encroach or destroy agricultural operations in the area.*

LU-5.3. Define discrete and clear city edges that preserve agriculture, open space, and scenic views.

- ***Consistent:*** *The Project site is located in the northern portion of the City adjacent to SR 99. The site was anticipated for development as part of the City's General Plan, and as part of the Original Project. As discussed in Section II, Agricultural Resources, the Envision Stockton 2040 General Plan EIR anticipated development of the Project site as part of the overall evaluation of the buildout of the City.*

Safety Element Policy

SAF-2.3. Protect the community from potential flood events.

- **Consistent:** *Impacts associated with potential flood events are discussed in Section X, Hydrology and Water Quality. All Potential flood impacts would be less than significant.*

Municipal Code

The Stockton Municipal Code, Title 16 Development Code protects Heritage Oak Trees through permit requirements. Section 16.130.020 provides the Director with Review Authority for permits to remove heritage trees. The decision of the Director is subject to an appeal to the Council in compliance with Chapter 16.100 (Appeals). (Ord. 015-09 C.S., eff. 12-3-09). Section 16.130.030 provides the permit requirements, and describes the process for approval or denial of a permit application. Section 16.130.040 establishes fines for violation of this requirement. Section 16.130.050 provides exemptions under emergencies. Section 16.130.060 establishes the replacement requirements.

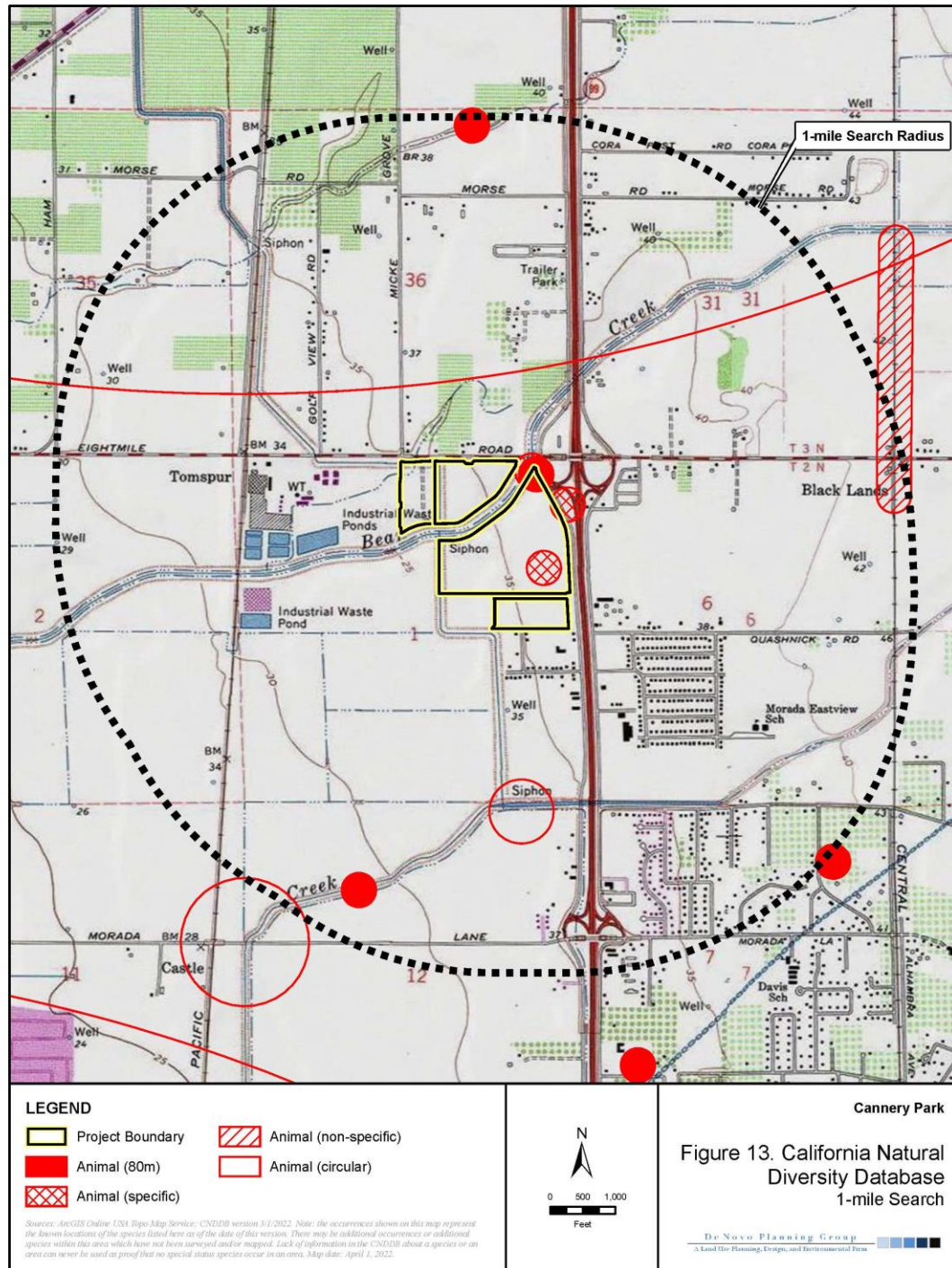
SJMSCP

The proposed Project is subject to the SJMSCP. The proposed Project does not conflict with the SJMSCP.

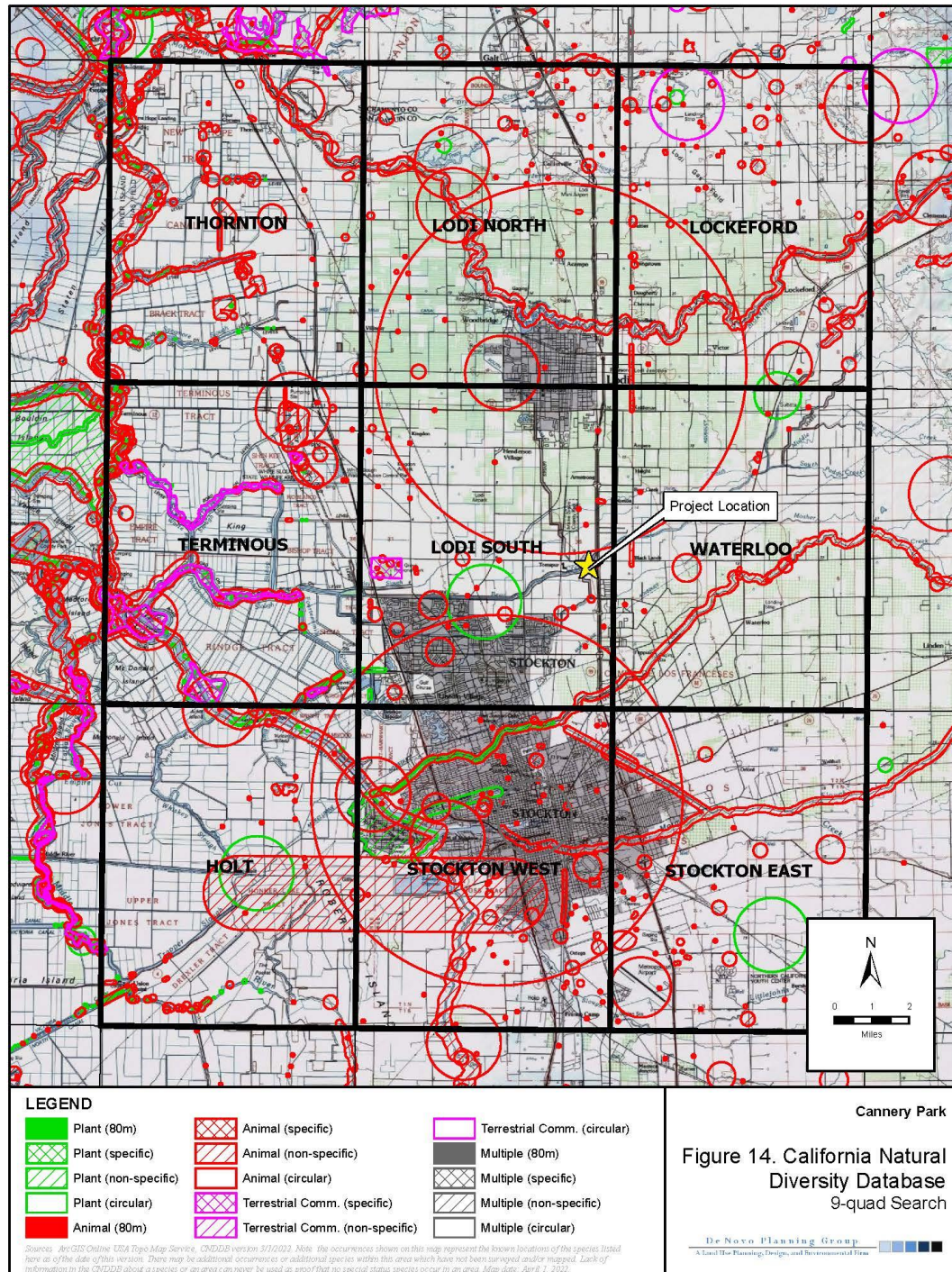
Heritage Tree Permit

The proposed Project would involve extensive grading and disturbance of the Project site as construction proceeds, and proposed land uses would likely involve removal of all of the existing vegetation, including 11 oak trees located along the eastern portion of the Project site within the old farmstead. While it is assumed that all 11 oak trees around the old farmstead will require removal, it may be possible for the engineer to incorporate some of the trees into the yard of a proposed lot(s). The two oak trees near Bear Creek are not proposed to be removed.

The City controls Heritage Tree impacts through existing regulations in Chapter 16.130, Heritage Tree Permit, of the City of Stockton Municipal Code. Any removal of Heritage oak trees will require a permit under the specific provisions of the Chapter 16.130, Heritage Tree Permit, of the City of Stockton Municipal Code. If removal of the Heritage Trees is permitted, mitigation in the form of replacement tree plantings will be required, as specified in the Municipal Code. In addition, the Cannery Park MMRP includes five mitigation measure specifically aimed at mitigating the loss of Heritage Trees. Those measures are presented at the beginning of this section (Section 3.4 Biological Resources). Consistency with the existing ordinance protecting Heritage Trees, as well as the adopted Cannery Park MMRP, will ensure that the proposed Project would have a ***less than significant*** impact relative to this topic.



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3.5 CULTURAL RESOURCES

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact CLT-1: Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact CLT-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact CLT-3: Disturb any human remains, including those interred outside of formal cemeteries?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect to cultural resources. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts to cultural resources would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below), which includes standard measures that must be implemented if a previously unknown cultural or historical resource is encountered during site grading and construction activities. These mitigation measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Prehistoric Cultural Resources

Mitigation Measure 1. If any subsurface cultural resources, including either prehistoric or historic resources, are encountered during construction of the residential project, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist can examine these materials and make a determination of their significance. The City of Stockton Community Development Department shall be notified, and the owners, developers and/or successors-in-interest shall be responsible for mitigation of any significant cultural resources pursuant to the CEQA Guidelines.

Mitigation Measure 2. If human remains are encountered at any time during the development of the project, all work in the vicinity of the find shall halt and the County Coroner and the Community Development Department shall be notified immediately. If it is determined that the remains are those of a Native American, the Coroner must contact the Native American Heritage Commission. At the same time, a qualified archaeologist must be contacted to evaluate the archaeological implications of the finds. The CEQA Guidelines detail steps to be taken when human remains are found to be of Native American origin.

Mitigation Measure 3. In order to ensure proper identification of any cultural materials that might inadvertently be encountered during future development or construction activity, the City's use permit should include a provision for training of field personnel in identification procedures, prior to implementing construction work. The training would take the form of a two-hour seminar in which a professional archaeologist would review with equipment operators the natural and cultural history of the project area, archeological sensitivity, the most likely locations of buried cultural materials, and what kinds of cultural materials would be seen if prehistoric materials are in fact unearthed. The seminar would conclude with specific instruction on how to address such discoveries and what immediate actions to take, particularly if human remains are found.

Environmental Impacts and Mitigation Measures

Responses CLT-1)-CLT3): The proposed Project is within the same footprint of the Original Project. As described in the EIR for the Original Project, a search of existing records at the Central California Information Center, consultation with Native Americans, and consultation with the Haggin Museum failed to identify information concerning prehistoric (or historic-period) sites or features within the Original Project site, in spite of some previous surveys of sensitive areas along Bear Creek. The Native American Heritage Commission did not identify any sacred land listings for this area, and no prehistoric or historic resources were identified during the field survey of the Original Project site. Additionally, the City has initiated a new Tribal Consultation, which includes a 90-day period for tribal organizations to comment and request formal consultation on the proposed Project. Proposed Project disturbance of the Project site is not expected to result in a significant effect on prehistoric cultural resources.

However, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown archaeological resources and cultural resources, including prehistoric or historic artifacts. With implementation of the mitigation measures contained within the Cannery Park EIR, the potential impact would be *less than significant* with respect to cultural resources.

3.6 ENERGY

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact ENERGY-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	N/A	No	No	No	No
Impact ENERGY-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	N/A	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to energy. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

As provided in the below analysis, the Revised Project would use less operational electricity, less operational fuel usage for vehicles, and less on- and off-road construction vehicle fuel, compared to the Original Project. However, as provided in Table ENERGY-1 and Table ENERGY-2, below, the Original Project's operational natural gas usage is anticipated to be greater than the Revised Project's operational natural gas usage, due to the differences in land uses between the Original Project and the Revised Project. Nevertheless, the Revised Project would use less energy overall, when compared to the Original Project, as described in further detail (under responses a-b), below.

Overall, the Revised Project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the Revised Project including construction, operations, maintenance, and/or removal. The Revised Project would comply with all existing energy standards, including those established by the City of Stockton, and would not result in significant adverse

impacts on energy resources. As such, no changes to potential impacts to energy impacts would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Environmental Impacts and Mitigation Measures

Response ENERGY-1 – ENERGY 2): The State CEQA Guidelines require consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision [b][3]). The means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered “wasteful, inefficient, and unnecessary” if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The Revised Project includes the construction of residential and commercial uses. The amount of energy used at the Revised Project site would directly correlate to the size and type of the proposed buildings, the energy consumption of associated unit appliances, and outdoor lighting. Other major sources of Revised Project energy consumption include fuel used by vehicle trips generated during Revised Project construction and operation, and fuel used by off-road construction vehicles during construction.

The following discussion provides calculated levels of energy use expected for both the Original Project as well as the Revised Project, based on commonly used modelling software (i.e., CalEEMod v.2020.4.0 and the California Air Resource Board’s EMFAC2021), to serve as a comparison. The modeling results show that the electricity consumption of the Original Project would exceed the Revised Project’s electricity consumption. However, the natural gas consumption of the Revised Project would exceed the Original Project’s natural gas consumption.

Electricity and Natural Gas

Electricity and natural gas used by the Revised Project would be used primarily to power on-site buildings. Total annual electricity (kWh) and natural gas (kBtu) usage associated with the operation of the Original Project is shown in Table ENERGY-1, and for the Revised Project in Table ENERGY-2, below (as provided by CalEEMod). The Revised Project incorporates feasible mitigation to reduce the Revised Project’s operational electricity and natural gas consumption.

According to Calico’s *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

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Table ENERGY-1: Original Project Operational Natural Gas and Electricity Usage

Emissions^(a)	Natural Gas (kBtu/year)	Electricity (kWh/year)
High Density Residential	3,147,220	1,104,840
Commercial	13,409,100	13,165,900
Total	16,556,320	14,270,740

NOTE: ^(A) NUMBERS PROVIDED HERE MAY NOT ADD UP EXACTLY TO TOTAL DUE TO ROUNDING.

SOURCE: CAL EEMOD (v.2020.4.0).

Table ENERGY-2: Revised Project Operational Natural Gas and Electricity Usage

Emissions^(a)	Natural Gas (kBtu/year)	Electricity (kWh/year)
Condo/Townhouse	5,586,110	1,443,370
Convenience Market with Gas Pumps	111,168	109,152
Fast Food Restaurant with Drive Thru	2,594,438	730,660
General Office Building	166,260	98,532
Hotel	4,264,610	1,034,720
Medical Office Building	159,740	94,668
Parking Lot	-	8,279
Quality Restaurant	654,060	184,200
Regional Shopping Center	17,370	17,055
Single Family Housing	7,594,480	2,538,270
Total	21,148,236	6,258,906

NOTE: ^(A) NUMBERS PROVIDED HERE MAY NOT ADD UP EXACTLY TO TOTAL DUE TO ROUNDING.

SOURCE: CAL EEMOD (v.2020.4.0).

As shown in Table ENERGY-1 and Table ENERGY-2, the Original Project's operational natural gas usage would be less than the Revised Project's operational natural gas usage, although the Original Project's operational electricity usage would be greater than the Revised Project's operational electricity usage. The Revised Project would include installation of Energy Star appliances (consistent with the requirements under the current version of California's Building Energy Efficiency Standards), and compliance with the Model Water Efficient Landscape Ordinance (as contained in the California Code of Regulations).

On-Road Vehicles (Operation)

The Original Project and the Revised Project would generate vehicle trips during their operational phases.

Original Project

Using fleet mix data provided by CalEEMod (v2020.4.0), and Year 2030 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, De Novo derived weighted MPG factors for operational on-road vehicles of approximately 29.0 MPG for gasoline vehicles. With this information, De Novo calculated as a conservative estimate that the Original Project (without mitigation incorporated) would generate vehicle trips that would use a total of approximately 7,119 gallons of gasoline fuel per day, on average, or 2,598,340 gallons of fuel per year.

Revised Project

Using fleet mix data provide by CalEEMod (v2020.4.0), and Year 2030 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, De Novo derived weighted MPG factors for operational on-road vehicles of approximately 29.0 MPG for gasoline vehicles. With this information, De Novo calculated as a conservative estimate that the Revised Project (without mitigation incorporated) would generate vehicle trips that would use a total of approximately 2,870 gallons of gasoline fuel per day, on average, or 1,046,637 gallons of fuel per year.

On-Road Vehicles (Construction)

The Original Project and the Revised Project would also generate on-road vehicle trips during project construction (from construction workers, vendors, and haulers). The Revised Project site is essentially flat, and it is anticipated that the Revised Project site can be balanced on site, meaning that there would be limited to no cut and fill (i.e., import/export). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2022 gasoline MPG factors provided by EMFAC2021. For the purposes of simplicity, it was assumed that all vehicles used gasoline as a fuel source (as opposed to diesel fuel or alternative sources).

Original Project

Table ENERGY-3, below, describes Original Project's gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the Original Project would occur during the building construction phase.

Table ENERGY-3: Original Project - On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	# of Days	Total Daily Worker Trips^(a)	Total Daily Vendor Trips^(a)	Total Hauling Trips^(a)	Gallons of Gasoline Fuel^(b)	Gallons of Diesel Fuel^(b)
Site Preparation	60	18	-	-	457	-
Grading	155	20	-	-	1,311	-
Building Construction	1550	565	219	-	18,519	22,554
Paving	110	15	-	-	698	-
Architectural Coating	110	113	-	-	263	-
Total	N/A	N/A	N/A	N/A	21,248	22,554

NOTE: ^(A) PROVIDED BY CALEEMOD. ^(B) SEE APPENDIX A FOR FURTHER DETAIL

SOURCE: CALEEMOD (v.2020.4.0); EMFAC2021.

Revised Project

Table ENERGY-4, below, describes Revised Project's gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road

mobile vehicle fuel used during the construction of the Revised Project would occur during the building construction phase.

Table ENERGY-4: Revised Project - On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	# of Days	Total Daily Worker Trips^(a)	Total Daily Vendor Trips^(a)	Total Hauling Trips^(a)	Gallons of Gasoline Fuel^(b)	Gallons of Diesel Fuel^(b)
Site Preparation	60	18	-	-	457	-
Grading	155	20	-	-	1,311	-
Building Construction	1550	431	107	-	14,127	11,019
Paving	110	15	-	-	698	-
Architectural Coating	110	86	-	-	200	-
Total	N/A	N/A	N/A	N/A	16,793	11,019

NOTE: ^(A) PROVIDED BY CALCEEMOD. ^(B) SEE APPENDIX A FOR FURTHER DETAIL

SOURCE: CALCEEMOD (v.2020.4.0); EMFAC2021.

Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during the construction phase. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed Project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO₂ emissions expected to be generated by the Revised Project (as provided by the CalEEMod output), and a CO₂ to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), the Original Project would use up to a total of approximately 97,189 gallons of diesel fuel for off-road construction vehicles (during the site preparation and grading phases of the Original Project). The Revised Project would use up to a total of approximately 96,506 gallons of diesel fuel for off-road construction vehicles (during the site preparation and grading phases of the proposed Project). Detailed calculations are provided in Appendix A.

Other

Both the Original Project and the Revised Project landscape maintenance activities would generally require the use of fossil fuel (i.e., gasoline) energy. For example, lawn mowers require the use of fuel for power. As an approximation, it is estimated that landscape care maintenance could require approximately eight individuals one full day per week, or 3,288 hours per year. Assuming an average of approximately 0.5 gallons of gasoline used per person-hour, the Revised Project would require the use of approximately 1,664 gallons of gasoline per year to power landscape maintenance equipment. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar project.

The Original Project and the Revised Project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site stationary sources (such as on-site natural gas generators) for electricity generation. In particular, the Revised Project residences would be required to install on-site solar PV, consistent with the latest State requirements.

Conclusion

The Revised Project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel) generated by the Revised Project, and from off-road construction activities associated with the Revised Project (e.g., diesel fuel). Each of these activities would require the use of energy resources. The Revised Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

The Revised Project would be in compliance with all applicable federal, state, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. PG&E has already achieved greater than a 33% mix of renewable energy resources in 2020, and is on track to achieve a minimum of a 50% mix of renewable energy resources by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards (“part 6”), would be applicable to the proposed project. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard) are improving vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

As a result, the Revised Project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the Revised Project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the Revised Project site, maintains sufficient capacity to serve the proposed project. The proposed Project would comply with all existing energy standards, including those established by the City of Stockton, and would not result in significant adverse impacts on energy resources. Therefore, the Revised Project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the CEQA Guidelines. This is a **less than significant** impact.

EIR ADDENDUM – CANNERY PARK EIR

3.7 GEOLOGY AND SOILS

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact Geo-1: 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	No	No	No	No
Impact Geo-2: Strong seismic ground shaking?	Less than Significant	No	No	No	No
Impact Geo-3: Seismic-related ground failure, including liquefaction?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact Geo-4: Landslides?	Less than Significant	No	No	No	No
Impact Geo-5: Result in substantial soil erosion or the loss of topsoil?	Less than Significant	No	No	No	No
Impact Geo-6: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact Geo-7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact Geo-8: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Less than Significant	No	No	No	No
Impact Geo-9: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to geology and soils. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts to geology and soils would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR geology and soils mitigation measure (listed below), which requires a licensed geotechnical or soils engineer to prepare a report for the project site prior to any building permits. This mitigation measure would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Soil Constraints

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall have a licensed geotechnical or soils engineer prepare a soil report for the project site prior to the issuance of any building permits. The report shall identify engineering limitations of the site soils and recommend measures to ensure that planned improvements will not be damaged by these limitations.

Mitigation Measure 2. Subdivision improvements and future industrial, commercial and residential development shall conform to applicable specifications of the soils report.

Environmental Impacts and Mitigation Measures

Responses GEO-1, GEO-2, GEO-4): The Revised Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and known surface expression of active faults does not exist within the Revised Project site. However, the Revised Project site is located within a seismically active region. The U.S. Geological Survey identifies the potential seismic source within 32.2 kilometers (20 miles) of the Project site. Three of the closest known faults classified as active by the California Geological Survey include the Vernalis Fault east of the Tracy, the San Joaquin Fault southeast of Tracy, and the Great Valley Thrust Fault System south of Tracy. Other faults that could potentially affect the proposed Project include the Midway Fault, the Midland Fault, the Black Butte Fault, Corral Hollow-Carnegie Fault, the Greenville Fault, and the Foothills Fault System.

Geologic Hazards

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture

Figure 15 shows earthquake maps near the Revised Project site. The property does not have known active faults crossing the Revised Project site, and the Revised Project site is not located within an Earthquake Fault Special Study Zone. Because no faults are located on the Project site, the potential for ground rupture (cracking or breaking of the ground during an earthquake) would be less than significant.

Ground Shaking

According to the California Geological Survey's Probabilistic Seismic Hazard Assessment Program, Stockton is considered to be within an area that is predicted to have a 10 percent probability that a seismic event would produce horizontal ground shaking of 10 to 20 percent within a 50-year period. This level of ground shaking correlates to a Modified Mercalli intensity of V to VII, light to strong. As a result of these factors the California Geological Survey has defined the entire county as a seismic hazard zone. The Uniform Building Code places all of California in the zone of greatest earthquake severity because recent studies indicate high potential for severe ground shaking.

To reduce the impact of seismic ground shaking on the development, the Revised Project would be required to be constructed using standard engineering and seismic safety design techniques of the California Building Code. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures would be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. The California Building Code, Title 24, Part 2, Chapter 16 addresses structural design and Chapter 18 addresses soils and foundations. Collectively, these state requirements, which have been adopted by the City of Stockton, include design standards and requirements that are intended to minimize impacts to structures in seismically active areas of California. Section 1613 specifically provides structural design standards for earthquake loads. Section 1803.5.11 and 1803.5.12 provide requirements for geotechnical investigations for structures assigned varying Seismic Design Categories in accordance with Section 1613. Additionally, the City of Stockton has adopted Design and Construction Standards and incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Landslides

The Revised Project site is not susceptible to landslides because the area is essentially flat. Some limited potential for slope instability risk could arise during grading and construction activities, where slopes could be over-steepened. However, this risk is mitigated by adhering to relevant California Building Code requirements. Additionally, according to the CGS Information Warehouse: Regulatory Maps, the site is not located within a Landslide and Liquefaction Zone. This is a less than significant impact.

Conclusion

In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. The California Building Code, Title 24, Part 2, Chapter 16 addresses structural design and Chapter 18 addresses soils and foundations. Collectively, these state requirements, which have been adopted by the City of Stockton, include design standards and requirements that are intended to minimize impacts to structures in seismically active areas of California. Section 1613 specifically provides structural design standards for earthquake loads. Section 1803.5.11 and 1803.5.12 provide requirements for geotechnical investigations for structures assigned varying Seismic Design Categories in accordance with Section 1613. Additionally, the City of Stockton has adopted Design and Construction Standards and incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level. Because all development in the Project site must be designed in conformance with these state and local standards and policies, any potential impact would be considered *less than significant*.

Responses GEO-3, GEO-6, GEO-7):

Liquefaction

The Revised Project site is relatively flat and, to date, the Seismic Hazards Zonation Program of the CGS has not identified any seismically-induced liquefaction or landslide zones in the City of Stockton, including the Project site. Furthermore, the Envision Stockton 2040 General Plan Update EIR identifies the Stockton Planning Area, including the Project site, is at low risk for liquefaction and landslides. Therefore, the probability of a landslide or liquefaction on the Project sites is low.

Lateral Spreading

Lateral spreading typically occurs on the surface of a slope and is oftentimes directly associated with areas of liquefaction. The Project site is relatively flat and there are no slopes on-site or within the surrounding area. Further, the Project site is not located within an area identified as having the potential for liquefaction. According to the Envision Stockton 2040 General Plan Update EIR, the Stockton Planning Area does not appear to be located atop unstable geologic materials that are prone to lateral spreading. Therefore, the potential for lateral spreading at the Revised Project site is also low.

Collapsible Soils

Collapsible soils or soil collapse occurs when any unsaturated soils go through a radical rearrangement of particles and greatly decreases in volume upon wetting, additional loading, or both. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial

fan and wash sediments have been deposited during rapid run-off events. As stated, the Project site is relatively flat and is located in the valley floor away from the bases of mountain ranges. Further, collapsible soils have not been identified as an issue in the Stockton area. According to the Envision Stockton 2040 General Plan Update EIR, the Stockton Planning Area does not appear to be located atop unstable geologic materials that are prone to collapsible soils. Therefore, the potential for soil collapse at the Revised Project site is also low.

Subsidence

Land subsidence is the gradual settling or sinking of an area with little or no horizontal motion due to changes taking place underground. It is a natural process, although it can also occur (and is greatly accelerated) as a result of human activities. Subsidence has not been identified as an issue in the Stockton area. According to the Envision Stockton 2040 General Plan Update EIR, the Stockton Planning Area does not appear to be located atop unstable geologic materials that are prone to subsidence. Therefore, the potential for subsidence at the Revised Project site is also low.

Expansive Soils

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of certain varieties of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

According to the NRCS Web Soil Survey, as shown in Figure 16, the soils in the Revised Project site have a high shrink-swell potential (due to their clayey composition). Therefore, measures to reduce potentially significant impacts related to expansive site soils would be necessary.

The California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 requires specific geotechnical evaluation when a preliminary geotechnical evaluation determines that expansive or other special soil conditions are present, which, if not corrected, would lead to structural defects. The City of Stockton also requires a final geotechnical evaluation to be performed at a design-level to ensure that the foundations, structures, roadway sections, sidewalks, and other improvements can accommodate the specific soils, including expansive soils, at those locations. Mitigation Measure GEO-1, presented below, provides the requirement for a final geotechnical evaluation in accordance with the standards and requirements outlined in the California Building Code, Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. The final geotechnical evaluation would include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures. The grading and improvement plans, as well as the storm drainage and building plans, are required to be designed in accordance with the recommendations provided in the final geotechnical evaluation.

Conclusion

With the implementation of mitigation measure contained within the Cannery Park EIR, the proposed Revised Project would have a ***less than significant*** impact relative to this topic.

Response GEO-5): The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of

vegetative cover; thus, there is the potential for erosion associated with construction activities or through the operational phase of a project.

The Revised Project site contains high clay content surface soils; therefore, the Project site would potentially be subject to water erosion. However, because the Project site is essentially flat, the erosion potential is slight. Regardless of the potential for erosion, there is always the potential for human caused erosion associated with construction activities or through the operational phase of a project. However, grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. Additionally, there is the potential for erosion associated with stormwater runoff throughout the operational phase of the Revised Project. The potential for erosion is associated with the design of the improvements, structures, and landscaping.

The Revised Project would be subject to the provisions of the City's Grading and Erosion Control Ordinance (Chapter 15.48 of the Stockton Municipal Code). The purpose of this Ordinance includes the regulation of grading activity on all property within the City of Stockton that results in the excavation of 50 cubic yards of soil. The Ordinance establish requirements for clearing and grubbing, grading, filling and excavation of land to minimize damage to surrounding property, public right-of-way, and degradation of water quality; controlling the discharge of sediments and pollutant turnoff from construction related activities to municipal separate storm drains; and reducing pollutants in stormwater discharges to the maximum extent practicable. Compliance with all applicable erosion control measures outlined in the City's Grading and Erosion Control Ordinance would assist in minimizing any impacts related to top soil erosion.

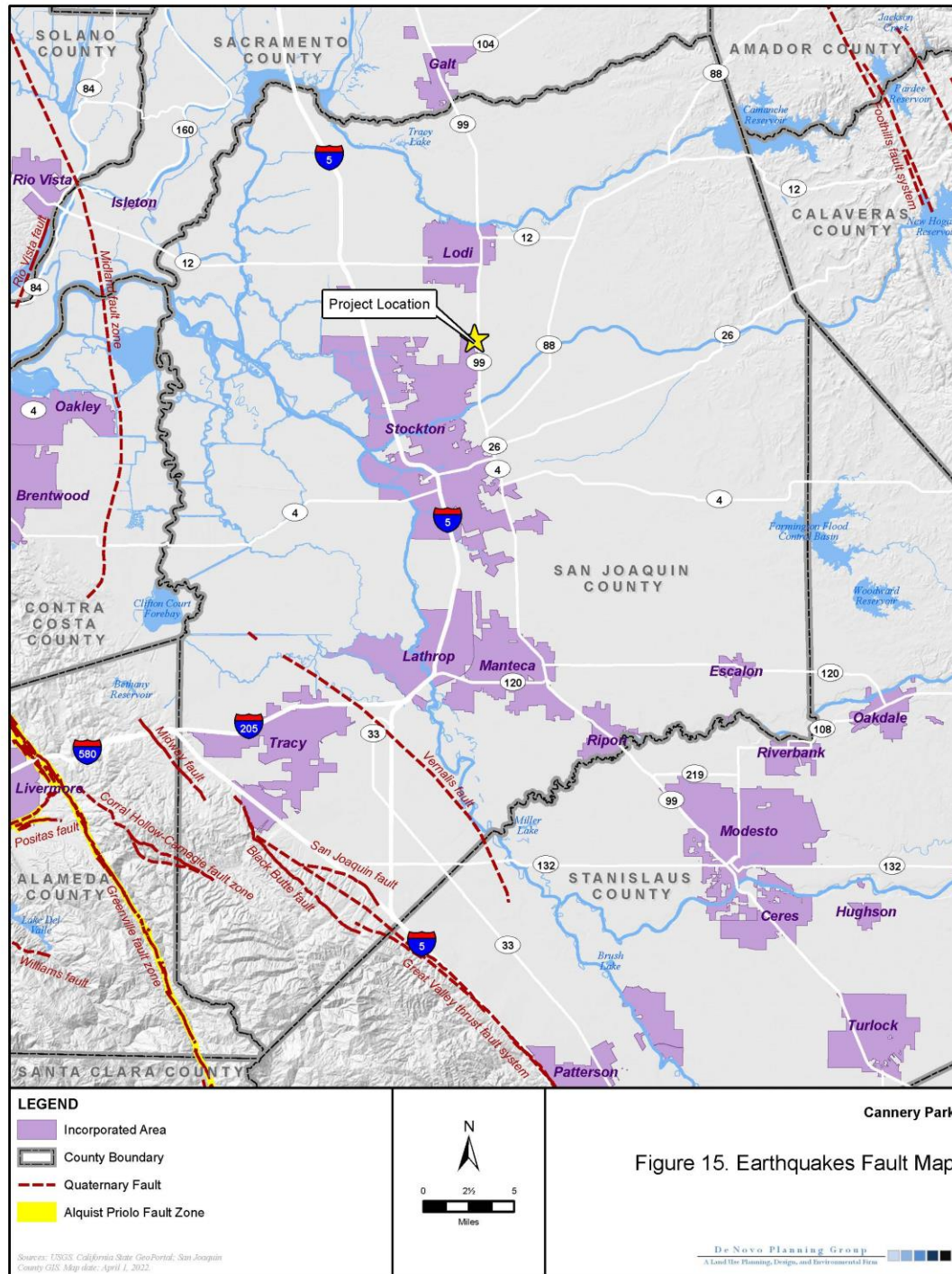
Additionally, in accordance with the NPDES Stormwater Program, projects in California must prepare a Stormwater Pollution Prevention Plan (SWPPP) containing Best Management Practices (BMPs) to reduce erosion and sediments to meet water quality standards. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover. The BMPs and overall SWPPP is reviewed by the Regional Water Quality Control Board as part of the permitting process. The Revised Project would be required an approved SWPPP for the Revised Project designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and are existing regulatory requirements.

Overall, compliance with the City's Grading and Erosion Control Ordinance and mitigation measures provided in the Cannery Park EIR, would ensure that the Revised Project would have a ***less than significant*** impact relative to this topic.

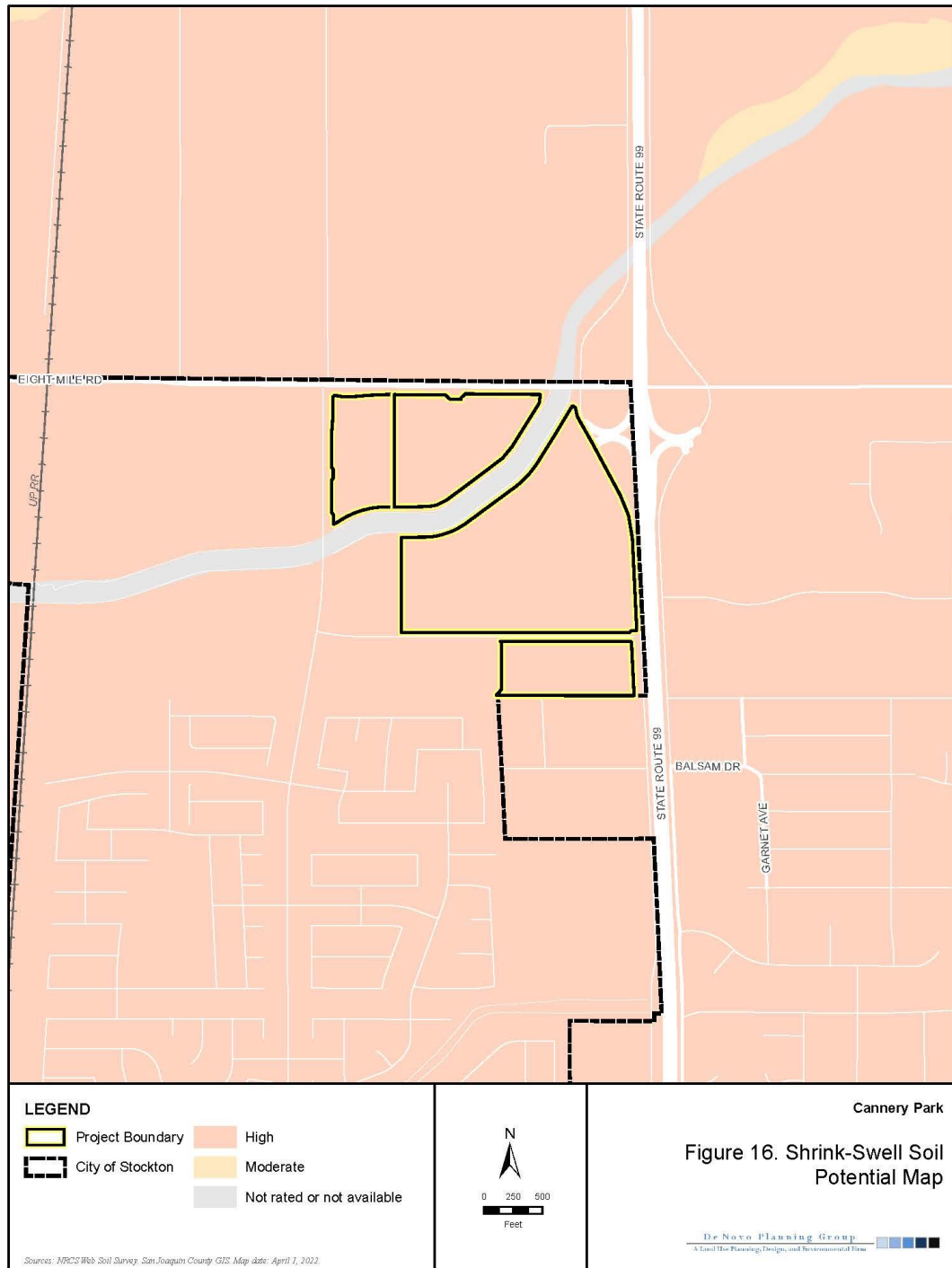
Response GEO-8): The Revised Project has been designed to connect to the existing City sewer system and septic systems will not be used. Therefore, ***no impact*** would occur related to soils incapable of adequately supporting the use of septic tanks.

Response GEO-9): The Revised Project site is the same physical site that was evaluated for cultural resources, including paleontological resources, as part of the EIR for the Original Project. The EIR found that development would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. There is no record of paleontological resources or sites located on the Revised Project site. Additionally, unique geologic features are not located on the Revised Project site. This is a *less than significant* impact.

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3.8 GREENHOUSE GAS EMISSIONS

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	N/A	No	No	No	No
Impact GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	N/A	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to greenhouse gases. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The Revised Project would result in reduced impacts to greenhouses gases compared with the impacts associated with the Original Project. Although greenhouse gases were not analyzed in the Original Project EIR, since greenhouse gases were not a required topic when the Original Project EIR was published, Table GHG-1 and Table GHG-3 show the Original Project construction and operational emissions (respectively). Table GHG-2 and Table GHG-4 show the Revised Project construction and operational emissions (respectively). As shown below (see Table GHG-1 through Table GHG-4, below, for detail), the Revised Project would generate a net decrease relative to GHG emissions compared to the Original Project. Therefore, no new mitigation measures are required for the Revised Project.

Environmental Impacts and Mitigation Measures

Responses GHG-1 – GHG-2): The SJVAPCD has evaluated different approaches for estimating impacts, and summarizing potential GHG emission reduction measures. The SJVAPCD staff has concluded that *“existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change.”* This is readily understood when one considers that global climatic change is the result of the sum total of GHG emissions, both man-made and natural that occurred in the past; that is occurring now; and will occur in the future. The effects of project specific GHG emissions are cumulative, and unless reduced or mitigated, their incremental contribution to global climatic change could be considered significant.

The *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD, 2015) provides an approach to assessing a project’s impacts on greenhouse gas emissions by evaluating the Revised Project’s emissions to the “reduction targets” established in ARB’s AB 32 Scoping Plan. For instance, the SJVAPCD’s guidance recommends that projects should demonstrate that *“project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB’s AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.”*

Subsequent to the SJVAPCD’s approval of the *Final Draft Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015), the California Supreme Court issued an opinion that affects the conclusions that should/should not be drawn from a GHG emissions analysis that is based on consistency with the AB 32 Scoping Plan. More specifically, in *Center for Biological Diversity v. California Department of Fish and Wildlife*, the Court ruled that showing a “project-level reduction” that meets or exceeds the Scoping Plan’s overall statewide GHG reduction goal is not necessarily sufficient to show that the proposed Project’s GHG impacts will be adequately mitigated: *“the Scoping Plan nowhere related that statewide level of reduction effort to the percentage of reduction that would or should be required from individual projects...”* According to the Court, the lead agency cannot simply assume that the overall level of effort required to achieve the statewide goal for emissions reductions will suffice for a specific project.

Given this Court decision, reliance on a 29 percent GHG emissions reduction from projected BAU levels compared to the proposed Project’s estimated 2020 levels as recommended in the SJVAPCD’s guidance documents is not an appropriate basis for an impact conclusion in the MND. Given that the SJVAPCD staff has concluded that *“existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change,”* this MND instead relies on a qualitative approach for this analysis. The approach still relies on the Appendix G of the CEQA Guidelines thresholds which indicate that climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

These two CEQA Appendix G threshold questions are provided within the Initial Study checklist and are the thresholds used for the subsequent analysis. The focus of the analysis is on the proposed Project's generation of GHG emissions in comparison to the Original Project.

The Original Project and the Revised Project would generate GHGs during the construction and operational phases. The primary source of construction-related would result from emissions of CO₂ associated with the construction of the proposed project, and worker vehicle trips. Both the Original Project and the Revised Project would require limited grading, and would also include site preparation, building construction, and architectural coating phases. The operational phase would generate GHGs primarily from the operational vehicle trips and building energy (electricity and natural gas) usage. Other sources of GHG emissions would be minimal. Construction-related GHGs are provided in Table GHG-1 and Table GHG-2, below, for the Original Project and the proposed Project, respectively. Additionally, operational-related GHGs are provided in Table GHG-3 and Table GHG-4, below, for the Original Project and the Revised Project, respectively.

Construction Emissions

Table GHG-1: Original Project Construction GHG Emissions (Metric Tons/Year)

Year	Bio-CO₂	NBio-CO₂	Total CO₂	CH₄	N₂O	CO₂e
2022	0	179.1785	179.1785	0.0564	0.0002	180.6365
2023	0	1,021.9134	1,021.9134	0.1580	0.0490	1,040.4749
2024	0	1,295.0919	1,295.0919	0.0871	0.0945	1,325.4144
2025	0	1,265.5184	1,265.5184	0.0850	0.0917	1,294.9600
2026	0	1,241.9873	1,241.9873	0.0839	0.0894	1,270.7193
2027	0	1,219.1400	1,219.1400	0.0829	0.0871	1,247.1718
2028	0	1,193.5523	1,193.5523	0.0817	0.0847	1,220.8374
2029	0	640.7267	640.7267	0.0714	0.0364	653.3426
2030	0	29.8860	29.8860	0.0008	0.0005	30.0521
Maximum	0	1,295.0919	1,295.0919	0.1580	0.0945	1,325.4144

SOURCE: CALFEEMOD (v.2020.4.0).

Table GHG-1: Revised Project Construction GHG Emissions (Metric Tons/Year)

<i>Year</i>	<i>Bio-CO₂</i>	<i>NBio-CO₂</i>	<i>Total CO₂</i>	<i>CH₄</i>	<i>N₂O</i>	<i>CO₂e</i>
2022	0	179.1785	179.1785	0.0564	0.0002	180.6365
2023	0	824.1367	824.1367	0.1556	0.0259	835.7486
2024	0	910.7354	910.7354	0.0828	0.0495	927.5586
2025	0	891.1358	891.1358	0.0810	0.0479	907.4375
2026	0	875.8802	875.8802	0.0802	0.0466	891.7713
2027	0	861.3555	861.3555	0.0795	0.0453	876.8511
2028	0	844.8450	844.8450	0.0785	0.0440	859.9249
2029	0	489.6585	489.6585	0.0700	0.0190	497.0656
2030	0	24.9414	24.9414	0.0007	0.0004	25.0700
Maximum	0	910.7354	910.7354	0.1556	0.0495	927.5586

SOURCE: CALEEMOD (v.2020.4.0).

Operational Emissions

Table GHG-3: Original Operational GHG Emissions (Metric Tons/Year)

<i>Category</i>	<i>Bio-CO₂</i>	<i>NBio-CO₂</i>	<i>Total CO₂</i>	<i>CH₄</i>	<i>N₂O</i>	<i>CO₂e</i>
Area	0	120.2615	120.2615	0.0054	0.0021	121.0359
Energy	0	2,203.8879	2,203.8879	0.2306	0.0421	2,222.1943
Mobile	0	23,059.3187	23,059.3187	1.3736	1.2810	23,475.3951
Waste	272.0180	0.0000	272.0180	16.0758	0.0000	673.9132
Water	32.7926	72.3641	105.1567	3.3798	0.0810	213.7745
Total	304.8106	25,455.8321	25,760.6428	21.0652	1.4062	26,706.3129

SOURCE: CALEEMOD (v.2020.4.0).

Table GHG-4: Revised Project Operational GHG Emissions (Metric Tons/Year)

<i>Category</i>	<i>Bio-CO₂</i>	<i>NBio-CO₂</i>	<i>Total CO₂</i>	<i>CH₄</i>	<i>N₂O</i>	<i>CO₂e</i>
Area	323.5795	274.7760	598.3556	1.5249	0.0049	637.9391
Energy	0	1,717.1723	1,717.1723	0.1162	0.0322	1,729.6806
Mobile	0	9,459.1432	9,459.1432	0.6507	0.5744	9,646.5699
Waste	201.7345	0.0000	201.7345	11.9222	0.0000	499.7886
Water	18.0472	37.7643	55.8114	1.8597	0.0445	115.5682
Total	543.3612	11,488.8558	12,032.2169	16.0737	0.6560	12,629.5463

SOURCE: CALEEMOD (v.2020.4.0).

As shown in the above tables, the Revised Project would generate fewer GHG emissions than the Original Project. Therefore, the proposed Project would generate a net benefit relative to GHG emissions compared to the Original Project. Therefore, the Revised Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations. Impacts related to greenhouse gases are ***less than significant***.

EIR ADDENDUM – CANNERY PARK EIR

3.9 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant	No	No	No	No
Impact HAZ-2: 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	No	No	No	No
Impact HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than Significant	No	No	No	No
Impact HAZ-4: 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 with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Less than Significant	No	No	No	No
Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant	No	No	No	No
Impact HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to hazards and hazardous materials. The Revised Project requests a General Plan Amendment and rezone to revise

the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts to hazards and hazardous materials would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below). These mitigation measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Hazardous and Toxic Materials and Sites

Mitigation Measure 1. Soils identified by Harding ESE (2002) as posing a potential threat to groundwater quality shall be excavated and transported to an appropriate disposal facility. Alternatively, these soils may be remediated by using on-site bio-remediation techniques until the subject constituent concentrations are reduced below levels that would no longer threaten water quality.

Mitigation Measure 2. Lead-contaminated soils in the former can dump area shall be removed and disposed in accordance with applicable local, state and federal laws and regulations. Cleanup activities shall occur in coordination with, and with the San Joaquin County Environmental Health Department, California Regional Water Quality Control Board, and/or California EPA, Department of Toxic Substances Control, as appropriate.

Mitigation Measure 3. Removal or demolition of any structures containing asbestos-containing materials or lead-based paint, as identified in the Phase II study (Harding ESE 2002), shall be removed and disposed of in accordance with local, state, and federal laws and regulations.

Mitigation Measure 4. Existing water wells will not be developed for further use, and monitoring wells, shall be closed in accordance with San Joaquin County Environmental Health Department guidelines.

Environmental Impacts and Mitigation Measures

Responses HAZ-1 – HAZ-2): The Revised Project would amend the General Plan and rezone the Revised Project site to remove commercial uses and add residential uses to the Revised Project site. The Project site is surrounded by existing residential, industrial, and open space uses. The proposed commercial and residential land uses do not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of

common hazardous materials such as household cleaners, paint, engine oil, and similar household substances. The operational phase of the proposed Project does not pose a significant hazard to the public or the environment.

The Revised Project site has historically been used for agricultural purposes. Like most agricultural operations in the Central Valley, agricultural practices in the area have used agricultural chemicals as a standard practice.

Hazardous Materials Investigations at the Original Project

The EIR for the Original Project, which included 489.40 acres, inclusive of the Revised Project site acreage (99.88 acres), analyzed potential hazard impacts within the overall Original Project. The EIR for the Original Project identified that the Original Project would not involve significant exposure to hazards from traffic operations or hazardous materials spills on SR 99, and that the Original Project would not be exposed to any significant safety risks from these sources.

Additionally, although the EIR for the Original Project identified that although the Original Project would be exposed to risks associated with train accidents, some of which may involve hazardous material releases, statistical information indicates the risk of accidents or incidents is relatively low. Moreover, the Project site for the Revised Project would be located distant from the UPRR railroad tracks located to the west of the Revised Project site, approximately 0.5 miles from the Revised Project site at its closest location.

Separately, the EIR for the Original Project also identified that, due to its industrial use history, the former cannery site for the Original Project and surrounding lands have been subject to numerous environmental site assessments (ESAs). The ESA for the Original Project identified concerns associated with 1) a can and rubbish burn dump located south of Bear Creek, 2) total dissolved solids levels in groundwater samples, 3) potential contamination associated with above-ground diesel fuel storage tanks, 4) potential contamination of ditches by wastewater flows and 5) asbestos-containing materials and lead-based paints. However, it should be noted that most of these concerns were identified within areas outside of the Revised Project site for the Revised Project.

Overall, the Phase I and II investigations of the former cannery site conducted for the EIR for the Original Project, which included the Project site, revealed relatively few environmental conditions requiring additional action. Sampling and laboratory testing of project site soils for organochlorine pesticides found trace levels of pesticide residues in eight of 10 samples, but pesticide levels were well below Preliminary Remediation Goals for residential uses, at the time the Phase I and II investigations were conducted.

A former drainage ditch and associated waste soil removed from the ditch was identified as having petroleum product and BTEX contamination that would pose a potential threat to water quality. The Phase II study recommended that these materials be removed and disposed at an appropriate disposal site.

The Phase II study identified numerous building materials containing ACMs and building components coated with lead-based paints. The Phase II study indicated that these materials would need to be properly removed during demolition of these structures. The recommendations of the Phase II study are accounted for in Cannery Park EIR (Original Project) mitigation measures.

Conclusion

Existing regulations require a Soils Management Plan (SMP) to be submitted and approved by the San Joaquin County Department of Environmental Health if any construction activities require the handling of hazardous materials, including fuels, paints, cleaners, solvents, etc. SMPs are required to be posted and maintained onsite throughout the duration of construction.

Existing regulations require a Hazardous Materials Business Plan (HMBP) to be submitted and approved by the San Joaquin County Environmental Health if any activities require the handling of hazardous materials, or generation of hazardous waste. This requires the user to register with the CUPA as a generator of hazardous waste, obtain an EPA ID# and accumulate, ship and dispose of the hazardous waste per Health and Safety Code Ch. 6.5. (California Hazardous Waste Control Law).

Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials and implementation of the mitigation measures contained in the Cannery Park EIR, would reduce potential impacts that could occur due to the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with construction activities within the Project site to a ***less than significant*** level.

Response HAZ-3): The Project site is located over ¼ mile from an existing school. The nearest school to the Revised Project site is the Aspire Vincent Shalvey Academy, located 0.27 miles from the Project site, at its closest point. Because the Project site is beyond the ¼-mile radius of a school, Implementation of the Revised Project would result in ***no impact*** relative to this topic.

Response HAZ-4): According the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the near vicinity of the Revised Project site. The Revised Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. The nearest site identified within these databases are located approximately 1.1 miles to the south of the Revised Project site:

- Morada Lane Secondary Schools (site 39820003). The approximately 14-acre site is occupied by modular portable classrooms, parking and landscaped areas, surrounded by residential properties. Prior to school construction, the site was utilized for agricultural purposes, indicating the potential for pesticide application. The Site was part of farmland from 1940 until approximately 1993. South of the Site is newly developed homes and open fields; on the east are four baseball fields, and on the west and north is open grassland. The potential contaminants of concern are not identified. This site has a current status of Inactive.

The Revised Project site is not directly affected by these sites. Implementation of the Revised Project would result in a ***less than significant*** impact relative to this environmental topic.

Response HAZ-5): The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. The Project site is not located within the vicinity of a private airstrip or public airport. The closest airport or airstrip is the Wallom Field-8CA8, located approximately 2.9 miles east of the Revised Project site. Implementation of the Revised Project would have a ***less than significant*** impact with regards to this environmental issue.

Response HAZ-6): The Office of Emergency Services (OES) maintains an Emergency Operations Plan (EOP) that serves as the official Emergency Plan for San Joaquin County. It includes planned operational functions and overall responsibilities of County Departments during an emergency situation. The Emergency Plan also contains a threat summary for San Joaquin County, which addresses the potential for natural, technological and human-caused disasters (County Code, Title 4-3007).

The County OES also prepared a Hazardous Materials Area Plan (§2720 H&S, 2008) that describes the hazardous materials response system developed to protect public health, prevent environmental damage and ensure proper use and disposal of hazardous materials. The plan establishes effective response capabilities to contain and control releases, establishes oversight of long-term cleanup and mitigation of residual releases, and integrates multi-jurisdiction and agency coordination. This plan is now implemented by the San Joaquin County Environmental Health Department.

The San Joaquin County Environmental Health Department maintains a Hazardous Materials Management Plan/ Hazardous Materials Business Plan (HMMP/HMBP). The HMMP/HMBP describes agency roles, strategies and processes for responding to emergencies involving hazardous materials. The Environmental Health Department maintains a Hazardous Materials Database and Risk and Flood Maps available to the public on its website.

In San Joaquin County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The Revised Project does not include any actions that would impair or physically interfere with any of San Joaquin County’s emergency plans or evacuation routes. Future uses on the Revised Project site will have access to the County resources that establish protocols for safe use, handling and transport of hazardous materials. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Implementation of the proposed Project would have a **less than significant** impact with regards to this environmental issue.

Response HAZ-7): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point. The City has areas with an abundance of flashy fuels (i.e., grassland) in the outlying residential parcels and open lands that, when combined with warm and dry summers with temperatures often exceeding 100 degrees Fahrenheit, create a situation that results in higher risk of wildland fires. Most wildland fires are human caused, so areas with easy human access to land with the appropriate fire parameters generally result in an increased risk of fire.

The City of Stockton contains areas with “moderate” and “non-wildland fuel” ranks. The areas warranting “moderate” fuel ranks possess combustible material in sufficient quantities combined with topographic characteristics that pose a wildfire risk. CalFire data for the areas immediately surrounding the Project site also include “moderate” and “non-wildland fuel” ranks. The Project site is located in an area with a “Local Responsibility Zone (LRA) Unzoned” rank. The Project site is also not located on a steep slope, and the Project site is essentially flat. The Revised Project site is also located in an urban area, with existing or future urban development located on all sides. Therefore, this is a **less than significant** impact and no mitigation is required.

EIR ADDENDUM – CANNERY PARK EIR

3.10 HYDROLOGY AND WATER QUALITY

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact HYD-2: 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	No	No	No	No
Impact HYD-3: Result in substantial erosion or siltation on- or off-site;	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact HYD-4: Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact HYD-5: 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	Less than Significant	No	No	No	No
Impact HYD-6: Impede or redirect flood flows?	Less than Significant	No	No	No	No
Impact HYD-7: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less than Significant	No	No	No	No
Impact HYD-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to hydrology and water quality. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts to hydrology and water quality impacts would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below). These mitigation measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Surface Water Features

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall design all structures to be located within the Bear Creek floodway to avoid significant backwater effects, as defined by the State Reclamation Board.

Mitigation Measure 2. Proposed improvements within the Bear Creek floodway shall be subject to the approval of the City Engineer and the Community Development Director as well as state and federal permit agencies with jurisdiction, including the US Army Corps of Engineers, the State Reclamation Board and the California Department of Fish and Game.

Mitigation Measure 3. The owners, developers and/or successors-in-interest shall design all project improvements requiring crossings of Woodbridge Irrigation District (WID) facilities to the specifications of WID. All such facilities shall be subject to WID, and the Community Development Director's review and approval.

Water Quality Degradation

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall demonstrate compliance with City Code Sections 7-859, 7-859.1 and 7-859.2 to the Municipal Utilities Department to insure that sufficient post-construction storm water pollution prevention practices have been incorporated into the project design. This would include required compliance with the City's Stormwater Quality Control Criteria Plan.

Mitigation Measure 2. The owners, developers and/or successors-in-interest shall submit a Storm Water Pollution Prevention Plan to the Municipal Utilities Department that includes both construction stage and permanent storm

water pollution prevention practices. This Plan must be developed during the project design phase and submitted and approved prior to the start of construction.

Environmental Impacts and Mitigation Measures

Response HYD-1): Implementation of Revised Project would not violate any water quality or waste discharge requirements. Construction activities including grading could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of soil and could adversely affect water quality in nearby surface waters. The RWQCB requires a project-specific SWPPP to be prepared for each project that disturbs an area one acre or larger. The SWPPP is required to include project specific best management measures that are designed to control drainage and erosion. The SWPPP and the project-specific drainage plan would reduce the potential for the proposed Project to violate water quality standards during construction.

A Project Stormwater Quality Control Plan must be submitted for review and approval by the City of Stockton Department of Municipal Utilities. In particular, the proposed Project Stormwater Quality Control Plan will need to specify BMPs the proposed Project will use and design specifications for selected BMPs. This would ensure that the Revised Project to be consistent with regulatory requirements, which would ensure that the proposed Project would have a *less than significant* impact on operation-related water quality.

Response HYD-2): The Revised Project site is located in the Eastern San Joaquin Groundwater Basin. Much of the groundwater recharge in the basin occurs in the sand and gravels along the San Joaquin River from Sierra snowmelt flowing downstream. Precipitation in the region is 13.81 inches, most of which falls between November through April. A portion of this annual rainfall infiltrates the soil and groundwater basin, while a portion is discharged downstream into the Delta. Since the building coverage ratio for residential uses is much less than for commercial uses, and given that the Revised Project would increase residential uses (i.e. housing) and reduce commercial uses overall, it is anticipated that the Revised Project would increase the amount of pervious surfaces within the Revised Project site compared to that of the Original Project. For example, the single-family residential uses associated with the Revised Project would include extensive pervious areas such as front- and backyards, which would promote increase infiltration of groundwater, compared with the minimal amount of pervious areas within the commercial uses associated with the Original project. Therefore, the Revised Project would facilitate on-site groundwater recharge better than the Original Project, overall.

Additionally, similar to the Original Project, the Revised Project grading design directs onsite stormwater runoff from the area north of Bear Creek toward several storm drain inlets located throughout the Revised Project area. These inlets would collect stormwater runoff into a connected underground storm drain piping system that would convey the runoff to a point of connection to the existing offsite storm drain piping east of the Holman Road and Tri-Valley Drive intersection. Both the proposed piping system and the existing offsite piping system are sized to accommodate the Revised Project runoff. From this point of connection, the existing storm drain system would continue conveying the Revised Project runoff west to an existing storm drainage basin located west of the Project site and north of Bear Creek. All stormwater from the area north of Bear Creek would be directed to the existing stormwater basin. Stormwater within the existing basin would either infiltrate into existing soils as it does in the pre-development condition, and/or discharge into Bear Creek via a new stormwater pump station. Stormwater from the area south of Bear Creek would be directed to the proposed storm drainage basin (Lot B) as shown on the Tentative Map. Stormwater from this storm drainage basin would be discharged into the existing 30-inch City storm drain located

within existing PFC Jesse Mizener Street. The Revised Project would incorporate site design measures, landscape features, and approved engineered treatment facilities for storm water quality treatment and for retention or detention of storm water to reduce post-development runoff discharge rates and pollutants consistent with the *City of Stockton NPDES SWMP and the City of Stockton and County of San Joaquin Stormwater Quality Control Criteria Plan*.

The City of Stockton Metropolitan Area (COSMA) has three water retailers including the City of Stockton Municipal Utilities District (COSMUD), California Water Service Company (Cal Water), and San Joaquin County within their respective service areas. According to the Water Supply Assessment (WSA) prepared for the Revised Project, the Revised Project site will receive its water from the COSMUD, which relies on purchased water from the Calaveras, Stanislaus, and Mokelumne Rivers; surface water from the San Joaquin Delta; and groundwater. According to the WSA, projected potable water demands for buildout of the Revised Project would total approximately 192 acre-feet per year (AFY). Pursuant to California Water Code Section 10910(4) and based on the technical analyses described in the WSA, the WSA demonstrates that the COSMUD existing and additional planned future water supplies are sufficient to meet the COSMUD existing water demands, including those future water demands associated with the Revised Project. That is, sufficient water supplies exist to meet the Revised Project's build-out water demand as well as all existing and reasonably foreseeable water demands. As such, implementation of the Revised Project would have a ***less than significant*** impact relative to this topic.

Responses HYD-3 - HYD-6): When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flow off the Project site as storm water runoff.

The infiltration and runoff process is altered when a site is developed. Buildings, sidewalks, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding if adequate storm drainage facilities are not provided.

A portion of Bear Creek is located between Project site parcels. However, development would occur with a substantial buffer between Bear Creek and the proposed developments. Stormwater from the area south of Bear Creek will be directed to the basin (Lot A) as shown on the Tentative Map, which will either be discharged into Bear Creek, into the Woodbridge Irrigation District South Main Canal, or into the existing 30-inch City storm drain in PFC Jesse Mizener. Any discharge to Bear Creek would be performed under a discharge permit. Other than the discharge of stormwater to Bear Creek, the Revised Project would not alter or adversely impact offsite drainage facilities.

The Revised Project would increase impervious surfaces throughout the Revised Project site. The Revised Project would require the installation of storm drainage infrastructure to ensure that storm waters properly drain from the Revised Project site. The proposed storm drainage plan includes an

engineered network of storm drain lines, manholes, inlets, and water quality basins. The storm drainage plan was designed and engineered to ensure proper construction of storm drainage infrastructure to control runoff and prevent flooding, erosion, and sedimentation. The Municipal Utilities Department reviews all storm drainage plans as part of the improvement plan submittal to ensure that all facilities are designed to the City's standards and specifications. The Municipal Utilities Department also reviews all storm drainage plans to ensure that post-project runoff does not exceed established limitations. The Municipal Utilities Department's review of pre- and post-project runoff is intended to ensure that the capacity of the existing storm drainage system is not exceeded. This determination is ultimately made by the Municipal Utilities Department during the improvement plan review and approval.

Additionally, as described in the EIR for the Original Project, the Revised Project is required to demonstrate compliance with the City's Municipal Code to ensure sufficient post-construction storm water pollution practices have been incorporated into the Revised Project design, including compliance with the City's Stormwater Quality Control Criteria Plan. The proposed Project is also required to submit a SWPPP and a Project Stormwater Quality Control Plan, as provided under Mitigation Measure GEO-2 and Mitigation Measure HYD-1, respectively, which includes both construction stage and permanent storm water pollution prevention practices.

The proposed Project Stormwater Quality Control Plan will require the construction of new storm water drainage facilities on the Revised Project site; however, the construction of these facilities would not substantially alter the existing drainage pattern of the area, or alter the course of a stream or river, in a manner that would result in substantial erosion or siltation, substantially increase the rate or amount of surface runoff in a manner that would result in flooding, or create or contribute runoff water which would exceed the capacity or existing or planned drainage systems or provide substantial additional sources of polluted runoff. The Revised Project would also not conflict with any water control quality plan or sustainable groundwater management plan.

Overall, compliance with Federal, State, and local standards and regulations as well as implementation of mitigation measures contained with the Canner Park EIR would ensure that the Revised Project would not result in substantial erosion, siltation, surface runoff, flooding, or polluted runoff and that the impact would be *less than significant*.

Response HYD-7 – HYD-8): The risks of flooding hazards on the Revised Project site and immediate surroundings are primarily related to large, infrequent storm events. These risks of flooding are greatest during the rainy season between November and April. Flooding events can result in damage to structures, injury or loss of human and animal life, exposure to waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater.

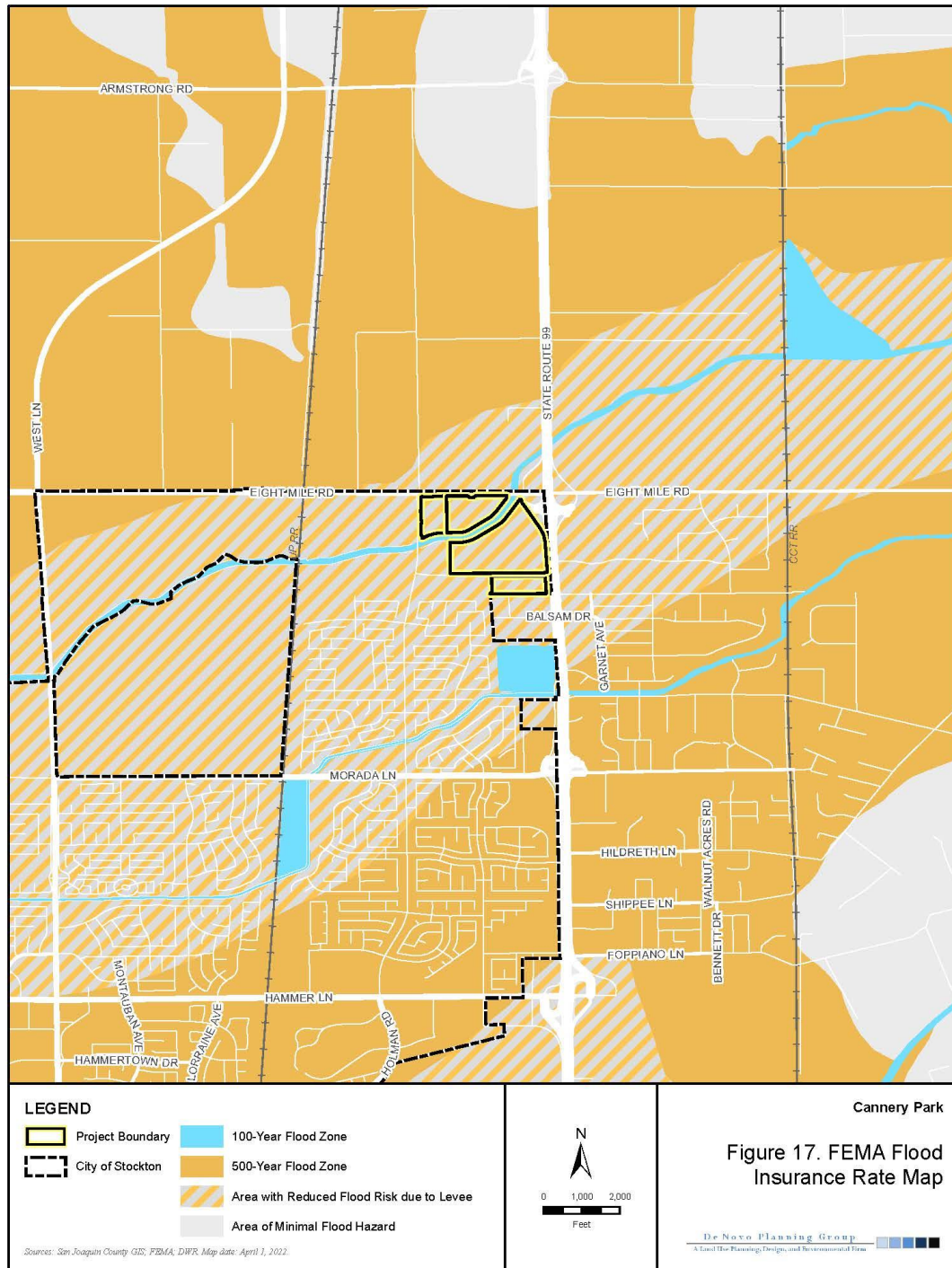
The Revised Project site is located outside the 100- year flood zone, but within the 500-year flood zone. However, the Revised Project site is located in an area of reduced flood risk due to a levee, as shown in Figure 17. Therefore, the Revised Project site is categorized as an area with minimal risk of flooding.

According to the 200-year flood map maintained by the San Joaquin County Public Works, portions of the Revised Project site fall have a 200-year base flood elevation (BFE) of 3 feet or less in all areas to be developed. This qualifies the Revised Project site under the "Shallow Flooding Exemption" under the City of Stockton's Criteria for Development in the 200-year Floodplains.

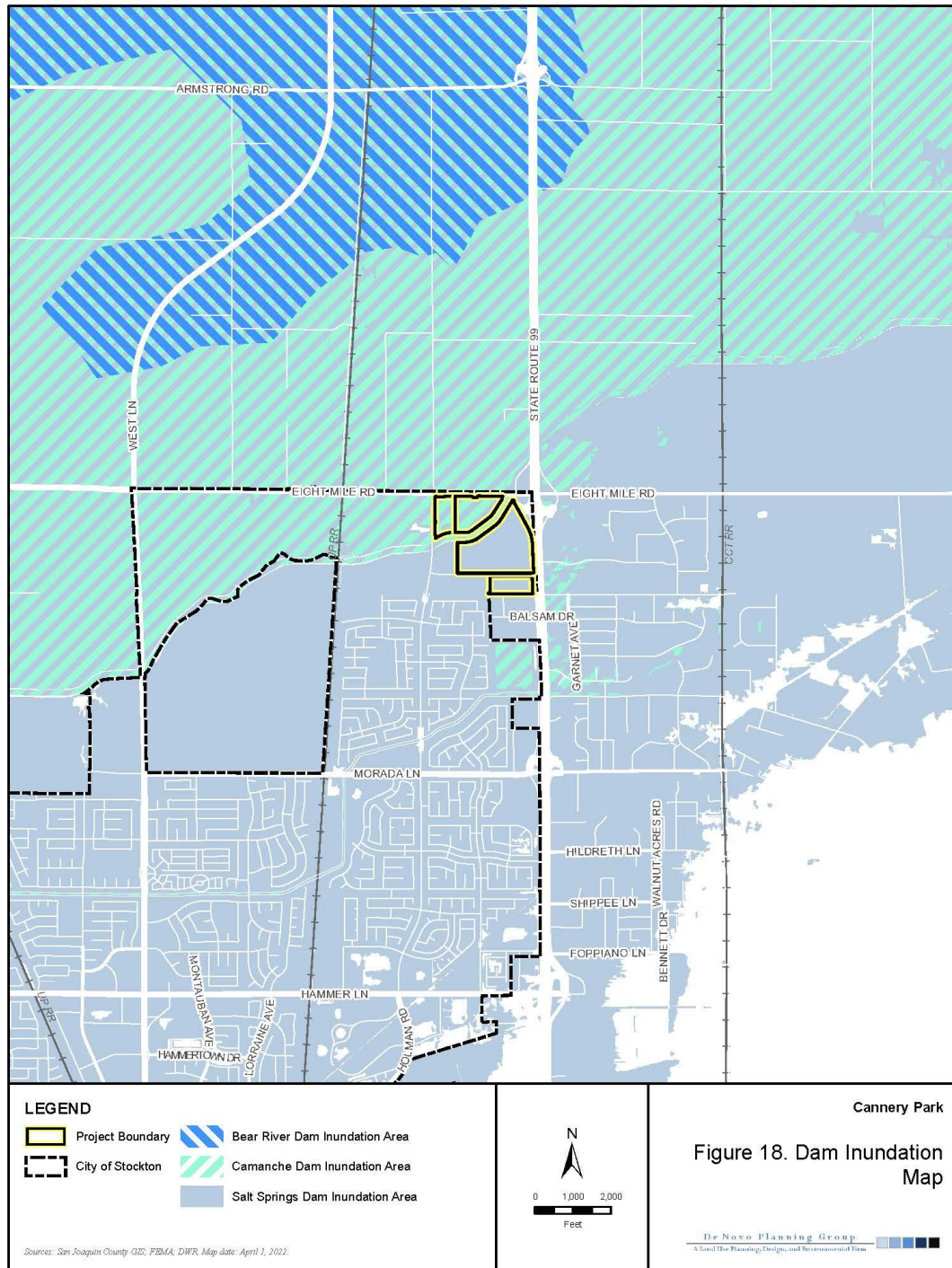
As shown in Figure 18, the Revised Project site is located within a dam inundation area for the Salt Springs dam, and the northern parcels of the Project site are located within a dam inundation area for the Camanche dam. Dam failure is generally a result of structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam. Larger dams that are higher than 25 feet or with storage capacities over 50 acre-feet of water are regulated by the California Dam Safety Act, which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring these dams. The Act also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury as a result of dam failure. The County Office of Emergency Services is responsible for developing and implementing a Dam Failure Plan that designates evacuation plans, the direction of floodwaters, and provides emergency information. Regular inspection by DSD and maintenance by the dam owners ensure that the dams are kept in safe operating condition. As such, failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

The Revised Project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam. Revised The Project site is not anticipated to be inundated by a tsunami because it is located approximately 60 miles away from the Pacific Ocean which is the closest ocean waterbody. The Revised Project site is not anticipated to be inundated by a seiche because it is not located in close proximity to a water body capable of creating a seiche. The level of risk regarding this environmental topic is the same as the Original Project.

Implementation of the Revised Project would have a ***less than significant*** impact relative to the risk of release of pollutants due to project inundation by flood hazards, seiches, and tsunamis, or the potential to alter the course of a stream or river in a manner that would impede or redirect flood flows.



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EIR ADDENDUM – CANNERY PARK EIR

3.11 LAND USE AND PLANNING

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact LU-1: Physically divide an established community?	Less than Significant	No	No	No	No
Impact LU-2: 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 with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect land use and planning. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The land use impacts were identified and discussed in the Cannery Park EIR. The Original Project anticipated industrial and commercial land uses to be developed on the Revised Project site. The Revised Project site is within the footprint of the Original Project Site and has the same physical environmental impacts. The Revised Project modifies the land use within the Revised Project site, but that does not change the physical environmental impacts on this topic. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below). These mitigation measures would be required by the project revisions and would ensure that there are no land use conflicts, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions. The Revised Project would not result in any new potential land use impacts and would not increase the significance of any land use impacts identified in the Original Project. Additionally, there are no new land use impacts beyond what was addressed in the Cannery Park EIR.

Mitigation Measures adopted with the Cannery Park EIR

Land Use Conflicts

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall submit proposed commercial development site plans, reflecting the following provisions, to the City of Stockton for review and approval in accordance with applicable ordinances, standards and guidelines. Commercial development plans shall conform to applicable ordinances, standards and guidelines as well as the requirements of the Development Agreement and mitigation measures specified in the EIR, as determined by the Community Development Director and other department heads, as applicable.

Mitigation Measure 2. Wherever feasible, as determined by the Community Development Director, proposed commercial sites shall be separated from residential uses or other noise-sensitive land uses by a public street, a private access way or an equivalent buffer (e.g., Bear Creek). With a private access way, a backup wall and 15- foot landscaping strip shall be provided between the private access and the adjoining residential property, as provided in Mitigation Measures 3 and 4 below.

Mitigation Measure 3. The owners, developers and/or successors-in-interest of sites designated for future commercial development shall, at the time of commercial development, install and maintain a solid masonry wall along any property boundary shared with residential land use designations or zoning. The wall shall be a minimum of eight feet in height, and the foundation of said wall shall be engineered to allow for extension of wall height to a maximum of 12 feet. Extension of wall height above the eight-foot minimum shall be required if the acoustical report required in Chapter 13.0 Noise indicates increased wall height is necessary to comply with City noise standard, or the Community Development Director deems an increase necessary to mitigate or eliminate all other land use impacts.

Mitigation Measure 4. The owners, developers and/or successors-in-interest shall incorporate the following requirements into commercial development site plans:

- a. Setbacks from adjacent, residentially-zoned parcels for commercial buildings or structures shall be as follows:
 1. The equivalent of the height of the building or structure, but not less than 15 feet, if no access road is provided between the building or structure and the property line, or
 2. 45 feet or more, if an access road is provided between the building or structure and the property line.
- b. A minimum 15-foot landscaping strip shall be installed and maintained along the boundary of adjoining residentially-zoned parcels. The landscaping strip shall be planted with trees and shrubs and shall be fitted with an automatic irrigation system.
- c. Commercial building or structure setbacks from front or side yard property lines abutting a public street shall be a minimum of ten feet.
- d. Commercial parking area setbacks from front or side yard property lines abutting a public street shall be a minimum of five feet. Landscaping, including an automatic irrigation system adequate to maintain the subject landscaping area, shall be installed and maintained within this setback area, except for required vehicle and pedestrian access openings.
- e. Sign, parking area and other outdoor lighting on proposed commercial sites shall be shielded to prevent glare onto, or illumination of, adjoining residential areas.

Environmental Impacts and Mitigation Measures

Response LU-1): The Revised Project site is located in the northeastern portion of the City of Stockton. The Revised Project is consistent with the surrounding uses and would not physically divide an established community. Implementation of the Revised Project would have a ***less than significant*** impact relative to this topic.

Response LU-2): The Revised Project includes a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original within the 99.88-acre Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Project site.

Over the past 14 years the market has not shown an interest in these land uses, while at the same time the demand for housing has reached a crisis status in the State of California. As a result, the Revised Project seeks to reverse some of the Original Project approvals to change approved commercial to residential uses to better reflect the market demand, and to assist in the current housing crisis.

The General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high-density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses.

The Rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high-density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses.

The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Project site.

The development of the Revised Project uses within the Revised Project site would be consistent with the General Plan Amendment and rezone associated with the Revised Project. Therefore, the Revised Project would not 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. Implementation of the Revised Project would have a ***less than significant*** relative to this topic.

3.12 MINERAL RESOURCES

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact MR-1: 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?	N/A	No	No	No	No
Impact MR-2: 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?	N/A	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to hazards and hazardous materials. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The Revised Project’s footprint and area of disturbance would not change from what was addressed in the Cannery Park EIR. The Cannery Park EIR determined that the project would not result in any impacts related to mineral resources. No new mitigation measures are required for the project revisions.

Environmental Impacts and Mitigation Measures

Responses MR-1 – MR-2): The Revised Project site is in an MRZ-1 designation in the Mineral Resources and Mineral Hazards Mapping Program (MRMHMP). Mining in this residential area is not practical given the number of sensitive receptors in the immediate vicinity. There are no oil and gas extraction wells within or near the property. Implementation of the Revised Project would have a ***less than significant*** impact relative to this environmental topic.

EIR ADDENDUM – CANNERY PARK EIR

3.13 NOISE

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact NOISE-1: 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?	Significant and Unavoidable	No	No	No	See Cannery Park EIR Mitigation Measures
Impact NOISE-2: Generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant	No	No	No	No
Impact NOISE-3: 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?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to noise. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts to noise impacts would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below). As applicable, these mitigation measures

would be required by the project revisions, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Traffic Noise Exposure to Noise-Sensitive Land Uses

Mitigation Measure 1. Masonry walls will be constructed along the east and west side of Holman Road at a minimum height of six feet or higher, at the discretion of the Community Development Director.

Railroad Noise

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall construct a masonry wall, earthen berm or berm/wall combination along the portion of the western project site boundary that abuts proposed residential development. The berm/wall shall be constructed prior to occupancy of any dwelling units located within the area subject to noise levels in excess of 65 dB. The berm/wall shall be a minimum of 11 feet in height within 1,000 feet to Eight Mile Road, and otherwise shall be a minimum of six feet.

Mitigation Measure 2. Two-story structures proposed within the area subject to noise levels in excess of 65 dB shall be subject to additional acoustical analysis prior to issuance of building permits. Facade wall and window specifications shall provide sufficient noise attenuation to allow the City's interior noise standard of 45 dB Ldn to be maintained. Two-story structures in this area shall be fitted with mechanical ventilation to allow occupants to close windows and doors.

Noise Impacts Associated with Industrial and Commercial Uses

Mitigation Measure 1. A noise study shall be completed by a qualified acoustical consultant prior to issuance of building permits for industrial or commercial uses which are located within 400 feet of residential areas. The study shall identify potential noise sources, effects of setbacks on noise impacts, design features and/or other noise attenuation measures that will provide compliance with City noise standards.

Mitigation Measure 2. Noise from industrial or commercial uses shall, where feasible, be mitigated by locating delivery areas, loading docks, refuse storage areas and other exterior noise sources so that they are effectively shielded from nearby noise-sensitive uses. Shielding may be accomplished by locating such areas on the opposite side of buildings from noise-sensitive uses, at sufficient distance from sensitive uses, or by constructing noise barriers.

Mitigation Measure 3. Heating, ventilating and air conditioning equipment for commercial uses located less than 50 feet from residential property should be located so that equipment is effectively shielded from the residential property, i.e., by parapet walls.

Mitigation Measure 4. Where commercial and industrial uses adjacent to residential uses, they shall be separated by a barrier wall at least eight feet in height. Wall height shall be increased to the degree such need is identified in the acoustical study required by mitigation measure #1. The ultimate height of such barriers shall be determined by the Community Development Director based on the acoustical study. Wall foundations will be designed to permit increased height as determined by the Director.

Mitigation Measure 5. Site and building plans for industrial and commercial uses located within 400 feet of noise sensitive residential uses shall incorporate other noise control features as may be identified in the acoustical study required by mitigation #1, as required to comply with City noise standards. These requirements shall include:

- a. Posting delivery areas prior to the issuance of a Certificate of Occupancy to inform delivery personnel that noise reduction efforts are in effect at all times but especially between the hours of 10 p.m. and 7:00 a.m.
- b. Prohibiting idling of truck engines during unloading/loading.

- c. Turning off refrigeration units on trucks and trailers while in the loading areas between 10:00 p.m. and 7:00 a.m.
- d. Designing delivery areas so that loading and unloading occurs within structures.
- e. Screening or positioning HVAC exhaust fans to minimize their contribution to noise levels on residential parcels.
- f. Screening or enclosing trash compactor.
- g. Controlling operations to minimize deliveries, trash compaction, or exterior repairs along the residential boundaries of the site between 10:00 p.m. and 7:00 a.m.

Neighborhood Parks

Mitigation Measure 1. Development of the proposed neighborhood park site, if it will share property boundaries with residential uses, will include a minimum six-foot masonry wall along the boundary shared with the residential uses.

Construction Noise

Mitigation Measure 1. Temporary noise impacts resulting from project construction shall be minimized by restricting hours of operation by noise-generating equipment to 7:00 a.m. to 10:00 p.m. Monday through Friday, and to 7:00 a.m. to 6:00 p.m. on Saturday and Sunday when such equipment is to be used near noise-sensitive land uses, and by requiring residential type mufflers where applicable.

Environmental Impacts and Mitigation Measures Response NOISE-1):

TRAFFIC NOISE INCREASES AT EXISTING SENSITIVE RECEPTORS

The impact conclusion in the EIR for the Original Project was *significant and unavoidable*. According to Fehr & Peers, the Revised Project is predicted to generate a total of 27,060 daily trips. This is less than the Original Project, which would generate 45,688 trips (Fehr & Peers, 2022). Therefore, the Revised Project traffic noise increases will be compatible with the surrounding land uses. The Revised Project would not create a new impact, and would not increase the severity of the original impact on noise.

CONSTRUCTION NOISE

During the construction phases of the Revised Project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would occur during daytime hours.

Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could experience

maximum instantaneous noise levels of greater than 60 dBA when on-site construction-related noise levels exceed approximately 90 dBA at the boundary of the construction site. Nearby noise-sensitive receptors consist predominantly of residential dwellings located near the western and northern boundaries of the Revised Project site.

The City of Stockton Noise Ordinance places limitations on the acceptable hours of construction. During development of the proposed project, construction activities occurring during the more noise-sensitive late evening and nighttime hours (i.e., 10 PM to 7 AM) are prohibited. Additionally, there are several residential uses directly adjacent the Revised Project site which may be subject to construction noise. Overall, based on the Noise Report prepared for the Revised Project, construction noise from the Revised Project would be similar to the construction noise analyzed within the Cannery Park EIR. As a result, with implementation of the mitigation measures provided in the Cannery Park EIR, there would be a ***less than significant*** impact relative to this issue.

EXTERIOR NON-TRANSPORTATION NOISE AT PROPOSED HIGH DENSITY RESIDENTIAL USES

The Revised Project includes the development of 15 commercial lots on land with an existing commercial designation adjacent to a future high-density residential use immediately to the south and east of the commercial use. The high density residential site has not been site planned, however, the intent is to incorporate the commercial and high density uses into an integrated and compatible plan with the commercial use, rather than building two isolated land uses.

TABLE NOISE-1: PART II: LAND USE-RELATED NOISE STANDARDS

NOISE LEVEL DESCRIPTOR, dB	DAYTIME (7 A.M. TO 10 P.M.)	NIGHTTIME (10 P.M. TO 7 A.M.)
Hourly Leq	55	45
Maximum Sound Level L _{max}	75	65

NOTES: (1) THE NOISE STANDARD MUST BE APPLIED AT THE PROPERTY LINE OF THE RECEIVING LAND USE. WHEN DETERMINING THE EFFECTIVENESS OF NOISE MITIGATION MEASURES, THE STANDARDS MUST BE APPLIED ON THE RECEIVING SIDE OF NOISE BARRIERS OR OTHER PROPERTY LINE NOISE MITIGATION MEASURES. (2) EACH OF THE NOISE LEVEL STANDARDS SPECIFIED MUST BE DECREASED BY 5 FOR IMPULSE NOISE, SIMPLE TONE NOISE, OR NOISE CONSISTING PRIMARILY OF SPEECH OR MUSIC.

SOURCE: CITY OF STOCKTON MUNICIPAL CODE SECTION 16.60.040, STANDARDS.

The proposed commercial uses are predicted to generate noise levels of up to 57 dBA at the future residential property line during daytime (7:00 a.m. to 10:00 p.m.) hours and up to 48 dBA during nighttime (10:00 p.m. to 7:00 a.m.) hours. This exceeds the City of Stockton daytime noise level standard of 55 dBA Leq and nighttime noise level standard of 45 dBA Leq (See Table NOISE-1 for hourly Leq standards for land uses).

While the high density residential site has not been site planned, the area where the noise threshold is exceeded at the parcel line is anticipated to be used for landscape buffers and parking space. The high density residential buildings are anticipated to be designed with a setback from the property line and commercial uses such that they would be built in an area that is within the City of Stockton noise level standards shown in Table NOISE-1. In order to ensure compliance with the City's daytime and nighttime noise standards, an evaluation of the high density residential site is necessary after it is designed for architectural design review. The City would need to review the site plan during that process to ensure that there are no buildings placed along the property line where the exceedance occurs. Overall, based on the Noise Report prepared for the Revised Project, exterior non-transportation noise at the proposed high density residential uses within the Revised Project would

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be similar to the exterior non-transportation noise at the location of the proposed Revised Project high density residential uses analyzed within the Cannery Park EIR. The impact conclusion in the EIR for the Original Project was **significant and unavoidable**. The Revised Project would not create a new impact, and would not increase the severity of the original impact on noise.

EXTERIOR TRAFFIC NOISE AT PROPOSED SINGLE FAMILY RESIDENTIAL USES

Table NOISE-2 shows the predicted traffic noise levels at the proposed residential uses adjacent to State Route 99. Based upon Table NOISE-2, exterior noise levels would exceed the City's 60 dBA L_{dn} normally acceptable exterior noise standard (Table NOISE-3), as well as the City 65 dBA L_{dn} maximum acceptable noise exposure (Table NOISE-4). The 60 dBA L_{dn} noise contours for State Route 99 were found to extend to an approximate distance of 2,037 feet from the roadway centerline. This would encroach into the outdoor activity areas of proposed residences. Therefore, use of a physical barrier would be the only feasible method to reduce exterior noise levels to within the City's allowable exterior noise standard range for the normally acceptable standard.

TABLE NOISE-2: FUTURE (2043) TRANSPORTATION NOISE LEVELS AT PROPOSED RESIDENTIAL USES

SEGMENT	APPROXIMATE RESIDENTIAL SETBACK, FEET ¹	PREDICTED NOISE LEVELS, DB L_{dn} ²					
		NO BARRIER	10' BARRIER	11' BARRIER	12' BARRIER	13' BARRIER	14' BARRIER
State Route 99	135	78	67	66	65	64	63

NOTES:

¹ SETBACK DISTANCES ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS TO THE CENTER OF RESIDENTIAL BACKYARDS.

² THE MODELED NOISE BARRIERS ASSUME FLAT SITE CONDITIONS WHERE ROADWAY ELEVATIONS, BASE OF WALL ELEVATIONS, AND BUILDING PAD ELEVATIONS ARE APPROXIMATELY EQUIVALENT. SOUND BARRIER HEIGHT MAY BE ACHIEVED THROUGH THE USE OF A WALL AND EARTHEN BERM TO ACHIEVE THE TOTAL HEIGHT (E.G. A 6-FOOT WALL ON 2-FOOT BERM IS EQUIVALENT TO AN 8-FOOT TALL BARRIER).

SOURCE: SAXELBY ACOUSTICS. 2022.

TABLE NOISE-3: PART I: TRANSPORTATION-RELATED NOISE STANDARDS (OUTDOOR/INDOOR)

NOISE LEVEL DESCRIPTOR, dB	MAXIMUM ALLOWABLE NOISE EXPOSURE (L_{DN} DB)	
	OUTDOOR ACTIVITY AREAS	INDOOR SPACES
Residential (all types)	65	45
Child care	--	45
Educational Facilities	--	45
Libraries and museums	--	45
Live-work facilities	65	45
Lodging	65	45
Medical services	--	45
Multi-use (with residential)	65	45

TABLE NOISE-4: LAND USE COMPATIBILITY FOR COMMUNITY NOISE EXPOSURE

TABLE 4.11-10 LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

Land Use Type	Noise Level, L_{dn} (dBA)						
	0-55	56-60	61-65	66-70	71-75	75-80	>81
Residential							
Urban Residential Infill							
Hotels, Motels							
Schools, Libraries, Churches, Hospitals, Extended Care Facilities							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Mining, Industrial, Manufacturing, Utilities, Agriculture							
	<i>Normally Acceptable.</i> Specified land use is satisfactory based on the assumption that any buildings involved are of normal, conventional construction, without any special noise insulation requirements.						
	<i>Conditionally Acceptable.</i> New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed insulation features have been included in the design.						
	<i>Unacceptable.</i> New construction or development should not be undertaken.						

Notes: If existing noise standards are currently exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA. Urban residential infill applies to residential uses in the Greater Downtown.

Source: Stockton General Plan 2035, Goal Policies Report; Table 11-1

The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.

Based upon the data in Table NOISE-2, a 12-foot-tall barrier may be used to achieve compliance with the City's exterior maximum noise level standard of 65 dBA L_{dn} for outdoor activity areas of residential uses. The proposed wall location is shown on Figure 19. Overall, based on the Noise Report prepared for the Revised Project, exterior traffic noise at proposed single-family residential uses from the Revised Project would be similar to the exterior traffic noise at the location of the proposed single-family residential uses analyzed within the Cannery Park EIR. The impact conclusion in the EIR for the Original Project was **significant and unavoidable**. The Revised Project would not create a new impact, and would not increase the severity of the original impact on noise.

INTERIOR NOISE IMPACTS AT PROPOSED SINGLE FAMILY RESIDENTIAL USES

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dB L_{dn} , or less, will

typically comply with the City of Stockton 45 dB L_{dn} interior noise level standard. Additional noise reduction measures, such as acoustically-rated windows, are generally required for exterior noise levels exceeding 70 dB L_{dn} .

It should be noted that noise barriers do not typically reduce exterior noise levels at second floor locations. The proposed residential uses are predicted to be exposed to unmitigated first-floor exterior transportation noise levels up to 77 dBA L_{dn} . Mitigated first-floor noise levels of 63-65 dBA L_{dn} are expected after construction of sound barriers. The second-floor locations are not expected to receive adequate shielding from the proposed sound walls and may be exposed to noise levels 2-3 dB higher than ground floor receivers. Therefore, noise levels of 80 dB L_{dn} are expected at the second-floor facades of the proposed residences.

Based upon a 25-dB exterior-to-interior noise level reduction, interior noise levels are predicted to be up to 55 dB L_{dn} at second floors and 40 dBA L_{dn} at first floors. Accordingly, predicted interior noise levels along the first row of residential uses along State Route 99 are predicted to exceed the City's 45 dB L_{dn} interior noise level standard at second floor locations. Overall, based on the Noise Report prepared for the Revised Project, interior noise impacts at the proposed single-family residential uses of the Revised Project would be similar to the interior noise impacts at proposed single-family residential uses analyzed within the Cannery Park EIR. The impact conclusion in the EIR for the Original Project was ***significant and unavoidable***. The Revised Project would not create a new impact, and would not increase the severity of the original impact on noise.

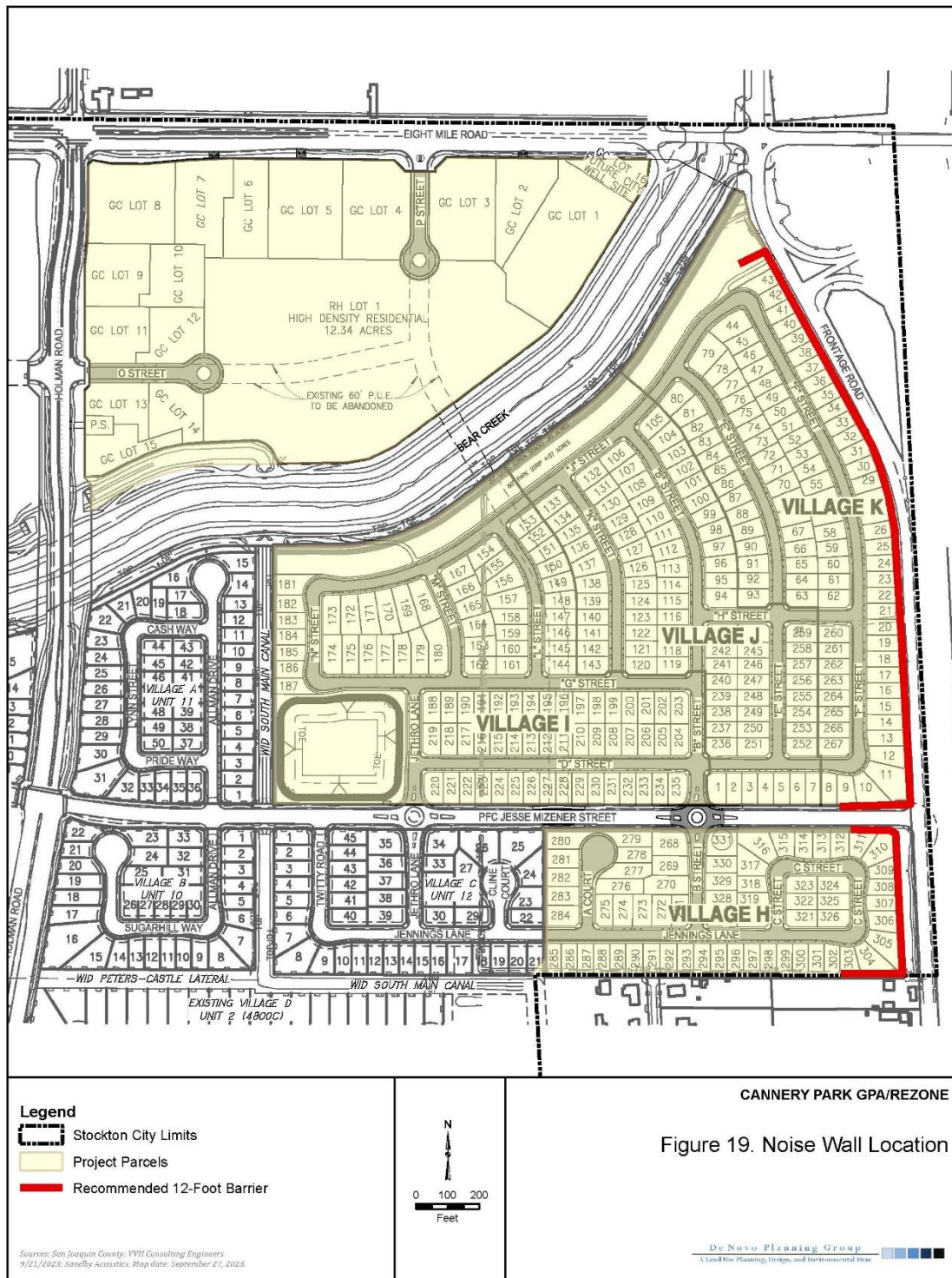
Response NOISE-2): Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

Construction vibration levels anticipated for the Revised Project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. This is a ***less than significant*** impact and no mitigation is required.

Response NOISE -3): There are no airports within two miles of the Revised Project vicinity. Therefore, this impact is not applicable to the Revised Project. There is ***no impact*** relative to this topic.

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3.14 POPULATION AND HOUSING

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact POP-1: 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	No	No	No	No
Impact POP-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than Significant	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to population and housing. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses.² The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

² It should be noted that the CG (Commercial, General) zone within the City of Stockton allows for a higher residential density than the Residential, Low Density (RL) zone, so the Revised Project could be considered as having a possible reduction in total allowable high density housing area. Nevertheless, it should also be noted that the overall residential unit count between the Original Project and the Revised Project is anticipated to be the same. Therefore, there would be “no net loss” of housing units, under State law.

As described in the Cannery Park EIR, implementation of the Original Project would not directly result in population growth, nor would it convert any land use designations to a use that would allow for the construction of housing. The Revised Project would not generate a significant number of new jobs which could lead indirectly to population growth. There are no homes or residences currently located on the Revised Project site, and therefore, no homes or people would be displaced as a result of project implementation. There would be no change to the analysis contained in the Cannery Park EIR and the project revisions would not increase the severity of any impacts related to population and housing. No new mitigation requirements are required for the project revisions.

Environmental Impacts and Mitigation Measures

Response POP-1): According to the 2020 U.S. Census, the population in Stockton is 320,804 people, and the average persons per household is 3.20. The Revised Project would result in the construction of up to 617 residential units, which would generate up to an estimated 1,974 people. This is an estimated 0.6 percent growth in Stockton. An estimated 0.6 percent growth in Stockton is not considered substantial growth in Stockton or the region and it is consistent with the assumed growth in the General Plan. The approximately 1,974 people may come from Stockton or surrounding communities. The Revised Project would not include upsizing of offsite infrastructure or roadways. The installation of new infrastructure would be limited to the internal Revised Project site. The sizing of the infrastructure would be specific to the number of residential units and the extent of commercial development proposed within the Revised Project site. Implementation of the Revised Project would not induce substantial population growth in an area, either directly or indirectly. Implementation of the Revised Project would have a ***less than significant*** impact relative to this topic.

Response POP-2): The Revised Project site currently contains undeveloped agricultural land. The Revised Project would not displace housing or people. Implementation of the Revised Project would have ***no impact*** relative to this topic.

3.15 PUBLIC SERVICES

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact PS-1: Fire protection?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact PS-2: Police Protection?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact PS-3: Schools?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact PS-4: Parks?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact PS-5: Other Public Facilities?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect to public services. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

With implementation of the mitigation measures contained in the Cannery Park EIR (listed below), as applicable, none of the proposed revisions to the project would result in new public services impacts or increase the severity of any impacts related to public services, above what was described in the Cannery Park EIR. More specifically, although the uses associated with the Revised Project would be different than the uses associated with the Original Project (e.g., more residential uses and fewer commercial uses), none of the proposed revisions to the project would result in new public services impacts or increase the severity of any impacts related to public services. For example, impacts related to fire services and police services would be similar to the Original Project, despite the land use changes associated with the Revised Project, which could result in a larger service population. Moreover, although the increased residential uses of the Revised Project could increase demand on schools and parks compared to the Original Project, the local school district collects impact fees from new developments under the provisions of the Leroy F. Greene School Facilities Act of 1998, enacted by Senate Bill 50, and park fees are collected under the Quimby Act for the purposes of collecting fees to mitigate for increase park demands. This ensures that impacts to schools and parks would be no greater than that as provided within the Cannery Park EIR for the Original Project. See the analysis under the ‘Environmental Impacts and Mitigation Measures’ header, below, for further detail.

Overall, impacts related to this topic would remain unchanged from the analysis in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below), as applicable. These mitigation measures would be required for the Revised Project, as described in the Cannery Park EIR. No new mitigation requirements are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Police Protection Services

Mitigation Measure 1. The owners, developers, and/or successors-in-interest shall comply with the Fire Protection Mitigation #3 requiring Police Department involvement in review of project design and emergency access.

Mitigation Measure 2. The owners, developers, and/or successors-in-interest shall pay Public Facility Fees to defray capital facilities costs associated with expanding law enforcement services.

Mitigation Measure 3. The owners, developers, and/or successors-in-interest shall fence and monitor contractors’ storage yards during the construction phases of the project to prevent theft and vandalism, and to reduce calls for assistance from the Police Department.

Fire Protection Services

Mitigation Measure 1. The tentative map shall reserve a site acceptable to the Stockton Fire Department for development of a new northeast Stockton fire station.

Mitigation Measure 2. The owners, developers, and/or successors-in-interest shall reserve land and pay required Public Facility Fees toward construction at new fire stations and related facilities prior to issuance of building permits.

Mitigation Measure 3. The owners, developers, and/or successors-in-interest shall incorporate access, water supply and other fire suppression and emergency access/response needs in the proposed project design. Said designs shall be developed in consultation with the Community Development, Fire, Police and Public Works Departments and shall address such items as the location and design at streets and cul-de-sacs, residential numbering, mapping and other measures deemed necessary to permit access at emergency vehicles and firefighting equipment, minimize response times and provide adequate evacuation routes.

Mitigation Measure 4. The owners, developers, and/or successors-in-interest shall install fire hydrants and water distribution facilities which will provide fire flows which are adequate to support the City's existing Class I ISO rating and which conform to adopted Building Code Fire Safety Standards, for all of the uses proposed within the project area.

Schools

Mitigation Measure 1. The tentative map shall reserve an approximately 10.5-acre site adjacent to the Villa Antinori project site for development of a new elementary school.

Mitigation Measure 2. The owners, developers and/or successors-in-interest shall pay adopted developer fees toward construction of new schools prior to issuance of construction permits in accordance with the rate schedule established by LUSD.

Mitigation Measure 3. The owners, developers and/or successors-in-interest shall coordinate with LUSD as required to assure that adequate school facilities will be available concurrently with the project-related need for such facilities, consistent with General Plan Public Facilities Goal 2, Policies 7, 8, and 9.

Parks and Recreation

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall reserve two proposed sites for development of public parks, adjacent to the proposed elementary school site and adjacent to the WID canal, as shown on the Tentative Map (Figure 3-5), in conjunction with required payment of Public Facility Fees.

Mitigation Measure 2. The owners, developers and/or successors-in-interest shall reserve for public use and construct the 0.9-acre half-circle park located within Village E; park improvements shall be subject to the approval of the City Parks Facility Planner/Landscape Architect. The owners, developers and/or successors-in-interest shall also construct a pedestrian/bikeway facility along the south levee of Bear Creek as specified in the Stockton Bikeway Plan.

Mitigation Measure 3. The owners, developers and/or successors-in-interest shall contribute Public Facility Fees, land or a combination of both in fulfillment of adopted parkland Public Facility Fee requirements.

Mitigation Measure 4. The owners, developers and/or successors-in-interest shall pay the applicable fee for Community Recreation Centers.

Mitigation Measure 5. Prior to recordation of any Final Map, the owners, developers and/or successors-in-interest (ODS) shall form a new zone to the Stockton Consolidated Landscape Maintenance District 96-2, and approve an assessment providing for the subdivision's proportionate share of the costs to maintain any public parks within the service area for this subdivision or serving this subdivision as well as the proposed 0.9-acre half-circle park to be developed by the ODS. ODS may request to annex to an existing zone of the Stockton Consolidated Landscape Maintenance District 96-2 provided the subdivision is within the service area of a park for which a zone of the Stockton Consolidated Landscape Maintenance District 96-2 has already been formed.

Formation of a new zone shall result in an assessment being established that includes, but not limited to, costs for: 1) annual maintenance of the park; and 2) administrative costs. The assessment levied shall contain a provision that will allow the maximum annual assessment to be increased in an amount equal to the greater of: 1) three percent (3%) or 2) the percentage increase of the Consumer Price Index (CPI) for the San Francisco - Oakland - San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period.

Mitigation Measure 6. Prior to recordation of any Final Map, the ODS shall establish a maintenance entity acceptable to the Community Development Director, the Parks and Recreation Director and the Public Works Director to provide funding for the maintenance of, and if necessary replacement at the end of the useful life of, improvements including but not limited to common area landscaping, landscaping in the right-of-way, sound walls and/or back-up walls (all "Improvements") serving or for the special benefit of this subdivision.

If the ODS elects to provide maintenance for the Improvements through a maintenance assessment district, the ODS shall form a new zone of the Stockton Consolidated Landscape Maintenance District 96-2 that includes the entire subdivision. The entire subdivision may be considered for annexation to an existing zone of the Stockton Consolidated

Landscape Maintenance District 96-2, provided the type, intensity and amount of the Improvements to be maintained are similar to Improvements in the zone to which annexation is proposed. Formation/annexation shall result in an assessment being approved that shall be levied on all properties in the subdivision to ensure that all property owners pay their proportionate share of the costs of maintaining, in perpetuity, the Improvements serving or for the special benefit of this subdivision.

The assessment shall be established including, but not limited to, costs for: 1) annual maintenance of sound walls and back-up walls, public area landscaping and irrigation; 2) replacement of the wall(s) at the end of its useful life; and 3) administrative costs. The assessment levied shall contain a provision that will allow the maximum annual assessment to be increased in an amount equal to the greater to: 1) three percent (3%) or 2) the percentage increase of the Consumer Price Index (CPI) for the San Francisco - Oakland - San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period. The owners, developers and/or successors in interest shall be responsible for maintenance of the Improvements until the District has generated sufficient revenue to fund the maintenance.

Mitigation Measure 7. All walls shall be located on private property and a separate maintenance easement shall be recorded for such walls. Such easement shall be sufficient to allow for regular maintenance (i.e., graffiti removal) and shall include the width of the support footing as it extends from both sides of the wall.

Mitigation Measure 8. The pedestrian/bike path along the Bear Creek levee system shall comply with applicable ADA requirements, including a wheelchair linkage to Holman Road.

Mitigation Measure 9. The owners, developers and/or successors-in-interest shall coordinate with PG&E to provide appropriate service sub- outs to public park sites, subject to the approval of the Parks and Recreation Department.

Environmental Impacts and Mitigation Measures

Response PS-1 – PS-5):

Fire Protection

The Revised Project would add up to 617 residential units, which is anticipated to add approximately 1,974 people to the City of Stockton. The addition of up to 1,974 people in the City of Stockton would place additional demands for fire service on the Stockton Fire Department.

The City of Stockton General Plan includes policies and implementation measures to ensure that the Fire Department continues to provide adequate facilities and staffing levels. Below is a list of relevant policies:

- The City shall review development proposals for their impacts on infrastructure (i.e., sewer, water, fire stations, libraries, streets) and require appropriate mitigation measures if development reduces service levels (Policy PFS-1.8).
- The City shall work to maintain a fire response time as indicated in Table 9-1, which shall be used to determine future fire station needs (Policy PFS-8.1).
- The City shall continue to maintain an ISO rating of 1 (Policy PFS-8.2).
- The City should provide fire station facilities, equipment (engines and other apparatus), and staffing necessary to maintain the City's service standards (ISO rating and response time) (Policy PFS-8.3).
- The City shall require new development to pay all public facility fees (PFF) as a means to provide a fair share of costs to provide fire station facilities and equipment in order to maintain the City's ISO rating of 1. Also, new development may be required to create a Community Facility District (CFD) or other funding mechanisms to pay the costs associated with the operation of a fire station (Policy PFS-8.4).

The Insurance Services Office (ISO) Public Protection Classification Program currently rates the Fire Department as 3 on a scale of 1 to 10, with 1 being the highest possible protection rating and 10 being the lowest. The ISO rating measures individual fire protection agencies against a Fire Suppression Rating Schedule, which includes such criteria as facilities and support for handling and dispatching fire alarms, first-alarm response and initial attack, and adequacy of local water supply for fire-suppression purposes.

Continued growth within the city will increase the overall demand for fire protection services in the city. Growth in accordance with buildout of the existing General Plan is expected to generate the typical range of service calls, including structure fires, car fires, electrical fires, emergency medical response and others. Any new facilities would require environmental review once a location and design of such facility is developed. The City's costs to maintain equipment and facilities and to train and equip personnel will also increase. Growth in rural areas and fire districts will also increase the demand for fire protection services in those areas.

Development of the Revised Project, as proposed, could increase demand for fire protection services to the site, similar to the increase in demand for fire protection services to the site under the Original Project. The Revised Project would not expand the project footprint; rather, it would modify certain land uses (such as from commercial to residential), though it could result in a larger service population. Nevertheless, the modification of the on-site land uses is not anticipated to generate an increase in demand for fire protection services to the site as compared with the Original Project. It should be noted that the Fire Chief did not indicate that there would be a need for the Revised Project to construct a new fire station or physically alter a fire station, in order to maintain acceptable service ratios, response times, or other performance objectives for public services.

The Revised Project would be subject to Stockton Municipal Code Section 17.72.260, Public Facilities Fee, which requires payment of a public facilities fee on issuance of building permits for development in the City to pay for municipally owned facilities, including but not limited to fire stations (similar to the Original Project). Payment of the fee is required in order to implement the goals and objectives of the General Plan and to mitigate the impacts caused by future development in the City. The payment of fees has been identified to finance public facilities and/or compensation measures, and to pay for each development's fair share of the construction costs of these improvements, and/or the costs of the compensation measures. Payment of the public facilities fee in compliance with Municipal Code 16.72.260 would reduce potential impacts associated with the Revised Project's contribution toward the future need for new or physically altered fire department facilities

The Revised Project would not directly require the need for new or physically altered fire facilities in order to maintain acceptable service ratios, response times or other performance objective which may cause substantial adverse physical environmental impacts. Additionally, since the Revised Project would not expand the footprint of the Original Project, and since the new land uses associated with the Revised Project are not anticipated to generate a notable increase in the demand for fire protection services beyond that needed for the land uses associated with the Original Project, the Revised Project is anticipated to generate a similar level of demand for fire protection as the Original Project. This would be true even if the Revised Project would result in a larger service population than the service population anticipated within the Cannery Park EIR. Moreover, the Revised Project

would be required to implement the mitigation measures contained in the Cannery Park EIR, as applicable. Therefore, implementation of the Revised Project would have a ***less than significant impact*** relative to this topic.

Police Protection

The Revised Project would add up to 617 residential units, which is anticipated to add approximately 1,974 people to the City of Stockton. The addition of up to 1,974 people in the City of Stockton would place additional demands for fire service on the Stockton Police Department. The Police Department's sworn staff totals 485, a ratio of about 1.52 sworn officers per 1,000 population.³

The Revised Project would generate jobs and residences within the Revised Project site. This potential increase in population and workers could contribute to the standard of sworn officers to residents being further exceeded. Further, development of the Revised Project site could increase the demand for police protection services to the site when compared to existing conditions. However, development of the Revised Project site, as proposed, would not result in significant growth beyond that identified and planned for in the City's General Plan. Although demand for services may increase, the Revised Project would not directly increase demand for police services to the extent that new or physically altered police department facilities would be needed in order to maintain acceptable service ratios, response times, or other performance objectives. Moreover, the Revised Project would generate similar increases in demand for police protection services to the site as under the Original Project. This is because the Revised Project would not expand the project footprint; although it would modify certain land uses (such as from commercial to residential), the modification of the on-site land uses is not anticipated to generate a notable increase in demand for police protection services to the site as compared with the Original Project, regardless of any potential increase in service population.

The Revised Project would be subject to Stockton Municipal Code Section 16.72.260, Public Facilities Fee, which requires payment of a public facilities fee on issuance of building permits for development in the City to pay for municipally owned facilities, including but not limited to police stations. Payment of the fee is required in order to implement the goals and objectives of the General Plan and to mitigate the impacts caused by future development in the City. The payment of fees has been identified to finance public facilities and/or compensation measures, and to pay for each development's fair share of the construction costs of these improvements, and/or the costs of the compensation measures. Payment of the public facilities fee in compliance with Municipal Code 17.72.260 would reduce potential impacts associated with the Revised Project's contribution toward the future need for new or physically altered police department facilities. Furthermore, it should be noted that the demand for police protection services under the Revised Project is anticipated to be similar to the Original Project.

The Revised Project would not directly require the need for new or physically altered police facilities in order to maintain acceptable service ratios, response times or other performance objective which may cause substantial adverse physical environmental impacts. Additionally, since the Revised

³ According to the Cal. State DOF, Stockton's population 318,522 on January 1, 2020.

Project would not expand the footprint of the Original Project, and since the new land uses associated with the Revised Project are not anticipated to generate a notable increase in the demand for fire protection services beyond that needed for the land uses associated with the Original Project, the Revised Project is anticipated to generate a similar level of demand for fire protection as the Original Project within the Revised Project site. Moreover, the Revised Project would be required to implement the mitigation measures contained in the Cannery Park EIR (listed below), as applicable. Therefore, implementation of the Revised Project would have a ***less than significant*** relative to this topic.

Schools

The Revised Project site is located within the service boundaries of the Lodi Unified School District (LUSD). LUSD provides school services for grades K through 12 within the communities of Lodi, North Stockton, and the communities of Acampo, Clements, Lockeford, Victor, and Woodbridge. Students would attend Mosher Elementary School, Morada Middle School, and McNair High School.

The LUSD collects impact fees from new developments under the provisions of the Leroy F. Greene School Facilities Act of 1998, enacted by Senate Bill 50 (“SB 50”). SB 50 restricts the ability of local agencies to deny or condition land use approvals on the basis that school facilities are inadequate and precludes local agencies from requiring anything other than payment of the prevailing developer fee adopted by the local school district. SB 50 sets forth the “exclusive methods of considering and mitigating impacts on school facilities” resulting from any planning and/or development project, regardless of whether its character is legislative, adjudicative, or both. Govt. Code § 65996(a) (emphasis added).

Section 65995(h) provides that “[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 ... is hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property ... on the provision of adequate school facilities.” (emphasis added). The reference in Section 65995(h) to fees “imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995” is to per-square-foot school fees that can be imposed by school districts on new residential and commercial and industrial construction. Pursuant to this authority, the District has adopted Level 1 fees. Payment of this Level 1 fee by the Project applicant constitutes full and complete mitigation of all impacts of the proposed Project on the District’s school facilities as a matter of law. (Gov’t Code § 65995(h).) Therefore, none of the proposed revisions to the project would result in new schools impacts or increase the severity of any impacts related to schools, above what was described in the Cannery Park EIR. Implementation of the proposed Project would have a ***less than significant*** relative to this topic.

Parks

CEQA requires that the Revised Project is analyzed to determine whether any substantial adverse impacts would be associated with any new or physically altered governmental facilities that may be required to serve the Revised Project (in this case, for park and recreation facilities). The Revised Project directly increases the number of persons in the area as a result of employment potential, and residential uses. The Revised Project includes up to 617 residential units, which is projected to increase the population by up to an estimated 1,974 people (based on 3.20 persons per household). Pursuant to the Quimby Act (as described in more detail below), the Revised Project is required to

provide sufficient land dedicated for parks and/or pay the relevant in-lieu park fees, based on the project's residential density.

The Revised Project includes the development of the 7.18-acre Lot A, which includes parkland and a stormwater basin. The Revised Project also includes open space along the north boundary adjacent to Bear Creek.

For the purposes of collecting fees to mitigate for increase park demands (Quimby Act), the California Government Code Section 66477 states: *The amount of land dedicated or fees paid shall be based upon the residential density, which shall be determined on the basis of the approved or conditionally approved tentative map or parcel map and the average number of persons per household. There shall be a rebuttable presumption that the average number of persons per household by units in a structure is the same as that disclosed by the most recent available federal census or a census taken pursuant to Chapter 17 (commencing with Section 40200) of Part 2 of Division 3 of Title 4.*

The Revised Project is a General Plan amendment and rezone of a portion of the Original Project. The Revised Project does not create or modify any parkland or open space other than what is described above, and does not eliminate any parkland or open space identified in the Original Project. Furthermore, although the Revised Project is anticipated to generate additional residential land uses (at the expense of commercial land uses) compared to Original Project within the Revised Project site, which would require a combination of either more park land and/or payment of in-lieu park fees (subject to the requirements of the Quimby Act), none of the proposed revisions to the project would result in new parks impacts or increase the severity of any impacts related to parks, beyond what was described in the Cannery Park EIR. Moreover, the Revised Project would be required to implement the mitigation measures contained in the Cannery Park EIR (listed below), as applicable. Therefore, with implementation of mitigation measures contained in the Cannery Park EIR, the Revised Project would have a ***less than significant*** impact relative to this topic.

Other Public Facilities

The Revised project would not result in a need for other facilities that are not addressed above, or in Section XVIII, Utilities and Service Systems. Implementation of the Revised Project would have ***no impact*** relative to this issue.

3.16 RECREATION

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	N/A	No	No	No	No
Impact REC-2: 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?	N/A	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to recreation. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

As described in the Cannery Park EIR, the project would not result in any impacts related to recreation facilities. None of the proposed revisions to the project would result in new recreation impacts or increase the severity of any impacts related to recreation. Impacts related to this topic would remain unchanged from the analysis in the Cannery Park EIR. No new mitigation requirements are required for the project revisions.

Environmental Impacts and Mitigation Measures

Responses REC-1): The Revised Project would result in the construction of up to 617 single-family residential units, which would result in up to an estimated 1,974 individuals. The Revised Project is a General Plan amendment and rezone of a portion of the Original Project.

The Revised Project includes the development of the 7.18-acre Lot A, which is anticipated to include parkland and a stormwater basin. The Revised Project also includes open space along the north boundary adjacent to Bear Creek, and bike/pedestrian access to the Bear Creek levee system. The Revised Project is not anticipated to create or modify any other parkland or open space other than what is described above, and is also not anticipated to eliminate any parkland or open space as identified in the Original Project. Park in-lieu fees would ultimately fund the construction of new park land to offset the increased demand for these facilities, as required under State law, as applicable. Therefore, there would be a *less than significant* impact associated with this environmental topic.

Responses REC-2): Beyond the park facilities described above, the Revised Project does not include the construction of recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Implementation of the Revised Project would have a *less than significant* impact relative to this topic.

3.17 TRANSPORTATION

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact TRA-1: Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact TRA-2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact TRA-3: 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 with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact TRA-4: Result in inadequate emergency access?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect to transportation impacts. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. No changes to potential impacts to transportation impacts would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (listed below). These mitigation measures would be required

by the project revisions, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Mitigation Measures adopted with the Cannery Park EIR

Traffic Impacts under EPAP Plus Project Conditions

Mitigation Measure 1. The owners, developers, and/or successors-in-interest shall be responsible for 100% of the design and construction costs of on-site roadway and intersection improvements, roadway extensions and frontage improvements along Eight Mile Road and West SR 99 Frontage Road (See Table 16-12).

Mitigation Measure 2. The owners, developers, and/or successors-in-interest shall be responsible for design and construction costs of off-site roadway and intersection improvements recommended under the EPAP Plus Project scenario and required to accommodate traffic generated by the project in the near-term, subject to reimbursement or Public Facility Fee credits, subject to applicable reimbursement, as identified in Table 16-12.

Mitigation Measure 3. Phasing of improvements shall be allowed subject to completion of a phasing analysis approved by the City.

Mitigation Measure 4. Golfview Road and the first driveway from Lot A shall be a signalized intersection, and shall align at Eight Mile Road.

Project Consistency with Eight Mile Road Specific Plan

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall relocate or eliminate some or all of the new access points, limit turning movements, coordinate signal timing, add acceleration/deceleration lanes or make other improvements as required to reduce potential inconsistency with the Eight Mile Road Specific Plan to a less than significant level.

Sight Distance

Mitigation Measure 1. Design of the Eight Mile Road grade separation shall include consideration of vertical curvature with respect to Caltrans design standards, the vertical curvature of the grade separation should be reduced if necessary to achieve adequate sight distance.

Cumulative Traffic Impacts

Mitigation Measure 1. The owners, developers, and/or successors-in-interest shall be responsible for their proportionate share of the design and construction costs of off-site roadway and intersection improvements recommended under the cumulative Plus Project scenario.

Environmental Impacts and Mitigation Measures

Response TRA-1 – TRA-2): Less than Significant. As directed by the City of Stockton, Fehr & Peers prepared a VMT Impact Assessment for the Revised Project on March 31, 2022. The VMT Impact Assessment for the Revised Project is provided in Appendix C. The VMT Impact Assessment for the Revised Project compared the impacts of the Revised Project to those of the Original Project. Both projects include a mix of uses, including residential, office/industrial/employment uses, and retail uses. Therefore, the following thresholds from the Stockton Transportation Impact Analysis Guidelines (Interim) are used in this assessment:

The Revised Project would have a significant impact if:

- a. The Revised Project's residential uses exceed baseline citywide home-based VMT per resident minus 15% and the proposed Project's residential uses have a home-based VMT per resident that is higher than the Original Project; or
- b. The Revised Project's office/employment uses exceed baseline citywide home-based work VMT per employee minus 15% and the Revised Project's office/employment uses have a home-based work VMT per employee that is higher than the Original Project; or
- c. The Revised Project would increase total citywide VMT relative to the VMT generated by the Original Project

While the Revised Project proposes changes only to a portion of the Original Project Area, because VMT is affected by the totality of land uses within a Revised Project site and a region, the VMT analysis prepared by Fehr & Peers provides a comparison of the complete Original Project and the complete Revised Project (i.e., including the uses in those areas that are not changed with the Revised Project). This approach captures the full effect of the change in uses with the Revised Project. However, Fehr & Peers also analyzed the VMT impacts when considering just the change in uses that would be changed by the Revised Project, to provide additional information on the VMT effects of the Revised Project.

The results of the VMT analysis prepared by Fehr and Peers identifies that, under the Baseline With Project VMT results comparing the Revised Project as a whole (i.e., the full Cannery Park site) to the Original Project and the citywide average, while neither the Original nor the Revised Project produces VMT per capita that is 15 percent below the citywide average, the home-based VMT per resident is lower with the Revised Project than with the Original Project (21.59 versus 21.63). However, the home-based work VMT per worker is slightly higher with the Revised Project than with the Original Project (21.86 versus 21.77).

Under the Baseline With Project VMT results comparing just the changed areas between the Original Project and the Revised Project, alongside the citywide average, neither the Original Project nor the Revised Project produces VMT per capita that is 15 percent below the citywide average. However, both the home-based VMT per resident and the home-based work VMT per worker are lower with the Revised Project than with the Original Project (21.91 versus 23.56 for the residential VMT, and 20.91 versus 21.84 for the worker VMT).

Under the total citywide VMT under Baseline With Project and Cumulative (2040) With Project conditions, for the Revised Project and the Original Project, the Revised Project results in lower VMT than the Original Project in both scenarios.

Based on the above findings, and City direction to conduct this assessment as a comparison of the Revised Project impacts to the Original Project's impacts, the VMT impact can be considered less than significant. The only metric by which the proposed Project results in higher VMT than the Original Project is the Baseline With Project home-based work VMT per worker. Since this metric is lower with the Revised Project than the Original Project under Cumulative conditions, and the metric is lower with the Revised Project than the Original Project when considering just the areas that would change, and the Revised Project results in lower citywide VMT than the Original Project under both Baseline and Cumulative conditions, the impact with respect to VMT can be considered less than significant. Furthermore, it should be noted that the Original Project was part of the General Plan

baseline for land uses in the region; the revisions associated with the VMT Impact Assessment for the Revised Project also reflect the General Plan baseline.

The Revised Project would also be consistent with the City of Stockton General Plan in terms of provisions for roadways, bicycle and pedestrian facilities. The Revised Project would not conflict with other road, transit bicycle or pedestrian plans documented by the city.

Therefore, impacts associated with the potential to conflict with a program plan, ordinance, or policy or conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) would be ***less than significant***.

Responses TRA-3 – TRA-4): Less than Significant. The area of the Revised Project located north of Bear Creek will have access to Holman Road by way of a public street, and access to Eight Mile Road by way of a public street. The area of the Revised Project located south of Bear Creek will have two accesses to PFC Jesse Mizener Street by way of public streets (PFC Jesse Mizener Street extends from Holman Road eastward to the SR99 West Frontage Road). There will not be any direct access to the Frontage Road and only one point of access to Holman Road.

The driveways would be designed and constructed per local design standards and requirements, consistent with accepted design guidelines for safety, and therefore would not be anticipated to introduce hazardous geometric design features. The Revised Project driveways will be required to have adequate site distance. Connection spacing and site distance adequacy should be confirmed when the detailed improvement plans and a final map are submitted.

The internal Project streets will be designed to meet the City's geometric design standards of the roadway to avoid creating hazardous driving conditions. In addition, a traffic calming analysis will be conducted to create safer streets through the implementation of the City's Neighborhood Traffic Management Program (NTMP).

The internal Project streets will be designed to meet the City's geometric design standards to avoid creating hazardous driving conditions.

The internal Project streets will provide ADA compliant sidewalk along each side of the roadways so that pedestrians would be separated from vehicle traffic per city standards.

Proposed roadway geometries/cross-sections and design features will be reviewed as part of final maps and improvement plan review to confirm that proposed designs are consistent with the local code and design standards and confirm that design features (such as trees, fountains, on-street parking, etc.) do not limit site distance. All streets are designed to accommodate emergency vehicles.

As parcels adjacent to the Revised Project site develop in the future, the Revised Project site plan allows for future street connections to the north which would provide additional emergency access routes.

Therefore, impacts associated with design features and emergency access would be ***less than significant***.

3.18 TRIBAL CULTURAL RESOURCES

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact TCR-1: 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)?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact TRC-2: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project would not result in any new or altered impacts with respect to tribal cultural resources. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density

residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts to tribal cultural resources would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. The Cannery Park EIR requires the project to implement the Cannery Park EIR mitigation measures (see Section 3.5 Cultural Resources), which includes standard measures that must be implemented if a previously unknown tribal cultural resources is encountered during site grading and construction activities. These mitigation measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Environmental Impacts and Mitigation Measures

Responses TRC-1 – TRC-2): The Revised Project is within the same footprint of the Original Project. As described in the EIR for the Original Project, a search of existing records at the Central California Information Center failed to identify information concerning prehistoric (or historic-period) sites or features within the Original Project site, in spite of some previous surveys of sensitive areas along Bear Creek. Consultation with the Native American Heritage Commission failed to identify any sacred land listings for this area, and no prehistoric or historic resources were identified during the field survey of the Original Project site. Revised Project disturbance of the Revised Project site is not expected to result in a significant effect on tribal cultural resources.

However, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of previously unknown tribal cultural resources, including prehistoric artifacts. With implementation of the mitigation measures contained within the Cannery Park EIR, the potential impact would be *less than significant* with respect to cultural resources.

3.19 UTILITIES AND SERVICE SYSTEMS

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact UTIL-1: Require or result in the relocation or construction of new or expanded water, wastewater 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 with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact UTIL-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact UTIL-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact UTIL-4: 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 with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures
Impact UTIL-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant with Mitigation	No	No	No	See Cannery Park EIR Mitigation Measures

Discussion

The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The proposed project changes would not result in any new or altered impacts with respect to utilities and service systems. The area of disturbance of the Revised Project would not be larger than that analyzed within the Original Project. Furthermore, although the Revised Project would replace commercial uses with residential uses, the demand for utilities for the residential uses would not be substantially different from the formerly proposed commercial uses associated with the Original Project. Additionally, the Revised Project would still be subject to the requirements of the mitigation measures (listed below) included within the Cannery Park EIR. This mitigation measures contained within the Cannery Park EIR would still be required and enforced. No new mitigation measures are required for the Revised Project revisions.

Mitigation Measures adopted with the Cannery Park EIR**Project Effects on Treatment Plant Capacity**

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall, prior to issuance of building permits, pay the applicable Sewer Connection Fees required for improvements to the Stockton Regional Wastewater Control Facilities.

Project Effects on Wastewater Collection System Capacity and Availability

Mitigation Measure 1. The owners, developers and/or successors-in-interest shall design and construct off-site wastewater collection system improvements needed to serve the proposed project.

Mitigation Measure 2. The owners, developers and/or successors-in-interest shall demonstrate to the satisfaction of the City Engineer that sewage generation by the proposed project can be accommodated within planned collection system improvements, or shall design and construct necessary improvements to the system to accommodate anticipated sewage generation. Limits on the development of "wet" uses shall be included in the Development Agreement.

Mitigation Measure 3. The owners, developers and/or successors-in-interest shall obtain all required permits for crossings of Bear Creek and WID irrigation canals.

Project Effects on Domestic Water Distribution System

Mitigation Measure 1. The owners, developer and/or successors-in-interest shall pay all applicable water connection fees.

Mitigation Measure 2. The owners, developer and/or successors- in-interest shall design and construct, and provide easements for, any required water system improvements needed to serve approved development, in accordance with City standards and master water plans.

Mitigation Measure 3. The owners, developer and/or successors- in-interest shall construct master planned water system facilities within the annexation area boundaries, subject to reimbursement where applicable.

Mitigation Measure 4. The owners, developers and/or successors-in-interest shall dedicate two sites acceptable to the Municipal Utilities Director for future domestic water wells to the City of Stockton.

Mitigation Measure 5. The owners, developers and/or successors-in-interest shall demonstrate to the satisfaction of the City Engineer that City water pressure and fire flow requirements can be met by the planned water system improvements of the proposed project.

Availability of Urban Storm Drainage Services

Mitigation Measure 1. The proposed Storm Drainage Master Plan and any necessary revisions to citywide plans shall be subject to the review and approval of the City Engineer, Director of Municipal Utilities and/or City Council, as required.

Mitigation Measure 2. The owners, developers and/or successors-in-interest shall design and construct elements of the Storm Drainage Master Plan as required to serve development of the project site.

Mitigation Measure 3. The owners, developers and/or successors-in-interest shall obtain all necessary permits for storm drainage crossings of Bear Creek and construction of the Bear Creek pump station and discharge, including permits from the US Army Corps of Engineers, the State Reclamation Board and the California Department of Fish and Game.

Mitigation Measure 4. The owners, developers and/or successors-in-interest shall demonstrate to the satisfaction of the City Engineer that the storm water runoff generated by the proposed project can be accommodated with the planned storm water collection system improvements, as provided by the City's Standard Plans and Specifications.

Consistency with Storm Water Quality Regulation

Mitigation Measure 1. The property owners, developers and/or successors-in-interest shall demonstrate compliance with the City Code Sections 7- 859, 7-859.1, 7-859.2 and other applicable code sections to the Municipal Utilities Department to ensure that sufficient post-construction storm water pollution prevention practices have been incorporated into the project design.

Mitigation Measure 2. The property owners, developers and/or successors-in-interest shall submit a Storm Water Pollution Prevention Plan to the State to address permanent storm water pollution prevention practices. These Plans shall be developed during the project design phase and submitted and approved prior to the start of construction.

Environmental Impacts and Mitigation Measures Responses UTIL-1 – UTIL-3):

Water

The provision of public services and the construction of onsite infrastructure improvements would be required to accommodate the development of the Revised Project. Water distribution will be by an underground distribution system to be installed as per the City of Stockton standards and specifications.

The Cannery Park EIR analyzed the Original Project, which includes (but is not limited) to the Revised Project site. Overall, the Cannery Park EIR identified the Original Project would generate a total of approximately 890.9 acre-feet per year of water demand. However, the Original Project analyzed the

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entire 489.40 acres of the Original Project, while the Revised Project only encompasses 99.88 acres of the area analyzed within the Original Project EIR. Table UTIL-1, below, provides the water demand estimate for just the Original Project within the Revised Project site. As shown in Table UTIL-1, below, the total water demand for the Original Project just within the Revised Project site would be approximately 224.6 acre-feet per year (afy).

TABLE UTIL-1: WATER DEMAND FOR THE ORIGINAL PROJECT WITHIN THE REVISED PROJECT SITE

LAND USE	ACRES	ACRE-FEET PER ACRE (ANNUAL)	ACRE-FEET (ANNUAL)
Industrial	0	2.0	0.0
Commercial	88.61	2.0	177.2
Low-Med Density Residential	0	2.4	0.0
High Density Residential	11.27	4.2	47.3
Total	99.88		224.6

Source: Cannery Park Development EIR

For comparison, the Revised Project water demand within the Revised Project site is provided by Table UTIL-2, below. As shown in Table UTIL-2, the total water demand for the Revised Project would be approximately 192 acre-feet per year (afy).

TABLE UTIL-2: WATER DEMAND FOR THE REVISED PROJECT WITHIN THE REVISED PROJECT SITE

LAND USE	UNITS (DU OR ACRES)	WATER USE FACTOR (ANNUAL)	ACRE-FEET (ANNUAL)
Industrial	0	2.0	0.0
Commercial	19.76 Acres	1.62 AFY/acre	35
Low-Med Density Residential	331 DU	242 gpd/DU 0.27 AFY/DU	95
High Density Residential	296 DU	175 gpd/DU 0.20 AFY/DU	63
Total	617 DU – Residential (19.72 acres Commercial)		192

Source: Cannery Park Project Water Supply Assessment, City of Stockton/West Yost, December 2022,

As shown in Table UTIL-1 and Table UTIL-2, the Revised Project within the Revised Project site is anticipated to demand approximately 32.6 acre-feet per year of water demand less than the Original Project assumed for development within the Revised Project site.

The Revised Project would require extension of offsite water conveyance infrastructure to the Project site for potable water and irrigation water, like the Original Project. All offsite water utility improvements would be constructed in accordance with the City's 2021 Water Master Plan Update adopted February 23, 2021, in or adjacent to existing roadways along the perimeter of the Revised Project site, thereby limiting any potential impact to areas that were not already disturbed. Improvements identified in the Water Master Plan Update include a 24-inch diameter potable water transmission pipeline along Eight Mile Road Project frontage and along the State Route 99 Frontage Road frontage between Eight Mile Road and PFC Jesse Mizener Street. The pipeline will cross under the UPRR tracks adjacent to the existing Eight Mile Road overcrossing and will cross Bear Creek either over the creek on the existing Eight Mile Road bridge or under the creek adjacent to existing rights-of-way for frontage roads. Stubs from the transmission pipeline will be constructed as

required by the City to connect to the Project water distribution system and to a future City well site that may be constructed adjacent to Holman Road depending on the future system needs. The Project may also construct a parallel distribution pipeline for connection of fire hydrants along project frontage roads as required by the City, with interconnection to the transmission pipeline as required. The Project may also construct additional 30-inch and 24-inch diameter potable water transmission pipelines as identified in the 2021 Water Master Plan Update along West Lane from just south of Bear Creek, undercrossing Bear Creek and continuing north to Eight Mile Road, and from West Lane to the Project boundary along Eight Mile Road. These additional potable water transmission pipelines would also include stubs for connection to City-approved development projects and may include stubs for a future parallel distribution pipeline for fire hydrants along West Lane and Eight Mile Road. Water supply will be provided by the City of Stockton, which includes surface and ground water supplies. Water distribution will be by an underground distribution system installed as per the City of Stockton standards and specifications.

The Revised Project would not require the construction of new water treatment facilities or expansion of existing water treatment facilities for water service. While the Revised Project would require construction of new water collection and distribution facilities, the construction of these facilities would not result in significant environmental effects. The environmental impacts of the new facilities are analyzed throughout the Cannery Park EIR. Moreover, the Revised Project water infrastructure would not notably different from the water infrastructure proposed in the EIR for the Original Project. Lastly, while the Revised Project is anticipated to generate more water demand than the Original Project (within the Revised Project site), as shown in Tables UTIL-1 and UTIL-2, none of the proposed revisions to the project would result in new impacts or increase the severity of any significant impacts related to water demand. Overall, implementation of the Revised Project would have a ***less than significant*** impact relative to this topic.

Wastewater

The City of Stockton owns and operates a wastewater collection, treatment, and disposal system, and provides sanitary sewerage service to the City of Stockton. On April 1, 2020, the RWQCB adopted Waste Discharge Requirements (WDRs) Board Order Number R5-2020-0007, NPDES CA0079138, prescribing waste discharge requirements for the City of Stockton Regional Wastewater Control Facility (RWCF).

The RWCF provides secondary and tertiary treatment of municipal wastewater from throughout the City. The remainder of the City is served by on-site septic systems, or lie outside the urban service area. As of 2015, RWCF processes an average of 33 mgd. The treated wastewater is discharged into the San Joaquin River.

To account for the additional wastewater flows in the Project site after the construction of the Revised Project, additions to the existing wastewater infrastructure will be needed. The sanitary sewer collection will be by an underground collection system installed as per the City of Stockton standards and specifications. Sanitary sewer disposal will flow to the City's RWCF for treatment. Improvements include connection to existing sanitary sewer lines.

The City of Stockton's wastewater treatment system is currently in compliance with the waste discharge requirements of Order Number R5-2020-0007, NPDES CA0079138. The wastewater treatment system options covered under this Order include: City of Stockton RWCF, including discharge to the San Joaquin River. The development of the Revised Project under this permitted option would not exceed the wastewater discharge requirements in this Order.

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The City's 2022 *Wastewater Master Plan Update* includes projected wastewater generation factors for commercial and industrial land uses. The 2022 *Water Master Plan Update* also provides overall projected water demand for the City of Stockton Municipal Utilities District (COSMUD) service area. Current dry weather flows at the facility are estimated to be on the order of 35 mgd. The RWCF has capacity to serve anticipated development within the City and is currently undergoing construction of the Modifications Project to change to an activated sludge process to meet the State's stringent new 2014 standards to meet lower nitrate concentrations by June 1, 2024. The Modifications Project also replaces equipment and processes that are 40 to 70 years old and beyond their useful life. Scheduled for completion in 2023, the Modifications Project is modernizing the RWCF to support the community and accommodate growth, initially through 2035 with the ability to expand through 2045 and beyond. The improvements provide a wastewater treatment capacity of 40.2 million gallons per day (mgd) average dry-weather flow (ADWF) with accommodations for future expansion to 48 mgd. The Modifications Project broke ground on October 8, 2019 and has completed several key steps each year toward completion.

Table UTIL-3, below, provides the wastewater demand estimate for just the Original Project within the Revised Project site. As shown in Table UTIL-3, below, the total wastewater demand for the Original Project just within the Revised Project site would be approximately 329,252 gallons per day.

TABLE UTIL-3: WASTEWATER DEMAND FOR THE ORIGINAL PROJECT WITHIN THE REVISED PROJECT SITE

LAND USE	ACRES	GENERATION RATE (GALLONS/DAY/ACRE)	GENERATION (GALLON/DAY)	INFLOW/INFILTRATION (400 GALLONS/DAY/ACRE)
Industrial	0	3000	-	-
Commercial	88.61	2400	212,664	248,108
Low-Med Density Residential	0	2100	-	-
High Density Residential	11.27	6800	76,636	81,144
Total	99.88		289,300	329,252

Source: Cannery Park Development EIR

For comparison, the Revised Project wastewater demand within the Revised Project site is provided by Table UTIL-4, below. As shown in Table UTIL-4, the total wastewater demand for the Original Project within the Revised Project site would be approximately 313,626 gallons per day.

TABLE UTIL-4: WASTEWATER DEMAND FOR THE REVISED PROJECT WITHIN THE REVISED PROJECT SITE

LAND USE	ACRES	GENERATION RATE (GALLONS/DAY/ACRE)	GENERATION (GALLON/DAY)	INFLOW/INFILTRATION (400 GALLONS/DAY/ACRE)
Industrial	0	3000	-	-
Commercial	19.76	2400	47,424	55,328
Low-Med Density Residential	67.78	2100	142,338	169,450
High Density Residential	12.34	6800	83,912	88,848
Total	99.88		273,674	313,626

Source: Cannery Park Development EIR

As shown in Table UTIL-3 and Table UTIL-4, the Revised Project within the Revised Project site is anticipated to generate approximately 16,626 gallons per year of wastewater less than the Original Project with the Revised Project site.

Municipal wastewater collection and treatment would also be provided by the City of Stockton. The site is within the City Urban Service Area and has been included in the City's Wastewater Collection System Master Plan. The Revised Project would be located within System 10 sub-area of the City of Stockton wastewater collection system. This plan has anticipated the extension of municipal wastewater collection and treatment service for the Revised Project site. The Project would construct wastewater infrastructure in accordance with the 2022 Wastewater Master Plan Update. Improvements would include a pump station located north of Bear Creek on the east side of Holman Road to convey Project effluent from tributary areas north of Bear Creek through an 8-inch diameter sewer force main south along Holman Road, crossing Bear Creek within the existing Holman Road bridge, terminating at a manhole structure within Holman Road on the south side of Bear Creek. Flows would continue south within the Holman Road right-of-way through gravity sewer conveyance pipelines. Effluent from tributary areas south of Bear Creek would be collected and conveyed through gravity sewer pipelines. All sewer collection and conveyance infrastructure would be sized and constructed according to adopted City of Stockton sewer hydrologic and hydraulic design criteria, design standards, and specifications. The proposed sewer pump station would include a standby natural gas generator to maintain service in the event of power outages and would be designed with full redundancy to operate with the largest pump out of service for routine maintenance or replacement.

Occupancy of the Revised Project would be prohibited without sewer allocation, as required by section 13.12.100, Mandatory Sanitary Service Required, of the City's Municipal Code. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the RWCF with a subsequent allocation of capacity to the Revised Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the Revised Project's projected demand in addition to the provider's existing commitments. Moreover, the Revised Project would be required to pay all applicable public facility fees to development the Project site. Lastly, as shown in Tables UTIL-3 and UTIL-4, the Revised Project is anticipated to generate less wastewater than the Original Project (within the Revised Project site). Overall, none of the proposed revisions to the project would result in new impacts or increase the severity of any impacts related to wastewater demand. Overall, implementation of the Revised Project would have a ***less than significant*** impact relative to this topic.

Storm Drainage

Flooding events can result in damage to structures, injury or loss of human and animal life, exposure of waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater. The levee system along Bear Creek is designed to a 100-year protection standard. The Revised Project site is not located within the 100-year floodplain as delineated on the most recent flood plain maps for Stockton.

Areas of proposed development within the Revised Project site will be required to meet the "volume reduction" and "trash control" requirements of the City's most recent stormwater NPDES permit.

Units of development would incorporate design features that would divert storm water to the groundwater system and/or detain runoff before it reaches the collection system. These design features would include measures also described as Low Impact Development (LID) and Volume Reduction Measures, such as grassy swales, porous pavement, rain barrels, and rain gardens, among others. Compliance with the City's stormwater standards will require that storm drainage from new development be reduced below "existing runoff" rates. In addition, units of development would incorporate design features to comply with the City's stormwater standards for trash control. Examples of potential design features include hydrodynamic separators, trash screens, or LID measures which are capable of trapping all particles five millimeters in size or greater.

The Revised Project includes development of a new storm drainage system to serve the Revised Project site. It should be noted that the storm drainage system for the Revised Project would be similar to the storm drainage system for the Original Project, as analyzed in the Cannery Park Development EIR. Overall, compliance with federal, State, and local standards and regulations would ensure that the Revised Project would not result in substantial erosion, siltation, surface runoff, flooding, or polluted runoff and that the impact would be *less than significant*.

Responses UTIL-4 – UTIL-5): The permitted maximum disposal at the Forward Landfill is 8,668 tons per day. The total permitted capacity of the Forward Landfill is 51.04 million cubic yards, which was expected to accommodate an operational life until January 1, 2021. An expansion was approved by the Board of Supervisors in early 2020 to extend the life of the landfill, extending its lifespan from 2030 to 2036 according to Republic Services⁴. The remaining capacity is 22,100,000 cubic yards. Solid waste generated by the proposed Project was estimated based on CalRecycle generation rate estimates by use (discussed below). The permitted maximum disposal at the Foothill Landfill is 1,500 tons per day. The remaining capacity is 125,000,000 cubic yards with an anticipated closure year of 2055. The permitted maximum disposal at the North County Landfill is 1,200 tons per day. The remaining capacity is 35,400,000 cubic yards with an anticipated closure year of 2048.

The commercial portion of the Revised Project site is estimated to generate roughly five pounds per day per 1,000 square feet. It is estimated that the 737,346 square feet of commercial space (lot size) would generate approximately 3,687 pounds per day (1.84 tons per day) of solid waste. However, it should be noted that this may be an overestimate, as this estimate is based on the overall lot size for the commercial portion of the Revised Project site, rather than just the total commercial floor space.

The residential uses of the Revised Project are estimated to generate roughly 10 pounds per day per household. It is estimated that the up to 617 proposed residential units would generate 6,170 pounds per day (3.09 tons per day) of solid waste.

The total solid waste generated by the Revised Project is estimated to be 4.93 tons per day. This amount is similar to the amount that would be anticipated for the Original Project. As previously described, solid waste generated in the City is disposed at the Forward Landfill. This landfill was projected to close in the year 2021. As mentioned above, an expansion was approved by the Board of Supervisors earlier this year to extend the life of the landfill, from 2030 to 2036 according to Republic Services. The City's solid waste per capita generation has decreased since 2007 due to the waste

⁴ E.A. Crunden, Republic Landfill Expansion Moves Ahead in California After Failed Appeal. WasteDive. Published January 10, 2020. Accessed: <<https://www.wastedive.com/news/republic-landfill-expansion-california-san-joaquin/570033/>>

diversion efforts of the City. The permitted maximum disposal at the Forward Landfill is 8,668 tons per day. The permitted vehicle limit is 620 vehicles per day; however, the landfill averages 212 daily trucks.⁵ The remaining capacity of the landfill is 22.1 million cubic yards. The addition of solid waste associated with the Revised Project, approximately 9,857 pounds or 4.93 tons per day at total buildout, to the Forward Landfill would not exceed the landfill's remaining capacity.

All development in the City of Stockton is required to have solid waste service pursuant to Section 8.04.020 of the City Municipal Code. Solid waste service for the Revised Project would be provided by the City's contracted providers. Moreover, the solid waste generated by the Revised Project is not anticipated to be substantially different than the solid waste anticipated for the Original Project. Therefore, impacts related to solid waste would be ***less than significant***.

⁵ San Joaquin County Community Development Department. Draft Environmental Impact Report – Forward Landfill Expansion (SCH#2008052024). September 2012. Page III-13.

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3.20 WILDFIRE

Environmental Issue Area	Conclusion in Cannery Park EIR	Does the Project involve new impacts?	New circumstances involving new impacts?	New information requiring new analysis or verification?	Mitigation Required?
Impact WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan?	N/A	No	No	No	No
Impact WF-2: 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?	N/A	No	No	No	No
Impact WF-2 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?	N/A	No	No	No	No
Impact WF-3 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?	N/A	No	No	No	No

Discussion

The Revised Project would not result in any new or altered impacts with respect to wildfire. The Revised Project requests a General Plan Amendment and rezone to revise the land use and zoning designations established by the Original Project within the 99.88-acre Revised Project site. The Original Project sought to increase commercial uses and reduce residential uses on the Revised Project site. The Revised Project General Plan Amendment would: 1) re-designate 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) re-designate 11.27 acres of high density residential land located south of Bear Creek for low density residential uses, and 3) re-designate 12.34 acres of commercial located north of Bear Creek for high density residential uses. The Revised Project rezone would: 1) rezone 56.51 acres of commercial land located south of Bear Creek for low density residential uses, 2) rezone 11.27 acres of high density residential

land located south of Bear Creek for low density residential uses, and 3) rezone 12.34 acres of commercial located north of Bear Creek for high density residential uses. The net change is an increase in housing units and a decrease in commercial land. The housing intensity in the 11.27 acres of high density residential that will be downzoned to low density residential, will be replaced with a net increase in high density residential but in a different location within the Revised Project site.

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the Cannery Park EIR. As such, no changes to potential impacts related to wildfire would occur as a result of the proposed project revisions compared to the potential impacts described in the Cannery Park EIR. No new mitigation measures are required for the project revisions.

Environmental Impacts and Mitigation Measures

Response WF-1): The Revised Project site will connect to an existing network of City streets. The proposed circulation improvements would allow for greater emergency access relative to existing conditions. The Revised Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

Response WF-2): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of flashy fuels (i.e., grassland) in the foothill areas of the eastern and western portion of the County. The Project site is located in an area that is predominately agricultural and urban, which is not considered at a significant risk of wildfire. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

Response WF-3): The Revised Project includes development of infrastructure (water, sewer, and storm drainage). The proposed infrastructure improvements would allow for decreased fire risk relative to existing conditions. The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

Response d): The Revised Project site will be connecting to an existing network of City streets. The proposed circulation improvements would allow for greater emergency access relative to existing conditions. The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e., cut and fill). The Revised Project site is relatively flat; therefore, the potential for a landslide in the Project site is essentially non-existent.

Therefore, impacts from proposed Revised Project implementation would be considered *less than significant* relative to this topic.

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Appendix A: Air Quality/Greenhouse Gas/Energy Modeling Outputs

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	4.80	1000sqft	0.59	4,800.00	0
General Office Building	5.40	1000sqft	0.63	5,400.00	0
General Office Building	5.40	1000sqft	0.64	5,400.00	0
Medical Office Building	4.20	1000sqft	0.80	4,200.00	0
Medical Office Building	5.60	1000sqft	0.70	5,600.00	0
Parking Lot	23.65	1000sqft	2.92	23,653.08	0
Fast Food Restaurant with Drive Thru	2.30	1000sqft	0.99	2,300.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	1.68	4,500.00	0
Fast Food Restaurant with Drive Thru	3.00	1000sqft	0.94	3,000.00	0
Fast Food Restaurant with Drive Thru	7.20	1000sqft	0.90	7,200.00	0
Fast Food Restaurant with Drive Thru	6.80	1000sqft	0.82	6,800.00	0
Hotel	111.00	Room	2.59	161,172.00	0
Quality Restaurant	6.00	1000sqft	1.08	6,000.00	0
Condo/Townhouse	296.00	Dwelling Unit	12.34	296,000.00	939
Single Family Housing	321.00	Dwelling Unit	67.70	577,800.00	1018
Convenience Market with Gas Pumps	4.00	1000sqft	1.44	4,000.00	0
Convenience Market with Gas Pumps	5.60	1000sqft	1.61	5,600.00	0
Regional Shopping Center	1.50	1000sqft	1.51	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2030

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Utility Company Pacific Gas and Electric Company

CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual Acreage;

Construction Phase - Construction schedule based on project size and details.

Off-road Equipment -

Demolition -

Grading -

Vehicle Trips - Trips consistent with Traffic Impact Assessment (Fehr & Peers). Institute of Transportation Engineers 2017.

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - Construction mitigation: Water Exposed Area 2x daily; Clean Paved Road (9% fugitive dust PM reduction);
 Unpaved road mitigation: Limit on-site construction vehicle speeds to 5 mph; Soil Stabilizer for unpaved (10% reduction)

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblLandUse	LandUseSquareFeet	23,650.00	23,653.08
tblLandUse	LotAcreage	0.11	0.59
tblLandUse	LotAcreage	0.12	0.63
tblLandUse	LotAcreage	0.12	0.64
tblLandUse	LotAcreage	0.10	0.80
tblLandUse	LotAcreage	0.13	0.70
tblLandUse	LotAcreage	0.54	2.92
tblLandUse	LotAcreage	0.05	0.99

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tblLandUse	LotAcreage	0.07	0.94
tblLandUse	LotAcreage	0.10	1.68
tblLandUse	LotAcreage	0.16	0.82
tblLandUse	LotAcreage	0.17	0.90
tblLandUse	LotAcreage	3.70	2.59
tblLandUse	LotAcreage	0.14	1.08
tblLandUse	LotAcreage	18.50	12.34
tblLandUse	LotAcreage	104.22	67.70
tblLandUse	LotAcreage	0.09	1.44
tblLandUse	LotAcreage	0.13	1.61
tblLandUse	LotAcreage	0.03	1.51

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1466	1.5187	1.0031	2.0400e-003	0.9240	0.0705	0.9945	0.3761	0.0648	0.4409	0.0000	179.1788	179.1788	0.0564	1.6000e-004	180.6367
2023	0.4102	3.5280	3.6355	9.2000e-003	0.9154	0.1405	1.0559	0.3149	0.1303	0.4452	0.0000	824.1373	824.1373	0.1556	0.0259	835.7492
2024	0.3585	2.4769	3.4844	0.0100	0.5424	0.0864	0.6288	0.1463	0.0813	0.2277	0.0000	910.7357	910.7357	0.0828	0.0495	927.5590
2025	0.3323	2.3275	3.3727	9.8100e-003	0.5403	0.0748	0.6151	0.1458	0.0704	0.2162	0.0000	891.1362	891.1362	0.0810	0.0479	907.4378
2026	0.3229	2.3155	3.3096	9.6500e-003	0.5403	0.0747	0.6150	0.1458	0.0703	0.2161	0.0000	875.8806	875.8806	0.0802	0.0466	891.7716
2027	0.3144	2.3041	3.2479	9.4900e-003	0.5403	0.0746	0.6149	0.1458	0.0702	0.2160	0.0000	861.3559	861.3559	0.0795	0.0453	876.8514
2028	0.3055	2.2864	3.1848	9.3100e-003	0.5382	0.0742	0.6124	0.1452	0.0698	0.2150	0.0000	844.8453	844.8453	0.0785	0.0440	859.9252
2029	3.5731	1.4864	2.2404	5.4400e-003	0.2535	0.0562	0.3097	0.0683	0.0525	0.1208	0.0000	489.6587	489.6587	0.0700	0.0190	497.0659
2030	6.4169	0.0338	0.1116	2.8000e-004	0.0247	8.1000e-004	0.0255	6.5600e-003	8.1000e-004	7.3600e-003	0.0000	24.9414	24.9414	6.8000e-004	3.7000e-004	25.0700
Maximum	6.4169	3.5280	3.6355	0.0100	0.9240	0.1405	1.0559	0.3761	0.1303	0.4452	0.0000	910.7357	910.7357	0.1556	0.0495	927.5590

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1466	1.5187	1.0031	2.0400e-003	0.4189	0.0705	0.4893	0.1701	0.0648	0.2349	0.0000	179.1785	179.1785	0.0564	1.6000e-004	180.6365
2023	0.4102	3.5280	3.6355	9.2000e-003	0.5464	0.1405	0.6870	0.1785	0.1303	0.3088	0.0000	824.1367	824.1367	0.1556	0.0259	835.7486
2024	0.3585	2.4769	3.4844	0.0100	0.5015	0.0864	0.5879	0.1363	0.0813	0.2176	0.0000	910.7354	910.7354	0.0828	0.0495	927.5586
2025	0.3323	2.3275	3.3727	9.8100e-003	0.4996	0.0748	0.5744	0.1358	0.0704	0.2062	0.0000	891.1358	891.1358	0.0810	0.0479	907.4375
2026	0.3229	2.3155	3.3096	9.6500e-003	0.4996	0.0747	0.5743	0.1358	0.0703	0.2061	0.0000	875.8802	875.8802	0.0802	0.0466	891.7713
2027	0.3144	2.3041	3.2479	9.4900e-003	0.4996	0.0746	0.5741	0.1358	0.0702	0.2060	0.0000	861.3555	861.3555	0.0795	0.0453	876.8511
2028	0.3055	2.2864	3.1847	9.3100e-003	0.4977	0.0742	0.5718	0.1353	0.0698	0.2050	0.0000	844.8450	844.8450	0.0785	0.0440	859.9249
2029	3.5731	1.4864	2.2404	5.4400e-003	0.2344	0.0562	0.2906	0.0636	0.0525	0.1161	0.0000	489.6585	489.6585	0.0700	0.0190	497.0656
2030	6.4169	0.0338	0.1116	2.8000e-004	0.0227	8.1000e-004	0.0236	6.0900e-003	8.1000e-004	6.8900e-003	0.0000	24.9414	24.9414	6.8000e-004	3.7000e-004	25.0700
Maximum	6.4169	3.5280	3.6355	0.0100	0.5464	0.1405	0.6870	0.1785	0.1303	0.3088	0.0000	910.7354	910.7354	0.1556	0.0495	927.5586

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	22.80	0.00	20.08	26.60	0.00	18.89	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2022	11-30-2022	1.1971	1.1971

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2	12-1-2022	2-28-2023	1.2709	1.2709
3	3-1-2023	5-31-2023	1.2465	1.2465
4	6-1-2023	8-31-2023	0.8996	0.8996
5	9-1-2023	11-30-2023	0.7480	0.7480
6	12-1-2023	2-29-2024	0.7252	0.7252
7	3-1-2024	5-31-2024	0.7111	0.7111
8	6-1-2024	8-31-2024	0.7070	0.7070
9	9-1-2024	11-30-2024	0.7074	0.7074
10	12-1-2024	2-28-2025	0.6767	0.6767
11	3-1-2025	5-31-2025	0.6694	0.6694
12	6-1-2025	8-31-2025	0.6654	0.6654
13	9-1-2025	11-30-2025	0.6661	0.6661
14	12-1-2025	2-28-2026	0.6589	0.6589
15	3-1-2026	5-31-2026	0.6638	0.6638
16	6-1-2026	8-31-2026	0.6599	0.6599
17	9-1-2026	11-30-2026	0.6605	0.6605
18	12-1-2026	2-28-2027	0.6536	0.6536
19	3-1-2027	5-31-2027	0.6587	0.6587
20	6-1-2027	8-31-2027	0.6548	0.6548
21	9-1-2027	11-30-2027	0.6553	0.6553
22	12-1-2027	2-29-2028	0.6562	0.6562
23	3-1-2028	5-31-2028	0.6544	0.6544
24	6-1-2028	8-31-2028	0.6506	0.6506
25	9-1-2028	11-30-2028	0.6510	0.6510
26	12-1-2028	2-28-2029	0.6449	0.6449
27	3-1-2029	5-31-2029	0.6504	0.6504
28	6-1-2029	8-31-2029	0.3374	0.3374
29	9-1-2029	11-30-2029	1.7083	1.7083
30	12-1-2029	2-28-2030	5.7639	5.7639

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31	3-1-2030	5-31-2030	2.6240	2.6240
		Highest	5.7639	5.7639

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	7.0764	0.5252	19.4828	0.0501		2.4606	2.4606		2.4606	2.4606	323.5795	274.7760	598.3556	1.5249	4.9000e-003	637.9391
Energy	0.1145	1.0022	0.5902	6.2500e-003		0.0791	0.0791		0.0791	0.0791	0.0000	1,717.1723	1,717.1723	0.1162	0.0322	1,729.6806
Mobile	6.4821	7.8255	50.7812	0.1023	12.0036	0.0799	12.0835	3.2077	0.0748	3.2825	0.0000	9,459.1432	9,459.1432	0.6507	0.5744	9,646.5699
Waste						0.0000	0.0000		0.0000	0.0000	201.7345	0.0000	201.7345	11.9222	0.0000	499.7886
Water						0.0000	0.0000		0.0000	0.0000	18.0472	37.7643	55.8114	1.8597	0.0445	115.5682
Total	13.6729	9.3529	70.8541	0.1586	12.0036	2.6197	14.6232	3.2077	2.6145	5.8222	543.3612	11,488.8558	12,032.2169	16.0737	0.6560	12,629.5463

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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	7.0764	0.5252	19.4828	0.0501		2.4606	2.4606		2.4606	2.4606	323.5795	274.7760	598.3556	1.5249	4.9000e-003	637.9391
Energy	0.1145	1.0022	0.5902	6.2500e-003		0.0791	0.0791		0.0791	0.0791	0.0000	1,717.1723	1,717.1723	0.1162	0.0322	1,729.6806
Mobile	6.4821	7.8255	50.7812	0.1023	12.0036	0.0799	12.0835	3.2077	0.0748	3.2825	0.0000	9,459.1432	9,459.1432	0.6507	0.5744	9,646.5699
Waste						0.0000	0.0000		0.0000	0.0000	201.7345	0.0000	201.7345	11.9222	0.0000	499.7886
Water						0.0000	0.0000		0.0000	0.0000	18.0472	37.7643	55.8114	1.8597	0.0445	115.5682
Total	13.6729	9.3529	70.8541	0.1586	12.0036	2.6197	14.6232	3.2077	2.6145	5.8222	543.3612	11,488.8558	12,032.2169	16.0737	0.6560	12,629.5463

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-619.2560
Total	-619.2560

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
2	Grading	Grading	11/24/2022	6/28/2023	5	155	
3	Building Construction	Building Construction	6/29/2023	6/6/2029	5	1550	
4	Paving	Paving	6/7/2029	11/7/2029	5	110	
5	Architectural Coating	Architectural Coating	11/8/2029	4/10/2030	5	110	

Acres of Grading (Site Preparation Phase): 90**Acres of Grading (Grading Phase): 465****Acres of Paving: 2.92**

Residential Indoor: 1,769,445; Residential Outdoor: 589,815; Non-Residential Indoor: 341,208; Non-Residential Outdoor: 113,736; Striped Parking Area: 1,419 (Architectural Coating – sqft)

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OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	431.00	107.00	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	86.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5897	0.0000	0.5897	0.3031	0.0000	0.3031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0951	0.9925	0.5909	1.1400e-003		0.0484	0.0484		0.0445	0.0445	0.0000	100.3182	100.3182	0.0324	0.0000	101.1293
Total	0.0951	0.9925	0.5909	1.1400e-003	0.5897	0.0484	0.6381	0.3031	0.0445	0.3476	0.0000	100.3182	100.3182	0.0324	0.0000	101.1293

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	4.3000e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270
Total	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	4.3000e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270

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					0.2654	0.0000	0.2654	0.1364	0.0000	0.1364	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0951	0.9925	0.5909	1.1400e-003		0.0484	0.0484		0.0445	0.0445	0.0000	100.3181	100.3181	0.0324	0.0000	101.1292
Total	0.0951	0.9925	0.5909	1.1400e-003	0.2654	0.0484	0.3138	0.1364	0.0445	0.1809	0.0000	100.3181	100.3181	0.0324	0.0000	101.1292

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3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270
Total	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3279	0.0000	0.3279	0.0713	0.0000	0.0713	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0489	0.5244	0.3921	8.4000e-004		0.0221	0.0221		0.0203	0.0203	0.0000	73.6217	73.6217	0.0238	0.0000	74.2170
Total	0.0489	0.5244	0.3921	8.4000e-004	0.3279	0.0221	0.3499	0.0713	0.0203	0.0916	0.0000	73.6217	73.6217	0.0238	0.0000	74.2170

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	2.1500e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635
Total	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	2.1500e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635

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					0.1475	0.0000	0.1475	0.0321	0.0000	0.0321	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0489	0.5244	0.3921	8.4000e-004		0.0221	0.0221		0.0203	0.0203	0.0000	73.6216	73.6216	0.0238	0.0000	74.2169
Total	0.0489	0.5244	0.3921	8.4000e-004	0.1475	0.0221	0.1696	0.0321	0.0203	0.0524	0.0000	73.6216	73.6216	0.0238	0.0000	74.2169

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635
Total	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6320	0.0000	0.6320	0.2385	0.0000	0.2385	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2126	2.2090	1.7953	3.9700e-003		0.0912	0.0912		0.0839	0.0839	0.0000	349.0253	349.0253	0.1129	0.0000	351.8474
Total	0.2126	2.2090	1.7953	3.9700e-003	0.6320	0.0912	0.7232	0.2385	0.0839	0.3224	0.0000	349.0253	349.0253	0.1129	0.0000	351.8474

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	0.0102	5.0000e-005	0.0103	2.7100e-003	5.0000e-005	2.7600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863
Total	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	0.0102	5.0000e-005	0.0103	2.7100e-003	5.0000e-005	2.7600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863

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					0.2844	0.0000	0.2844	0.1073	0.0000	0.1073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2126	2.2090	1.7953	3.9700e-003		0.0912	0.0912		0.0839	0.0839	0.0000	349.0249	349.0249	0.1129	0.0000	351.8470
Total	0.2126	2.2090	1.7953	3.9700e-003	0.2844	0.0912	0.3756	0.1073	0.0839	0.1912	0.0000	349.0249	349.0249	0.1129	0.0000	351.8470

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	9.4000e-003	5.0000e-005	9.4500e-003	2.5200e-003	5.0000e-005	2.5600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863
Total	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	9.4000e-003	5.0000e-005	9.4500e-003	2.5200e-003	5.0000e-005	2.5600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9911	152.9911	0.0364	0.0000	153.9010
Total	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9911	152.9911	0.0364	0.0000	153.9010

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.4500e-003	0.3124	0.0920	1.4200e-003	0.0467	2.0000e-003	0.0487	0.0135	1.9100e-003	0.0154	0.0000	136.0633	136.0633	6.7000e-004	0.0206	142.2099
Worker	0.0826	0.0547	0.6471	1.9400e-003	0.2266	1.1200e-003	0.2277	0.0602	1.0300e-003	0.0613	0.0000	178.0460	178.0460	5.4200e-003	5.1100e-003	179.7046
Total	0.0901	0.3671	0.7390	3.3600e-003	0.2733	3.1200e-003	0.2764	0.0737	2.9400e-003	0.0767	0.0000	314.1092	314.1092	6.0900e-003	0.0257	321.9146

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	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9910	152.9910	0.0364	0.0000	153.9008
Total	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9910	152.9910	0.0364	0.0000	153.9008

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.4500e-003	0.3124	0.0920	1.4200e-003	0.0437	2.0000e-003	0.0457	0.0128	1.9100e-003	0.0147	0.0000	136.0633	136.0633	6.7000e-004	0.0206	142.2099
Worker	0.0826	0.0547	0.6471	1.9400e-003	0.2089	1.1200e-003	0.2101	0.0559	1.0300e-003	0.0569	0.0000	178.0460	178.0460	5.4200e-003	5.1100e-003	179.7046
Total	0.0901	0.3671	0.7390	3.3600e-003	0.2527	3.1200e-003	0.2558	0.0687	2.9400e-003	0.0716	0.0000	314.1092	314.1092	6.0900e-003	0.0257	321.9146

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0144	0.6205	0.1790	2.7700e-003	0.0926	4.0000e-003	0.0966	0.0268	3.8300e-003	0.0306	0.0000	265.8695	265.8695	1.2700e-003	0.0402	277.8655
Worker	0.1513	0.0953	1.1875	3.7200e-003	0.4497	2.0900e-003	0.4518	0.1196	1.9200e-003	0.1215	0.0000	341.1439	341.1439	9.6500e-003	9.3600e-003	344.1756
Total	0.1657	0.7158	1.3665	6.4900e-003	0.5424	6.0900e-003	0.5485	0.1463	5.7500e-003	0.1521	0.0000	607.0134	607.0134	0.0109	0.0495	622.0411

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0144	0.6205	0.1790	2.7700e-003	0.0868	4.0000e-003	0.0908	0.0253	3.8300e-003	0.0292	0.0000	265.8695	265.8695	1.2700e-003	0.0402	277.8655
Worker	0.1513	0.0953	1.1875	3.7200e-003	0.4147	2.0900e-003	0.4168	0.1110	1.9200e-003	0.1129	0.0000	341.1439	341.1439	9.6500e-003	9.3600e-003	344.1756
Total	0.1657	0.7158	1.3665	6.4900e-003	0.5015	6.0900e-003	0.5076	0.1363	5.7500e-003	0.1421	0.0000	607.0134	607.0134	0.0109	0.0495	622.0411

3.4 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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	0.0141	0.6160	0.1752	2.7100e-003	0.0923	3.9800e-003	0.0963	0.0267	3.8100e-003	0.0305	0.0000	260.1449	260.1449	1.2200e-003	0.0392	271.8660
Worker	0.1398	0.0842	1.0984	3.5800e-003	0.4480	1.9800e-003	0.4500	0.1191	1.8200e-003	0.1209	0.0000	328.3364	328.3364	8.6600e-003	8.6800e-003	331.1383
Total	0.1539	0.7002	1.2736	6.2900e-003	0.5403	5.9600e-003	0.5463	0.1458	5.6300e-003	0.1514	0.0000	588.4813	588.4813	9.8800e-003	0.0479	603.0043

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	0.0141	0.6160	0.1752	2.7100e-003	0.0864	3.9800e-003	0.0904	0.0252	3.8100e-003	0.0290	0.0000	260.1449	260.1449	1.2200e-003	0.0392	271.8660
Worker	0.1398	0.0842	1.0984	3.5800e-003	0.4131	1.9800e-003	0.4151	0.1106	1.8200e-003	0.1124	0.0000	328.3364	328.3364	8.6600e-003	8.6800e-003	331.1383
Total	0.1539	0.7002	1.2736	6.2900e-003	0.4996	5.9600e-003	0.5055	0.1358	5.6300e-003	0.1414	0.0000	588.4813	588.4813	9.8800e-003	0.0479	603.0043

3.4 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	0.1785	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	0.0138	0.6126	0.1727	2.6600e-003	0.0923	3.9700e-003	0.0962	0.0267	3.7900e-003	0.0305	0.0000	255.3441	255.3441	1.1700e-003	0.0385	266.8324
Worker	0.1306	0.0757	1.0378	3.4700e-003	0.4480	1.8900e-003	0.4499	0.1191	1.7400e-003	0.1209	0.0000	317.8816	317.8816	7.8700e-003	8.1500e-003	320.5058
Total	0.1444	0.6882	1.2106	6.1300e-003	0.5403	5.8600e-003	0.5462	0.1458	5.5300e-003	0.1513	0.0000	573.2257	573.2257	9.0400e-003	0.0466	587.3381

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

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3.4 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	0.0138	0.6126	0.1727	2.6600e-003	0.0864	3.9700e-003	0.0904	0.0252	3.7900e-003	0.0290	0.0000	255.3441	255.3441	1.1700e-003	0.0385	266.8324
Worker	0.1306	0.0757	1.0378	3.4700e-003	0.4131	1.8900e-003	0.4150	0.1106	1.7400e-003	0.1123	0.0000	317.8816	317.8816	7.8700e-003	8.1500e-003	320.5058
Total	0.1444	0.6882	1.2106	6.1300e-003	0.4996	5.8600e-003	0.5054	0.1358	5.5300e-003	0.1413	0.0000	573.2257	573.2257	9.0400e-003	0.0466	587.3381

3.4 Building Construction - 2027

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

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3.4 Building Construction - 2027

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	0.0136	0.6082	0.1706	2.6100e-003	0.0923	3.9400e-003	0.0962	0.0267	3.7700e-003	0.0304	0.0000	250.1706	250.1706	1.1300e-003	0.0376	261.4120
Worker	0.1223	0.0686	0.9783	3.3600e-003	0.4480	1.7900e-003	0.4498	0.1191	1.6400e-003	0.1208	0.0000	308.5304	308.5304	7.1700e-003	7.7100e-003	311.0059
Total	0.1359	0.6768	1.1488	5.9700e-003	0.5403	5.7300e-003	0.5460	0.1458	5.4100e-003	0.1512	0.0000	558.7010	558.7010	8.3000e-003	0.0453	572.4179

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

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3.4 Building Construction - 2027

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	0.0136	0.6082	0.1706	2.6100e-003	0.0864	3.9400e-003	0.0904	0.0252	3.7700e-003	0.0290	0.0000	250.1706	250.1706	1.1300e-003	0.0376	261.4120
Worker	0.1223	0.0686	0.9783	3.3600e-003	0.4131	1.7900e-003	0.4149	0.1106	1.6400e-003	0.1122	0.0000	308.5304	308.5304	7.1700e-003	7.7100e-003	311.0059
Total	0.1359	0.6768	1.1488	5.9700e-003	0.4996	5.7300e-003	0.5053	0.1358	5.4100e-003	0.1412	0.0000	558.7010	558.7010	8.3000e-003	0.0453	572.4179

3.4 Building Construction - 2028

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

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3.4 Building Construction - 2028

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	0.0134	0.6028	0.1682	2.5500e-003	0.0919	3.9000e-003	0.0958	0.0266	3.7300e-003	0.0303	0.0000	244.3208	244.3208	1.1000e-003	0.0367	255.2849
Worker	0.1144	0.0625	0.9255	3.2600e-003	0.4463	1.6700e-003	0.4480	0.1187	1.5300e-003	0.1202	0.0000	299.0292	299.0292	6.5500e-003	7.3200e-003	301.3732
Total	0.1278	0.6653	1.0937	5.8100e-003	0.5382	5.5700e-003	0.5438	0.1452	5.2600e-003	0.1505	0.0000	543.3500	543.3500	7.6500e-003	0.0440	556.6581

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

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3.4 Building Construction - 2028

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	0.0134	0.6028	0.1682	2.5500e-003	0.0861	3.9000e-003	0.0900	0.0251	3.7300e-003	0.0289	0.0000	244.3208	244.3208	1.1000e-003	0.0367	255.2849
Worker	0.1144	0.0625	0.9255	3.2600e-003	0.4116	1.6700e-003	0.4132	0.1101	1.5300e-003	0.1117	0.0000	299.0292	299.0292	6.5500e-003	7.3200e-003	301.3732
Total	0.1278	0.6653	1.0937	5.8100e-003	0.4977	5.5700e-003	0.5032	0.1353	5.2600e-003	0.1405	0.0000	543.3500	543.3500	7.6500e-003	0.0440	556.6581

3.4 Building Construction - 2029

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	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0345	131.0345	0.0308	0.0000	131.8046
Total	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0345	131.0345	0.0308	0.0000	131.8046

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3.4 Building Construction - 2029

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	5.7300e-003	0.2604	0.0725	1.0900e-003	0.0400	1.6800e-003	0.0416	0.0116	1.6100e-003	0.0132	0.0000	104.1282	104.1282	4.6000e-004	0.0156	108.7952
Worker	0.0468	0.0251	0.3842	1.3800e-003	0.1940	6.8000e-004	0.1947	0.0516	6.2000e-004	0.0522	0.0000	126.7408	126.7408	2.6200e-003	3.0500e-003	127.7156
Total	0.0525	0.2856	0.4567	2.4700e-003	0.2339	2.3600e-003	0.2363	0.0631	2.2300e-003	0.0654	0.0000	230.8690	230.8690	3.0800e-003	0.0187	236.5108

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	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0343	131.0343	0.0308	0.0000	131.8044
Total	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0343	131.0343	0.0308	0.0000	131.8044

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3.4 Building Construction - 2029

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	5.7300e-003	0.2604	0.0725	1.0900e-003	0.0374	1.6800e-003	0.0391	0.0109	1.6100e-003	0.0125	0.0000	104.1282	104.1282	4.6000e-004	0.0156	108.7952
Worker	0.0468	0.0251	0.3842	1.3800e-003	0.1789	6.8000e-004	0.1796	0.0479	6.2000e-004	0.0485	0.0000	126.7408	126.7408	2.6200e-003	3.0500e-003	127.7156
Total	0.0525	0.2856	0.4567	2.4700e-003	0.2163	2.3600e-003	0.2187	0.0588	2.2300e-003	0.0610	0.0000	230.8690	230.8690	3.0800e-003	0.0187	236.5108

3.5 Paving - 2029

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	0.0503	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1059	110.1059	0.0356	0.0000	110.9962
Paving	3.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0542	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1059	110.1059	0.0356	0.0000	110.9962

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3.5 Paving - 2029

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	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.5700e-003	2.0000e-005	6.5900e-003	1.7500e-003	2.0000e-005	1.7700e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269
Total	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.5700e-003	2.0000e-005	6.5900e-003	1.7500e-003	2.0000e-005	1.7700e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269

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	0.0503	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1058	110.1058	0.0356	0.0000	110.9960
Paving	3.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0542	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1058	110.1058	0.0356	0.0000	110.9960

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3.5 Paving - 2029

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	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.0600e-003	2.0000e-005	6.0800e-003	1.6200e-003	2.0000e-005	1.6400e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269
Total	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.0600e-003	2.0000e-005	6.0800e-003	1.6200e-003	2.0000e-005	1.6400e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269

3.6 Architectural Coating - 2029

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	3.3812					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2500e-003	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578
Total	3.3845	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578

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3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1400e-003	1.6800e-003	0.0258	9.0000e-005	0.0130	5.0000e-005	0.0131	3.4600e-003	4.0000e-005	3.5000e-003	0.0000	8.5044	8.5044	1.8000e-004	2.0000e-004	8.5698
Total	3.1400e-003	1.6800e-003	0.0258	9.0000e-005	0.0130	5.0000e-005	0.0131	3.4600e-003	4.0000e-005	3.5000e-003	0.0000	8.5044	8.5044	1.8000e-004	2.0000e-004	8.5698

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	3.3812					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2500e-003	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578
Total	3.3845	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1400e-003	1.6800e-003	0.0258	9.0000e-005	0.0120	5.0000e-005	0.0121	3.2100e-003	4.0000e-005	3.2500e-003	0.0000	8.5044	8.5044	1.8000e-004	2.0000e-004	8.5698
Total	3.1400e-003	1.6800e-003	0.0258	9.0000e-005	0.0120	5.0000e-005	0.0121	3.2100e-003	4.0000e-005	3.2500e-003	0.0000	8.5044	8.5044	1.8000e-004	2.0000e-004	8.5698

3.6 Architectural Coating - 2030

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	6.4066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7100e-003	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010
Total	6.4113	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-003	2.9700e-003	0.0469	1.7000e-004	0.0247	8.0000e-005	0.0247	6.5600e-003	7.0000e-005	6.6300e-003	0.0000	15.7497	15.7497	3.1000e-004	3.7000e-004	15.8690
Total	5.6000e-003	2.9700e-003	0.0469	1.7000e-004	0.0247	8.0000e-005	0.0247	6.5600e-003	7.0000e-005	6.6300e-003	0.0000	15.7497	15.7497	3.1000e-004	3.7000e-004	15.8690

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	6.4066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7100e-003	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010
Total	6.4113	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010

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3.6 Architectural Coating - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-003	2.9700e-003	0.0469	1.7000e-004	0.0227	8.0000e-005	0.0228	6.0900e-003	7.0000e-005	6.1600e-003	0.0000	15.7497	15.7497	3.1000e-004	3.7000e-004	15.8690
Total	5.6000e-003	2.9700e-003	0.0469	1.7000e-004	0.0227	8.0000e-005	0.0228	6.0900e-003	7.0000e-005	6.1600e-003	0.0000	15.7497	15.7497	3.1000e-004	3.7000e-004	15.8690

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	6.4821	7.8255	50.7812	0.1023	12.0036	0.0799	12.0835	3.2077	0.0748	3.2825	0.0000	9,459.143 2	9,459.143 2	0.6507	0.5744	9,646.569 9
Unmitigated	6.4821	7.8255	50.7812	0.1023	12.0036	0.0799	12.0835	3.2077	0.0748	3.2825	0.0000	9,459.143 2	9,459.143 2	0.6507	0.5744	9,646.569 9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,166.72	2,409.44	1858.88	6,251,800	6,251,800
Convenience Market with Gas Pumps	2,496.80	2,496.80	2496.80	1,339,294	1,339,294
Convenience Market with Gas Pumps	3,495.52	3,495.52	3495.52	1,875,012	1,875,012
Fast Food Restaurant with Drive Thru	1,083.19	1,417.08	1086.93	1,057,113	1,057,113
Fast Food Restaurant with Drive Thru	2,119.28	2,772.54	2126.61	2,068,265	2,068,265
Fast Food Restaurant with Drive Thru	1,412.85	1,848.36	1417.74	1,378,844	1,378,844
Fast Food Restaurant with Drive Thru	3,390.84	4,436.06	3402.58	3,309,224	3,309,224
Fast Food Restaurant with Drive Thru	3,202.46	4,189.62	3213.54	3,125,379	3,125,379
General Office Building	46.75	10.61	3.36	84,573	84,573
General Office Building	52.60	11.93	3.78	95,144	95,144
General Office Building	52.60	11.93	3.78	95,144	95,144
Hotel	927.96	909.09	660.45	1,685,331	1,685,331
Medical Office Building	146.16	35.99	5.96	216,069	216,069
Medical Office Building	194.88	47.99	7.95	288,092	288,092
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	503.04	540.24	431.82	590,925	590,925
Regional Shopping Center	56.63	69.18	31.65	96,170	96,170
Single Family Housing	3,030.24	3,062.34	2744.55	8,676,101	8,676,101
Total	24,378.50	27,764.73	22,991.91	32,232,478	32,232,478

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Condo/Townhouse	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Convenience Market with Gas Pumps	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Fast Food Restaurant with Drive Thru	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
General Office Building	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Hotel	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Medical Office Building	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Parking Lot	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

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Quality Restaurant	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Regional Shopping Center	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Single Family Housing	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	583.9246	583.9246	0.0945	0.0115	589.6985
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	583.9246	583.9246	0.0945	0.0115	589.6985
NaturalGas Mitigated	0.1145	1.0022	0.5902	6.2500e-003		0.0791	0.0791		0.0791	0.0791	0.0000	1,133.2477	1,133.2477	0.0217	0.0208	1,139.9820
NaturalGas Unmitigated	0.1145	1.0022	0.5902	6.2500e-003		0.0791	0.0791		0.0791	0.0791	0.0000	1,133.2477	1,133.2477	0.0217	0.0208	1,139.9820

5.2 Energy by Land Use - NaturalGas

Unmitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Natural Gas 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					
Condo/Townhouse	5.58611e+006	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	298.0964	298.0964	5.7100e-003	5.4700e-003	299.8678
Convenience Market with Gas Pumps	46320	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4718	2.4718	5.0000e-005	5.0000e-005	2.4865
Convenience Market with Gas Pumps	64848	3.5000e-004	3.1800e-003	2.6700e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4605	3.4605	7.0000e-005	6.0000e-005	3.4811
Fast Food Restaurant with Drive Thru	250723	1.3500e-003	0.0123	0.0103	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	13.3795	13.3795	2.6000e-004	2.5000e-004	13.4590
Fast Food Restaurant with Drive Thru	327030	1.7600e-003	0.0160	0.0135	1.0000e-004		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	17.4516	17.4516	3.3000e-004	3.2000e-004	17.5553
Fast Food Restaurant with Drive Thru	490545	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1774	26.1774	5.0000e-004	4.8000e-004	26.3329
Fast Food Restaurant with Drive Thru	741268	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	39.5569	39.5569	7.6000e-004	7.3000e-004	39.7920
Fast Food Restaurant with Drive Thru	784872	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003	0.0000	41.8838	41.8838	8.0000e-004	7.7000e-004	42.1327
General Office Building	78240	4.2000e-004	3.8400e-003	3.2200e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1752	4.1752	8.0000e-005	8.0000e-005	4.2000
General Office Building	88020	9.5000e-004	8.6300e-003	7.2500e-003	5.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	9.3942	9.3942	1.8000e-004	1.7000e-004	9.4500
Hotel	4.26461e+006	0.0230	0.2091	0.1756	1.2500e-003		0.0159	0.0159		0.0159	0.0159	0.0000	227.5759	227.5759	4.3600e-003	4.1700e-003	228.9283
Medical Office Building	68460	3.7000e-004	3.3600e-003	2.8200e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.6533	3.6533	7.0000e-005	7.0000e-005	3.6750
Medical Office Building	91280	4.9000e-004	4.4700e-003	3.7600e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8711	4.8711	9.0000e-005	9.0000e-005	4.9000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	654060	3.5300e-003	0.0321	0.0269	1.9000e-004		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	34.9031	34.9031	6.7000e-004	6.4000e-004	35.1105
Regional Shopping Center	17370	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9269	0.9269	2.0000e-005	2.0000e-005	0.9324
Single Family Housing	7.59448e+006	0.0410	0.3499	0.1489	2.2300e-003		0.0283	0.0283		0.0283	0.0283	0.0000	405.2703	405.2703	7.7700e-003	7.4300e-003	407.6786
Total		0.1145	1.0022	0.5902	6.2300e-003		0.0791	0.0791		0.0791	0.0791	0.0000	1,133.2477	1,133.2477	0.0217	0.0208	1,139.9820

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5.2 Energy by Land Use - Natural Gas

Mitigated

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	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					
Condo/Townhouse	5.58611e+006	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	298.0964	298.0964	5.7100e-003	5.4700e-003	299.8678
Convenience Market with Gas Pumps	46320	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4718	2.4718	5.0000e-005	5.0000e-005	2.4865
Convenience Market with Gas Pumps	64848	3.5000e-004	3.1800e-003	2.6700e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4605	3.4605	7.0000e-005	6.0000e-005	3.4811
Fast Food Restaurant with Drive Thru	250723	1.3500e-003	0.0123	0.0103	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	13.3795	13.3795	2.6000e-004	2.5000e-004	13.4590
Fast Food Restaurant with Drive Thru	327030	1.7600e-003	0.0160	0.0135	1.0000e-004		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	17.4516	17.4516	3.3000e-004	3.2000e-004	17.5553
Fast Food Restaurant with Drive Thru	490545	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1774	26.1774	5.0000e-004	4.8000e-004	26.3329
Fast Food Restaurant with Drive Thru	741268	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	39.5569	39.5569	7.6000e-004	7.3000e-004	39.7920
Fast Food Restaurant with Drive Thru	784872	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003	0.0000	41.8838	41.8838	8.0000e-004	7.7000e-004	42.1327
General Office Building	78240	4.2000e-004	3.8400e-003	3.2200e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1752	4.1752	8.0000e-005	8.0000e-005	4.2000
General Office Building	88020	9.5000e-004	8.6300e-003	7.2500e-003	5.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	9.3942	9.3942	1.8000e-004	1.7000e-004	9.4500
Hotel	4.26461e+006	0.0230	0.2091	0.1756	1.2500e-003		0.0159	0.0159		0.0159	0.0159	0.0000	227.5759	227.5759	4.3600e-003	4.1700e-003	228.9283
Medical Office Building	68460	3.7000e-004	3.3600e-003	2.8200e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.6533	3.6533	7.0000e-005	7.0000e-005	3.6750
Medical Office Building	91280	4.9000e-004	4.4700e-003	3.7600e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8711	4.8711	9.0000e-005	9.0000e-005	4.9000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	654060	3.5300e-003	0.0321	0.0269	1.9000e-004		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	34.9031	34.9031	6.7000e-004	6.4000e-004	35.1105
Regional Shopping Center	17370	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9269	0.9269	2.0000e-005	2.0000e-005	0.9324
Single Family Housing	7.59448e+006	0.0410	0.3499	0.1489	2.2300e-003		0.0283	0.0283		0.0283	0.0283	0.0000	405.2703	405.2703	7.7700e-003	7.4300e-003	407.6786
Total		0.1145	1.0022	0.5902	6.2300e-003		0.0791	0.0791		0.0791	0.0791	0.0000	1,133.2477	1,133.2477	0.0217	0.0208	1,139.9820

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.44337e+006	133.5460	0.0216	2.6200e-003	134.8666
Convenience Market with Gas Pumps	45480	4.2080	6.8000e-004	8.0000e-005	4.2496
Convenience Market with Gas Pumps	63672	5.8912	9.5000e-004	1.2000e-004	5.9494
Fast Food Restaurant with Drive Thru	138150	12.7822	2.0700e-003	2.5000e-004	12.9086
Fast Food Restaurant with Drive Thru	208760	19.3153	3.1200e-003	3.8000e-004	19.5063
Fast Food Restaurant with Drive Thru	221040	20.4515	3.3100e-003	4.0000e-004	20.6537
Fast Food Restaurant with Drive Thru	70610	6.5331	1.0600e-003	1.3000e-004	6.5977
Fast Food Restaurant with Drive Thru	92100	8.5214	1.3800e-003	1.7000e-004	8.6057
General Office Building	46368	4.2901	6.9000e-004	8.0000e-005	4.3326
General Office Building	52164	9.6528	1.5600e-003	1.9000e-004	9.7483
Hotel	1.03472e+006	95.7366	0.0155	1.8800e-003	96.6833
Medical Office Building	40572	3.7539	6.1000e-004	7.0000e-005	3.7910
Medical Office Building	54096	5.0052	8.1000e-004	1.0000e-004	5.0547
Parking Lot	8278.58	0.7660	1.2000e-004	2.0000e-005	0.7735
Quality Restaurant	184200	17.0429	2.7600e-003	3.3000e-004	17.2114
Regional Shopping Center	17055	1.5780	2.6000e-004	3.0000e-005	1.5936
Single Family Housing	2.53827e+006	234.8505	0.0380	4.6100e-003	237.1728
Total		583.9246	0.0945	0.0115	589.6985

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

2021 Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.44337e+006	133.5460	0.0216	2.6200e-003	134.8666
Convenience Market with Gas Pumps	45480	4.2080	6.8000e-004	8.0000e-005	4.2496
Convenience Market with Gas Pumps	63672	5.8912	9.5000e-004	1.2000e-004	5.9494
Fast Food Restaurant with Drive Thru	138150	12.7822	2.0700e-003	2.5000e-004	12.9086
Fast Food Restaurant with Drive Thru	208760	19.3153	3.1200e-003	3.8000e-004	19.5063
Fast Food Restaurant with Drive Thru	221040	20.4515	3.3100e-003	4.0000e-004	20.6537
Fast Food Restaurant with Drive Thru	70610	6.5331	1.0600e-003	1.3000e-004	6.5977
Fast Food Restaurant with Drive Thru	92100	8.5214	1.3800e-003	1.7000e-004	8.6057
General Office Building	46368	4.2901	6.9000e-004	8.0000e-005	4.3326
General Office Building	52164	9.6528	1.5600e-003	1.9000e-004	9.7483
Hotel	1.03472e+006	95.7366	0.0155	1.8800e-003	96.6833
Medical Office Building	40572	3.7539	6.1000e-004	7.0000e-005	3.7910
Medical Office Building	54096	5.0052	8.1000e-004	1.0000e-004	5.0547
Parking Lot	8278.58	0.7660	1.2000e-004	2.0000e-005	0.7735
Quality Restaurant	184200	17.0429	2.7600e-003	3.3000e-004	17.2114
Regional Shopping Center	17055	1.5780	2.6000e-004	3.0000e-005	1.5936
Single Family Housing	2.53827e+006	234.8505	0.0380	4.6100e-003	237.1728
Total		583.9246	0.0945	0.0115	589.6985

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.0764	0.5252	19.4828	0.0501		2.4606	2.4606		2.4606	2.4606	323.5795	274.7760	598.3556	1.5249	4.9000e-003	637.9391
Unmitigated	7.0764	0.5252	19.4828	0.0501		2.4606	2.4606		2.4606	2.4606	323.5795	274.7760	598.3556	1.5249	4.9000e-003	637.9391

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.9788					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6582	0.4725	14.9118	0.0498		2.4352	2.4352		2.4352	2.4352	323.5795	267.2890	590.8685	1.5178	4.9000e-003	630.2736
Landscaping	0.1368	0.0527	4.5710	2.4000e-004		0.0254	0.0254		0.0254	0.0254	0.0000	7.4871	7.4871	7.1400e-003	0.0000	7.6655
Total	7.0764	0.5251	19.4828	0.0500		2.4606	2.4606		2.4606	2.4606	323.5795	274.7760	598.3556	1.5249	4.9000e-003	637.9391

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.9788					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6582	0.4725	14.9118	0.0498		2.4352	2.4352		2.4352	2.4352	323.5795	267.2890	590.8685	1.5178	4.9000e-003	630.2736
Landscaping	0.1368	0.0527	4.5710	2.4000e-004		0.0254	0.0254		0.0254	0.0254	0.0000	7.4871	7.4871	7.1400e-003	0.0000	7.6655
Total	7.0764	0.5251	19.4828	0.0500		2.4606	2.4606		2.4606	2.4606	323.5795	274.7760	598.3556	1.5249	4.9000e-003	637.9391

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	55.8114	1.8597	0.0445	115.5682
Unmitigated	55.8114	1.8597	0.0445	115.5682

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	19.2856 / 12.1583	19.7110	0.6306	0.0151	39.9777
Convenience Market with Gas Pumps	0.711096 / 0.435833	0.7227	0.0233	5.6000e-004	1.4700
Fast Food Restaurant with Drive Thru	7.2241 / 0.461113	6.0579	0.2360	5.6300e-003	13.6365
General Office Building	2.77265 / 1.69936	2.8181	0.0907	2.1700e-003	5.7316
Hotel	2.81571 / 0.312857	2.4043	0.0920	2.2000e-003	5.3586
Medical Office Building	1.22971 / 0.23423	1.0816	0.0402	9.6000e-004	2.3722
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.8212 / 0.116247	1.5272	0.0595	1.4200e-003	3.4378
Regional Shopping Center	0.111109 / 0.0680989	0.1129	3.6300e-003	9.0000e-005	0.2297
Single Family Housing	20.9144 / 13.1852	21.3757	0.6839	0.0164	43.3542
Total		55.8115	1.8597	0.0445	115.5682

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	19.2856 / 12.1583	19.7110	0.6306	0.0151	39.9777
Convenience Market with Gas Pumps	0.711096 / 0.435833	0.7227	0.0233	5.6000e-004	1.4700
Fast Food Restaurant with Drive Thru	7.2241 / 0.461113	6.0579	0.2360	5.6300e-003	13.6365
General Office Building	2.77265 / 1.69936	2.8181	0.0907	2.1700e-003	5.7316
Hotel	2.81571 / 0.312857	2.4043	0.0920	2.2000e-003	5.3586
Medical Office Building	1.22971 / 0.23423	1.0816	0.0402	9.6000e-004	2.3722
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.8212 / 0.116247	1.5272	0.0595	1.4200e-003	3.4378
Regional Shopping Center	0.111109 / 0.0680989	0.1129	3.6300e-003	9.0000e-005	0.2297
Single Family Housing	20.9144 / 13.1852	21.3757	0.6839	0.0164	43.3542
Total		55.8115	1.8597	0.0445	115.5682

8.0 Waste Detail

8.1 Mitigation Measures Waste

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	201.7345	11.9222	0.0000	499.7886
Unmitigated	201.7345	11.9222	0.0000	499.7886

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	136.16	27.6393	1.6334	0.0000	68.4751
Convenience Market with Gas Pumps	28.85	5.8563	0.3461	0.0000	14.5087
Fast Food Restaurant with Drive Thru	274.15	55.6500	3.2888	0.0000	137.8705
General Office Building	14.51	2.9454	0.1741	0.0000	7.2971
Hotel	60.77	12.3358	0.7290	0.0000	30.5613
Medical Office Building	105.84	21.4846	1.2697	0.0000	53.2271
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	5.47	1.1104	0.0656	0.0000	2.7509
Regional Shopping Center	1.58	0.3207	0.0190	0.0000	0.7946
Single Family Housing	366.48	74.3921	4.3965	0.0000	184.3034
Total		201.7345	11.9222	0.0000	499.7886

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	136.16	27.6393	1.6334	0.0000	68.4751
Convenience Market with Gas Pumps	28.85	5.8563	0.3461	0.0000	14.5087
Fast Food Restaurant with Drive Thru	274.15	55.6500	3.2888	0.0000	137.8705
General Office Building	14.51	2.9454	0.1741	0.0000	7.2971
Hotel	60.77	12.3358	0.7290	0.0000	30.5613
Medical Office Building	105.84	21.4846	1.2697	0.0000	53.2271
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	5.47	1.1104	0.0656	0.0000	2.7509
Regional Shopping Center	1.58	0.3207	0.0190	0.0000	0.7946
Single Family Housing	366.48	74.3921	4.3965	0.0000	184.3034
Total		201.7345	11.9222	0.0000	499.7886

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-619.2560	0.0000	0.0000	-619.2560

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**11.1 Vegetation Land Change****Vegetation Type**

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	99.88 / 0	-619.2560	0.0000	0.0000	-619.2560
Total		-619.2560	0.0000	0.0000	-619.2560

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2021 Cannery Park Project

San Joaquin County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	4.80	1000sqft	0.59	4,800.00	0
General Office Building	5.40	1000sqft	0.63	5,400.00	0
General Office Building	5.40	1000sqft	0.64	5,400.00	0
Medical Office Building	4.20	1000sqft	0.80	4,200.00	0
Medical Office Building	5.60	1000sqft	0.70	5,600.00	0
Parking Lot	23.65	1000sqft	2.92	23,653.08	0
Fast Food Restaurant with Drive Thru	2.30	1000sqft	0.99	2,300.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	1.68	4,500.00	0
Fast Food Restaurant with Drive Thru	3.00	1000sqft	0.94	3,000.00	0
Fast Food Restaurant with Drive Thru	7.20	1000sqft	0.90	7,200.00	0
Fast Food Restaurant with Drive Thru	6.80	1000sqft	0.82	6,800.00	0
Hotel	111.00	Room	2.59	161,172.00	0
Quality Restaurant	6.00	1000sqft	1.08	6,000.00	0
Condo/Townhouse	296.00	Dwelling Unit	12.34	296,000.00	939
Single Family Housing	321.00	Dwelling Unit	67.70	577,800.00	1018
Convenience Market with Gas Pumps	4.00	1000sqft	1.44	4,000.00	0
Convenience Market with Gas Pumps	5.60	1000sqft	1.61	5,600.00	0
Regional Shopping Center	1.50	1000sqft	1.51	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2030

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Utility Company Pacific Gas and Electric Company

CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual Acreage;

Construction Phase - Construction schedule based on project size and details.

Off-road Equipment -

Demolition -

Grading -

Vehicle Trips - Trips consistent with Traffic Impact Assessment (Fehr & Peers). Institute of Transportation Engineers 2017.

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - Construction mitigation: Water Exposed Area 2x daily; Clean Paved Road (9% fugitive dust PM reduction);
 Unpaved road mitigation: Limit on-site construction vehicle speeds to 5 mph; Soil Stabilizer for unpaved (10% reduction)

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblLandUse	LandUseSquareFeet	23,650.00	23,653.08
tblLandUse	LotAcreage	0.11	0.59
tblLandUse	LotAcreage	0.12	0.63
tblLandUse	LotAcreage	0.12	0.64
tblLandUse	LotAcreage	0.10	0.80
tblLandUse	LotAcreage	0.13	0.70
tblLandUse	LotAcreage	0.54	2.92
tblLandUse	LotAcreage	0.05	0.99

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LotAcreage	0.07	0.94
tblLandUse	LotAcreage	0.10	1.68
tblLandUse	LotAcreage	0.16	0.82
tblLandUse	LotAcreage	0.17	0.90
tblLandUse	LotAcreage	3.70	2.59
tblLandUse	LotAcreage	0.14	1.08
tblLandUse	LotAcreage	18.50	12.34
tblLandUse	LotAcreage	104.22	67.70
tblLandUse	LotAcreage	0.09	1.44
tblLandUse	LotAcreage	0.13	1.61
tblLandUse	LotAcreage	0.03	1.51

2.0 Emissions Summary

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6959	38.8834	29.6001	0.0636	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,165.353 3	6,165.353 3	1.9487	4.0500e- 003	6,215.275 5
2023	3.3869	34.5505	28.5887	0.0802	9.3679	1.4253	10.7932	3.6973	1.3113	5.0086	0.0000	8,035.475 0	8,035.475 0	1.9482	0.4232	8,179.193 8
2024	2.8777	18.6393	27.6302	0.0787	4.2657	0.6598	4.9254	1.1479	0.6207	1.7687	0.0000	7,888.693 7	7,888.693 7	0.6916	0.4113	8,028.556 4
2025	2.6762	17.5756	26.7792	0.0773	4.2657	0.5732	4.8389	1.1479	0.5394	1.6873	0.0000	7,744.188 2	7,744.188 2	0.6800	0.3997	7,880.307 0
2026	2.5936	17.4908	26.2341	0.0760	4.2657	0.5724	4.8381	1.1479	0.5386	1.6866	0.0000	7,607.856 3	7,607.856 3	0.6732	0.3890	7,740.605 2
2027	2.5197	17.4100	25.6980	0.0747	4.2657	0.5714	4.8371	1.1479	0.5377	1.6856	0.0000	7,478.606 8	7,478.606 8	0.6672	0.3786	7,608.097 2
2028	2.4533	17.3468	25.2579	0.0736	4.2657	0.5703	4.8361	1.1479	0.5367	1.6846	0.0000	7,360.812 6	7,360.812 6	0.6621	0.3691	7,487.350 7
2029	178.3147	17.2876	24.8864	0.0725	4.2657	0.5693	4.8350	1.1479	0.5358	1.6837	0.0000	7,252.739 4	7,252.739 4	0.7154	0.3603	7,376.562 6
2030	178.2635	0.9314	3.2417	8.1100e- 003	0.7065	0.0226	0.7290	0.1874	0.0224	0.2098	0.0000	801.4550	801.4550	0.0202	0.0108	805.1689
Maximum	178.3147	38.8834	29.6001	0.0802	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	8,035.475 0	8,035.475 0	1.9487	0.4232	8,179.193 8

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6959	38.8834	29.6001	0.0636	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	6,165.353 3	6,165.353 3	1.9487	4.0500e- 003	6,215.275 5
2023	3.3869	34.5505	28.5887	0.0802	4.2931	1.4253	5.7183	1.6846	1.3113	2.9959	0.0000	8,035.475 0	8,035.475 0	1.9482	0.4232	8,179.193 8
2024	2.8777	18.6393	27.6302	0.0787	3.9423	0.6598	4.6020	1.0685	0.6207	1.6893	0.0000	7,888.693 7	7,888.693 7	0.6916	0.4113	8,028.556 4
2025	2.6762	17.5756	26.7792	0.0773	3.9423	0.5732	4.5155	1.0685	0.5394	1.6079	0.0000	7,744.188 2	7,744.188 2	0.6800	0.3997	7,880.307 0
2026	2.5936	17.4908	26.2341	0.0760	3.9423	0.5724	4.5147	1.0685	0.5386	1.6072	0.0000	7,607.856 3	7,607.856 3	0.6732	0.3890	7,740.605 2
2027	2.5197	17.4100	25.6980	0.0747	3.9423	0.5714	4.5137	1.0685	0.5377	1.6062	0.0000	7,478.606 8	7,478.606 8	0.6672	0.3786	7,608.097 2
2028	2.4533	17.3468	25.2579	0.0736	3.9423	0.5703	4.5127	1.0685	0.5367	1.6053	0.0000	7,360.812 6	7,360.812 6	0.6621	0.3691	7,487.350 7
2029	178.3147	17.2876	24.8864	0.0725	3.9423	0.5693	4.5116	1.0685	0.5358	1.6043	0.0000	7,252.739 4	7,252.739 4	0.7154	0.3603	7,376.562 6
2030	178.2635	0.9314	3.2417	8.1100e- 003	0.6512	0.0226	0.6738	0.1738	0.0224	0.1962	0.0000	801.4550	801.4550	0.0202	0.0108	805.1689
Maximum	178.3147	38.8834	29.6001	0.0802	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	8,035.475 0	8,035.475 0	1.9487	0.4232	8,179.193 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	32.26	0.00	28.84	38.55	0.00	29.81	0.00	0.00	0.00	0.00	0.00	0.00

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965
Energy	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622
Mobile	50.2870	45.5847	313.1729	0.6705	76.6362	0.4962	77.1323	20.4292	0.4644	20.8935		68,325.4784	68,325.4784	4.1168	3.7893	69,557.6051
Total	121.8174	63.1851	730.8975	1.9222	76.6362	60.6078	137.2440	20.4292	60.5760	81.0052	8,699.6437	82,448.3008	91,147.9445	45.1422	4.0465	93,482.3638

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	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965
Energy	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622
Mobile	50.2870	45.5847	313.1729	0.6705	76.6362	0.4962	77.1323	20.4292	0.4644	20.8935		68,325.4784	68,325.4784	4.1168	3.7893	69,557.6051
Total	121.8174	63.1851	730.8975	1.9222	76.6362	60.6078	137.2440	20.4292	60.5760	81.0052	8,699.6437	82,448.3008	91,147.9445	45.1422	4.0465	93,482.3638

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
2	Grading	Grading	11/24/2022	6/28/2023	5	155	
3	Building Construction	Building Construction	6/29/2023	6/6/2029	5	1550	
4	Paving	Paving	6/7/2029	11/7/2029	5	110	
5	Architectural Coating	Architectural Coating	11/8/2029	4/10/2030	5	110	

Acres of Grading (Site Preparation Phase): 90

Acres of Grading (Grading Phase): 465

Acres of Paving: 2.92

Residential Indoor: 1,769,445; Residential Outdoor: 589,815; Non-Residential Indoor: 341,208; Non-Residential Outdoor: 113,736; Striped Parking Area: 1,419 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	431.00	107.00	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	86.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0639	0.0360	0.5028	1.3700e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337
Total	0.0639	0.0360	0.5028	1.3700e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0639	0.0360	0.5028	1.3700e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337
Total	0.0639	0.0360	0.5028	1.3700e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0710	0.0400	0.5586	1.5200e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596
Total	0.0710	0.0400	0.5586	1.5200e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	4.1416	1.6349	5.7765	1.6442	1.5041	3.1483	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0710	0.0400	0.5586	1.5200e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596
Total	0.0710	0.0400	0.5586	1.5200e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	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		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0651	0.0349	0.5092	1.4700e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429
Total	0.0651	0.0349	0.5092	1.4700e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	4.1416	1.4245	5.5661	1.6442	1.3105	2.9547	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0651	0.0349	0.5092	1.4700e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429
Total	0.0651	0.0349	0.5092	1.4700e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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	0.1165	4.5325	1.3726	0.0215	0.7251	0.0302	0.7554	0.2088	0.0289	0.2377		2,270.673 6	2,270.673 6	0.0113	0.3431	2,373.208 4
Worker	1.4033	0.7516	10.9721	0.0318	3.5406	0.0169	3.5575	0.9391	0.0156	0.9547		3,209.591 5	3,209.591 5	0.0855	0.0800	3,235.579 3
Total	1.5198	5.2842	12.3447	0.0532	4.2657	0.0472	4.3129	1.1479	0.0445	1.1924		5,480.265 1	5,480.265 1	0.0968	0.4232	5,608.787 7

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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	0.1165	4.5325	1.3726	0.0215	0.6787	0.0302	0.7089	0.1974	0.0289	0.2263		2,270.673 6	2,270.673 6	0.0113	0.3431	2,373.208 4
Worker	1.4033	0.7516	10.9721	0.0318	3.2636	0.0169	3.2806	0.8712	0.0156	0.8867		3,209.591 5	3,209.591 5	0.0855	0.0800	3,235.579 3
Total	1.5198	5.2842	12.3447	0.0532	3.9423	0.0472	3.9894	1.0685	0.0445	1.1130		5,480.265 1	5,480.265 1	0.0968	0.4232	5,608.787 7

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1138	4.5352	1.3456	0.0211	0.7251	0.0305	0.7556	0.2088	0.0292	0.2380		2,235.3872	2,235.3872	0.0108	0.3374	2,336.2090
Worker	1.2923	0.6603	10.1178	0.0307	3.5406	0.0160	3.5565	0.9391	0.0147	0.9538		3,097.6077	3,097.6077	0.0764	0.0739	3,121.5398
Total	1.4062	5.1955	11.4634	0.0518	4.2657	0.0464	4.3121	1.1479	0.0438	1.1918		5,332.9948	5,332.9948	0.0872	0.4113	5,457.7488

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

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	0.1138	4.5352	1.3456	0.0211	0.6787	0.0305	0.7092	0.1974	0.0292	0.2266		2,235.387 2	2,235.387 2	0.0108	0.3374	2,336.209 0
Worker	1.2923	0.6603	10.1178	0.0307	3.2636	0.0160	3.2796	0.8712	0.0147	0.8858		3,097.607 7	3,097.607 7	0.0764	0.0739	3,121.539 8
Total	1.4062	5.1955	11.4634	0.0518	3.9423	0.0464	3.9887	1.0685	0.0438	1.1124		5,332.994 8	5,332.994 8	0.0872	0.4113	5,457.748 8

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1114	4.5197	1.3223	0.0208	0.7251	0.0305	0.7556	0.2088	0.0292	0.2380		2,195.627 6	2,195.627 6	0.0104	0.3310	2,294.517 8
Worker	1.1974	0.5862	9.3723	0.0296	3.5406	0.0152	3.5557	0.9391	0.0140	0.9531		2,992.086 3	2,992.086 3	0.0686	0.0688	3,014.291 1
Total	1.3088	5.1059	10.6946	0.0504	4.2657	0.0457	4.3114	1.1479	0.0431	1.1910		5,187.713 8	5,187.713 8	0.0790	0.3997	5,308.808 9

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1114	4.5197	1.3223	0.0208	0.6787	0.0305	0.7092	0.1974	0.0292	0.2266		2,195.627 6	2,195.627 6	0.0104	0.3310	2,294.517 8
Worker	1.1974	0.5862	9.3723	0.0296	3.2636	0.0152	3.2788	0.8712	0.0140	0.8851		2,992.086 3	2,992.086 3	0.0686	0.0688	3,014.291 1
Total	1.3088	5.1059	10.6946	0.0504	3.9423	0.0457	3.9880	1.0685	0.0431	1.1117		5,187.713 8	5,187.713 8	0.0790	0.3997	5,308.808 9

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1094	4.4945	1.3032	0.0204	0.7252	0.0304	0.7555	0.2088	0.0290	0.2378		2,155.102 1	2,155.102 1	0.0101	0.3244	2,252.028 9
Worker	1.1169	0.5266	8.8462	0.0287	3.5406	0.0145	3.5551	0.9391	0.0134	0.9525		2,896.279 8	2,896.279 8	0.0622	0.0646	2,917.078 2
Total	1.2262	5.0211	10.1495	0.0490	4.2657	0.0449	4.3106	1.1479	0.0424	1.1903		5,051.381 9	5,051.381 9	0.0722	0.3890	5,169.107 2

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1094	4.4945	1.3032	0.0204	0.6787	0.0304	0.7090	0.1974	0.0290	0.2264		2,155.102 1	2,155.102 1	0.0101	0.3244	2,252.028 9
Worker	1.1169	0.5266	8.8462	0.0287	3.2636	0.0145	3.2781	0.8712	0.0134	0.8845		2,896.279 8	2,896.279 8	0.0622	0.0646	2,917.078 2
Total	1.2262	5.0211	10.1495	0.0490	3.9423	0.0449	3.9872	1.0685	0.0424	1.1109		5,051.381 9	5,051.381 9	0.0722	0.3890	5,169.107 2

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1075	4.4629	1.2868	0.0200	0.7252	0.0301	0.7553	0.2088	0.0288	0.2376		2,111.428 4	2,111.428 4	9.7000e-003	0.3175	2,206.273 1
Worker	1.0448	0.4774	8.3266	0.0278	3.5406	0.0137	3.5542	0.9391	0.0126	0.9517		2,810.704 0	2,810.704 0	0.0565	0.0611	2,830.326 1
Total	1.1523	4.9403	9.6134	0.0478	4.2657	0.0438	4.3095	1.1479	0.0414	1.1893		4,922.132 4	4,922.132 4	0.0662	0.3786	5,036.599 1

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1075	4.4629	1.2868	0.0200	0.6787	0.0301	0.7088	0.1974	0.0288	0.2262		2,111.428 4	2,111.428 4	9.7000e-003	0.3175	2,206.273 1
Worker	1.0448	0.4774	8.3266	0.0278	3.2636	0.0137	3.2773	0.8712	0.0126	0.8837		2,810.704 0	2,810.704 0	0.0565	0.0611	2,830.326 1
Total	1.1523	4.9403	9.6134	0.0478	3.9423	0.0438	3.9861	1.0685	0.0414	1.1100		4,922.132 4	4,922.132 4	0.0662	0.3786	5,036.599 1

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1060	4.4400	1.2738	0.0196	0.7252	0.0300	0.7551	0.2088	0.0287	0.2375		2,069.980 9	2,069.980 9	9.4200e- 003	0.3108	2,162.842 0
Worker	0.9799	0.4372	7.8994	0.0271	3.5406	0.0128	3.5534	0.9391	0.0118	0.9509		2,734.357 4	2,734.357 4	0.0518	0.0583	2,753.010 6
Total	1.0859	4.8772	9.1732	0.0466	4.2657	0.0428	4.3085	1.1479	0.0405	1.1884		4,804.338 3	4,804.338 3	0.0612	0.3691	4,915.852 6

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1060	4.4400	1.2738	0.0196	0.6787	0.0300	0.7086	0.1974	0.0287	0.2261		2,069.980 9	2,069.980 9	9.4200e- 003	0.3108	2,162.842 0
Worker	0.9799	0.4372	7.8994	0.0271	3.2636	0.0128	3.2765	0.8712	0.0118	0.8829		2,734.357 4	2,734.357 4	0.0518	0.0583	2,753.010 6
Total	1.0859	4.8772	9.1732	0.0466	3.9423	0.0428	3.9851	1.0685	0.0405	1.1090		4,804.338 3	4,804.338 3	0.0612	0.3691	4,915.852 6

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1047	4.4139	1.2629	0.0192	0.7252	0.0297	0.7549	0.2088	0.0285	0.2373		2,029.869 0	2,029.869 0	9.1700e- 003	0.3044	2,120.817 0
Worker	0.9204	0.4041	7.5388	0.0264	3.5406	0.0120	3.5526	0.9391	0.0111	0.9502		2,666.396 0	2,666.396 0	0.0476	0.0559	2,684.247 5
Total	1.0251	4.8180	8.8017	0.0456	4.2657	0.0417	4.3075	1.1479	0.0395	1.1874		4,696.265 0	4,696.265 0	0.0568	0.3603	4,805.064 5

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1047	4.4139	1.2629	0.0192	0.6787	0.0297	0.7084	0.1974	0.0285	0.2258		2,029.869 0	2,029.869 0	9.1700e- 003	0.3044	2,120.817 0
Worker	0.9204	0.4041	7.5388	0.0264	3.2636	0.0120	3.2756	0.8712	0.0111	0.8822		2,666.396 0	2,666.396 0	0.0476	0.0559	2,684.247 5
Total	1.0251	4.8180	8.8017	0.0456	3.9423	0.0417	3.9841	1.0685	0.0395	1.1080		4,696.265 0	4,696.265 0	0.0568	0.3603	4,805.064 5

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9847	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0320	0.0141	0.2624	9.2000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193
Total	0.0320	0.0141	0.2624	9.2000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9847	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0320	0.0141	0.2624	9.2000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193
Total	0.0320	0.0141	0.2624	9.2000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	177.9602					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	178.1310	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	0.1837	0.0806	1.5043	5.2600e-003	0.7065	2.4000e-003	0.7089	0.1874	2.2000e-003	0.1896		532.0419	532.0419	9.5000e-003	0.0112	535.6039
Total	0.1837	0.0806	1.5043	5.2600e-003	0.7065	2.4000e-003	0.7089	0.1874	2.2000e-003	0.1896		532.0419	532.0419	9.5000e-003	0.0112	535.6039

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	177.9602					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	178.1310	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	0.1837	0.0806	1.5043	5.2600e-003	0.6512	2.4000e-003	0.6536	0.1738	2.2000e-003	0.1760		532.0419	532.0419	9.5000e-003	0.0112	535.6039
Total	0.1837	0.0806	1.5043	5.2600e-003	0.6512	2.4000e-003	0.6536	0.1738	2.2000e-003	0.1760		532.0419	532.0419	9.5000e-003	0.0112	535.6039

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	177.9602					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	178.0909	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

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	0.1726	0.0751	1.4440	5.1400e-003	0.7065	2.2400e-003	0.7087	0.1874	2.0600e-003	0.1895		520.0070	520.0070	8.7900e-003	0.0108	523.4361
Total	0.1726	0.0751	1.4440	5.1400e-003	0.7065	2.2400e-003	0.7087	0.1874	2.0600e-003	0.1895		520.0070	520.0070	8.7900e-003	0.0108	523.4361

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	177.9602					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	178.0909	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

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	0.1726	0.0751	1.4440	5.1400e-003	0.6512	2.2400e-003	0.6535	0.1738	2.0600e-003	0.1759		520.0070	520.0070	8.7900e-003	0.0108	523.4361
Total	0.1726	0.0751	1.4440	5.1400e-003	0.6512	2.2400e-003	0.6535	0.1738	2.0600e-003	0.1759		520.0070	520.0070	8.7900e-003	0.0108	523.4361

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	50.2870	45.5847	313.1729	0.6705	76.6362	0.4962	77.1323	20.4292	0.4644	20.8935		68,325.47 84	68,325.47 84	4.1168	3.7893	69,557.60 51
Unmitigated	50.2870	45.5847	313.1729	0.6705	76.6362	0.4962	77.1323	20.4292	0.4644	20.8935		68,325.47 84	68,325.47 84	4.1168	3.7893	69,557.60 51

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,166.72	2,409.44	1858.88	6,251,800	6,251,800
Convenience Market with Gas Pumps	2,496.80	2,496.80	2496.80	1,339,294	1,339,294
Convenience Market with Gas Pumps	3,495.52	3,495.52	3495.52	1,875,012	1,875,012
Fast Food Restaurant with Drive Thru	1,083.19	1,417.08	1086.93	1,057,113	1,057,113
Fast Food Restaurant with Drive Thru	2,119.28	2,772.54	2126.61	2,068,265	2,068,265
Fast Food Restaurant with Drive Thru	1,412.85	1,848.36	1417.74	1,378,844	1,378,844
Fast Food Restaurant with Drive Thru	3,390.84	4,436.06	3402.58	3,309,224	3,309,224
Fast Food Restaurant with Drive Thru	3,202.46	4,189.62	3213.54	3,125,379	3,125,379
General Office Building	46.75	10.61	3.36	84,573	84,573
General Office Building	52.60	11.93	3.78	95,144	95,144
General Office Building	52.60	11.93	3.78	95,144	95,144
Hotel	927.96	909.09	660.45	1,685,331	1,685,331
Medical Office Building	146.16	35.99	5.96	216,069	216,069
Medical Office Building	194.88	47.99	7.95	288,092	288,092

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	503.04	540.24	431.82	590,925	590,925
Regional Shopping Center	56.63	69.18	31.65	96,170	96,170
Single Family Housing	3,030.24	3,062.34	2744.55	8,676,101	8,676,101
Total	24,378.50	27,764.73	22,991.91	32,232,478	32,232,478

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Condo/Townhouse	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Convenience Market with Gas Pumps	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Fast Food Restaurant with Drive Thru	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
General Office Building	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Hotel	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Medical Office Building	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Parking Lot	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Quality Restaurant	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Regional Shopping Center	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Single Family Housing	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

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	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622
NaturalGas Unmitigated	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622

5.2 Energy by Land Use - NaturalGas

Unmitigated

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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					
Condo/Townhouse	15304.4	0.1651	1.4104	0.6002	9.0000e-003		0.1140	0.1140		0.1140	0.1140		1,800.5205	1,800.5205	0.0345	0.0330	1,811.2201
Convenience Market with Gas Pumps	126.904	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9299	14.9299	2.9000e-004	2.7000e-004	15.0186
Convenience Market with Gas Pumps	177.666	1.9200e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003		20.9019	20.9019	4.0000e-004	3.8000e-004	21.0261
Fast Food Restaurant with Drive Thru	1343.96	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1128	158.1128	3.0300e-003	2.9000e-003	159.0524
Fast Food Restaurant with Drive Thru	2030.87	0.0219	0.1991	0.1673	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.9260	238.9260	4.5800e-003	4.3800e-003	240.3459
Fast Food Restaurant with Drive Thru	2150.33	0.0232	0.2108	0.1771	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.9805	252.9805	4.8500e-003	4.6400e-003	254.4838
Fast Food Restaurant with Drive Thru	686.912	7.4100e-003	0.0673	0.0566	4.0000e-004		5.1200e-003	5.1200e-003		5.1200e-003	5.1200e-003		80.8132	80.8132	1.5500e-003	1.4800e-003	81.2935
Fast Food Restaurant with Drive Thru	895.973	9.6600e-003	0.0878	0.0738	5.3000e-004		6.6800e-003	6.6800e-003		6.6800e-003	6.6800e-003		105.4085	105.4085	2.0200e-003	1.9300e-003	106.0349
General Office Building	214.356	2.3100e-003	0.0210	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003		25.2184	25.2184	4.8000e-004	4.6000e-004	25.3682
General Office Building	241.151	5.2000e-003	0.0473	0.0397	2.8000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003		56.7413	56.7413	1.0900e-003	1.0400e-003	57.0785
Hotel	11683.9	0.1260	1.1455	0.9622	6.8700e-003		0.0871	0.0871		0.0871	0.0871		1,374.5725	1,374.5725	0.0264	0.0252	1,382.7409
Medical Office Building	187.562	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.0661	22.0661	4.2000e-004	4.0000e-004	22.1972
Medical Office Building	250.082	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4214	29.4214	5.6000e-004	5.4000e-004	29.5963
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1791.95	0.0193	0.1757	0.1476	1.0500e-003		0.0134	0.0134		0.0134	0.0134		210.8171	210.8171	4.0400e-003	3.8600e-003	212.0699
Regional Shopping Center	47.589	5.1000e-004	4.6700e-003	3.9200e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		5.5987	5.5987	1.1000e-004	1.0000e-004	5.6320
Single Family Housing	20806.8	0.2244	1.9175	0.8160	0.0122		0.1550	0.1550		0.1550	0.1550		2,447.8575	2,447.8575	0.0469	0.0449	2,462.4039
Total		0.6274	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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					
Condo/Townhouse	15.3044	0.1651	1.4104	0.6002	9.0000e-003		0.1140	0.1140		0.1140	0.1140		1,800.5205	1,800.5205	0.0345	0.0330	1,811.2201
Convenience Market with Gas Pumps	0.126904	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9299	14.9299	2.9000e-004	2.7000e-004	15.0186
Convenience Market with Gas Pumps	0.177666	1.9200e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003		20.9019	20.9019	4.0000e-004	3.8000e-004	21.0261
Fast Food Restaurant with Drive Thru	0.686912	7.4100e-003	0.0673	0.0566	4.0000e-004		5.1200e-003	5.1200e-003		5.1200e-003	5.1200e-003		80.8132	80.8132	1.5500e-003	1.4800e-003	81.2935
Fast Food Restaurant with Drive Thru	0.895973	9.6600e-003	0.0878	0.0738	5.3000e-004		6.6800e-003	6.6800e-003		6.6800e-003	6.6800e-003		105.4085	105.4085	2.0200e-003	1.9300e-003	106.0349
Fast Food Restaurant with Drive Thru	1.34396	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1128	158.1128	3.0300e-003	2.9000e-003	159.0524
Fast Food Restaurant with Drive Thru	2.03087	0.0219	0.1991	0.1673	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.9260	238.9260	4.5800e-003	4.3800e-003	240.3459
Fast Food Restaurant with Drive Thru	2.15033	0.0232	0.2108	0.1771	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.9805	252.9805	4.8500e-003	4.6400e-003	254.4838
General Office Building	0.214356	2.3100e-003	0.0210	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003		25.2184	25.2184	4.8000e-004	4.6000e-004	25.3682
General Office Building	0.241151	5.2000e-003	0.0473	0.0397	2.8000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003		56.7413	56.7413	1.0900e-003	1.0400e-003	57.0785
Hotel	11.6839	0.1260	1.1455	0.9622	6.8700e-003		0.0871	0.0871		0.0871	0.0871		1,374.5725	1,374.5725	0.0264	0.0252	1,382.7409
Medical Office Building	0.187562	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.0661	22.0661	4.2000e-004	4.0000e-004	22.1972
Medical Office Building	0.250082	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4214	29.4214	5.6000e-004	5.4000e-004	29.5963
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.79195	0.0193	0.1757	0.1476	1.0500e-003		0.0134	0.0134		0.0134	0.0134		210.8171	210.8171	4.0400e-003	3.8600e-003	212.0699
Regional Shopping Center	0.047589	5.1000e-004	4.6700e-003	3.9200e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		5.5987	5.5987	1.1000e-004	1.0000e-004	5.6320
Single Family Housing	20.8068	0.2244	1.9175	0.8160	0.0122		0.1550	0.1550		0.1550	0.1550		2,447.8575	2,447.8575	0.0469	0.0449	2,462.4039
Total		0.6274	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965
Unmitigated	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.3632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	40.4437	11.5233	363.7018	1.2147		59.3958	59.3958		59.3958	59.3958	8,699.6437	7,186.2353	15,885.8789	40.8068	0.1318	16,945.3098
Landscaping	1.5204	0.5855	50.7892	2.6900e-003		0.2824	0.2824		0.2824	0.2824		91.7008	91.7008	0.0874		93.8867
Total	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.3632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	40.4437	11.5233	363.7018	1.2147		59.3958	59.3958		59.3958	59.3958	8,699.6437	7,186.2353	15,885.8789	40.8068	0.1318	16,945.3098
Landscaping	1.5204	0.5855	50.7892	2.6900e-003		0.2824	0.2824		0.2824	0.2824		91.7008	91.7008	0.0874		93.8867
Total	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965

7.0 Water Detail

7.1 Mitigation Measures Water

2021 Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2021 Cannery Park Project

San Joaquin County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	4.80	1000sqft	0.59	4,800.00	0
General Office Building	5.40	1000sqft	0.63	5,400.00	0
General Office Building	5.40	1000sqft	0.64	5,400.00	0
Medical Office Building	4.20	1000sqft	0.80	4,200.00	0
Medical Office Building	5.60	1000sqft	0.70	5,600.00	0
Parking Lot	23.65	1000sqft	2.92	23,653.08	0
Fast Food Restaurant with Drive Thru	2.30	1000sqft	0.99	2,300.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	1.68	4,500.00	0
Fast Food Restaurant with Drive Thru	3.00	1000sqft	0.94	3,000.00	0
Fast Food Restaurant with Drive Thru	7.20	1000sqft	0.90	7,200.00	0
Fast Food Restaurant with Drive Thru	6.80	1000sqft	0.82	6,800.00	0
Hotel	111.00	Room	2.59	161,172.00	0
Quality Restaurant	6.00	1000sqft	1.08	6,000.00	0
Condo/Townhouse	296.00	Dwelling Unit	12.34	296,000.00	939
Single Family Housing	321.00	Dwelling Unit	67.70	577,800.00	1018
Convenience Market with Gas Pumps	4.00	1000sqft	1.44	4,000.00	0
Convenience Market with Gas Pumps	5.60	1000sqft	1.61	5,600.00	0
Regional Shopping Center	1.50	1000sqft	1.51	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2030

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Utility Company Pacific Gas and Electric Company

CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual Acreage;

Construction Phase - Construction schedule based on project size and details.

Off-road Equipment -

Demolition -

Grading -

Vehicle Trips - Trips consistent with Traffic Impact Assessment (Fehr & Peers). Institute of Transportation Engineers 2017.

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - Construction mitigation: Water Exposed Area 2x daily; Clean Paved Road (9% fugitive dust PM reduction);
 Unpaved road mitigation: Limit on-site construction vehicle speeds to 5 mph; Soil Stabilizer for unpaved (10% reduction)

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblLandUse	LandUseSquareFeet	23,650.00	23,653.08
tblLandUse	LotAcreage	0.11	0.59
tblLandUse	LotAcreage	0.12	0.63
tblLandUse	LotAcreage	0.12	0.64
tblLandUse	LotAcreage	0.10	0.80
tblLandUse	LotAcreage	0.13	0.70
tblLandUse	LotAcreage	0.54	2.92
tblLandUse	LotAcreage	0.05	0.99

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LotAcreage	0.07	0.94
tblLandUse	LotAcreage	0.10	1.68
tblLandUse	LotAcreage	0.16	0.82
tblLandUse	LotAcreage	0.17	0.90
tblLandUse	LotAcreage	3.70	2.59
tblLandUse	LotAcreage	0.14	1.08
tblLandUse	LotAcreage	18.50	12.34
tblLandUse	LotAcreage	104.22	67.70
tblLandUse	LotAcreage	0.09	1.44
tblLandUse	LotAcreage	0.13	1.61
tblLandUse	LotAcreage	0.03	1.51

2.0 Emissions Summary

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6913	38.8919	29.5416	0.0635	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,150.462 1	6,150.462 1	1.9492	4.6000e- 003	6,200.564 8
2023	3.3828	34.5578	28.5095	0.0771	9.3679	1.4253	10.7932	3.6973	1.3113	5.0086	0.0000	7,730.334 1	7,730.334 1	1.9487	0.4351	7,877.880 8
2024	2.7955	19.0915	26.7103	0.0758	4.2657	0.6598	4.9255	1.1479	0.6208	1.7687	0.0000	7,595.170 7	7,595.170 7	0.7022	0.4223	7,738.568 7
2025	2.6028	18.0107	25.9648	0.0745	4.2657	0.5733	4.8390	1.1479	0.5395	1.6874	0.0000	7,461.529 4	7,461.529 4	0.6899	0.4099	7,600.935 9
2026	2.5281	17.9113	25.4825	0.0733	4.2657	0.5725	4.8382	1.1479	0.5387	1.6867	0.0000	7,334.958 9	7,334.958 9	0.6823	0.3986	7,470.791 9
2027	2.4610	17.8178	25.0119	0.0721	4.2657	0.5715	4.8372	1.1479	0.5378	1.6857	0.0000	7,214.277 1	7,214.277 1	0.6757	0.3876	7,346.681 0
2028	2.4001	17.7445	24.6233	0.0710	4.2657	0.5704	4.8361	1.1479	0.5368	1.6847	0.0000	7,104.025 9	7,104.025 9	0.6700	0.3777	7,233.335 7
2029	178.3065	17.6765	24.2924	0.0701	4.2657	0.5694	4.8351	1.1479	0.5358	1.6838	0.0000	7,002.570 0	7,002.570 0	0.7156	0.3686	7,129.046 8
2030	178.2563	0.9470	3.1208	7.6200e- 003	0.7065	0.0226	0.7290	0.1874	0.0224	0.2098	0.0000	751.9141	751.9141	0.0216	0.0122	756.0929
Maximum	178.3065	38.8919	29.5416	0.0771	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	7,730.334 1	7,730.334 1	1.9492	0.4351	7,877.880 8

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6913	38.8919	29.5416	0.0635	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	6,150.462 1	6,150.462 1	1.9492	4.6000e- 003	6,200.564 8
2023	3.3828	34.5578	28.5095	0.0771	4.2931	1.4253	5.7183	1.6846	1.3113	2.9959	0.0000	7,730.334 1	7,730.334 1	1.9487	0.4351	7,877.880 8
2024	2.7955	19.0915	26.7103	0.0758	3.9423	0.6598	4.6021	1.0685	0.6208	1.6894	0.0000	7,595.170 7	7,595.170 7	0.7022	0.4223	7,738.568 7
2025	2.6028	18.0107	25.9648	0.0745	3.9423	0.5733	4.5156	1.0685	0.5395	1.6080	0.0000	7,461.529 4	7,461.529 4	0.6899	0.4099	7,600.935 9
2026	2.5281	17.9113	25.4825	0.0733	3.9423	0.5725	4.5148	1.0685	0.5387	1.6073	0.0000	7,334.958 9	7,334.958 9	0.6823	0.3986	7,470.791 9
2027	2.4610	17.8178	25.0119	0.0721	3.9423	0.5715	4.5138	1.0685	0.5378	1.6063	0.0000	7,214.277 1	7,214.277 1	0.6757	0.3876	7,346.681 0
2028	2.4001	17.7445	24.6233	0.0710	3.9423	0.5704	4.5127	1.0685	0.5368	1.6053	0.0000	7,104.025 9	7,104.025 9	0.6700	0.3777	7,233.335 7
2029	178.3065	17.6765	24.2924	0.0701	3.9423	0.5694	4.5117	1.0685	0.5358	1.6044	0.0000	7,002.570 0	7,002.570 0	0.7156	0.3686	7,129.046 8
2030	178.2563	0.9470	3.1208	7.6200e- 003	0.6512	0.0226	0.6738	0.1738	0.0224	0.1962	0.0000	751.9141	751.9141	0.0216	0.0122	756.0929
Maximum	178.3065	38.8919	29.5416	0.0771	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	7,730.334 1	7,730.334 1	1.9492	0.4351	7,877.880 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	32.26	0.00	28.84	38.55	0.00	29.81	0.00	0.00	0.00	0.00	0.00	0.00

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965
Energy	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622
Mobile	38.1988	51.4047	342.6418	0.6239	76.6362	0.4969	77.1330	20.4292	0.4650	20.8942		63,613.4711	63,613.4711	4.8471	4.0988	64,956.0886
Total	109.7292	69.0051	760.3664	1.8755	76.6362	60.6085	137.2447	20.4292	60.5767	81.0059	8,699.6437	77,736.2936	86,435.9372	45.8725	4.3560	88,880.8473

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	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965
Energy	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622
Mobile	38.1988	51.4047	342.6418	0.6239	76.6362	0.4969	77.1330	20.4292	0.4650	20.8942		63,613.4711	63,613.4711	4.8471	4.0988	64,956.0886
Total	109.7292	69.0051	760.3664	1.8755	76.6362	60.6085	137.2447	20.4292	60.5767	81.0059	8,699.6437	77,736.2936	86,435.9372	45.8725	4.3560	88,880.8473

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
2	Grading	Grading	11/24/2022	6/28/2023	5	155	
3	Building Construction	Building Construction	6/29/2023	6/6/2029	5	1550	
4	Paving	Paving	6/7/2029	11/7/2029	5	110	
5	Architectural Coating	Architectural Coating	11/8/2029	4/10/2030	5	110	

Acres of Grading (Site Preparation Phase): 90

Acres of Grading (Grading Phase): 465

Acres of Paving: 2.92

Residential Indoor: 1,769,445; Residential Outdoor: 589,815; Non-Residential Indoor: 341,208; Non-Residential Outdoor: 113,736; Striped Parking Area: 1,419 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	431.00	107.00	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	86.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0598	0.0436	0.4501	1.2400e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941
Total	0.0598	0.0436	0.4501	1.2400e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0598	0.0436	0.4501	1.2400e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941
Total	0.0598	0.0436	0.4501	1.2400e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0664	0.0484	0.5001	1.3800e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490
Total	0.0664	0.0484	0.5001	1.3800e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	4.1416	1.6349	5.7765	1.6442	1.5041	3.1483	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0664	0.0484	0.5001	1.3800e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490
Total	0.0664	0.0484	0.5001	1.3800e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	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		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0611	0.0422	0.4584	1.3300e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479
Total	0.0611	0.0422	0.4584	1.3300e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	4.1416	1.4245	5.5661	1.6442	1.3105	2.9547	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0611	0.0422	0.4584	1.3300e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479
Total	0.0611	0.0422	0.4584	1.3300e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1098	4.8459	1.4192	0.0215	0.7251	0.0303	0.7555	0.2088	0.0290	0.2378		2,274.9968	2,274.9968	0.0110	0.3441	2,377.7986
Worker	1.3169	0.9102	9.8777	0.0287	3.5406	0.0169	3.5575	0.9391	0.0156	0.9547		2,900.1274	2,900.1274	0.0972	0.0910	2,929.6761
Total	1.4266	5.7561	11.2969	0.0502	4.2657	0.0473	4.3130	1.1479	0.0446	1.1925		5,175.1242	5,175.1242	0.1082	0.4351	5,307.4748

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1098	4.8459	1.4192	0.0215	0.6787	0.0303	0.7090	0.1974	0.0290	0.2264		2,274.9968	2,274.9968	0.0110	0.3441	2,377.7986
Worker	1.3169	0.9102	9.8777	0.0287	3.2636	0.0169	3.2806	0.8712	0.0156	0.8867		2,900.1274	2,900.1274	0.0972	0.0910	2,929.6761
Total	1.4266	5.7561	11.2969	0.0502	3.9423	0.0473	3.9895	1.0685	0.0446	1.1131		5,175.1242	5,175.1242	0.1082	0.4351	5,307.4748

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1070	4.8485	1.3919	0.0212	0.7251	0.0306	0.7557	0.2088	0.0293	0.2380		2,239.6704	2,239.6704	0.0105	0.3383	2,340.7508
Worker	1.2169	0.7992	9.1516	0.0277	3.5406	0.0160	3.5565	0.9391	0.0147	0.9538		2,799.8014	2,799.8014	0.0874	0.0840	2,827.0103
Total	1.3240	5.6477	10.5435	0.0489	4.2657	0.0465	4.3122	1.1479	0.0439	1.1918		5,039.4718	5,039.4718	0.0979	0.4223	5,167.7611

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1070	4.8485	1.3919	0.0212	0.6787	0.0306	0.7093	0.1974	0.0293	0.2266		2,239.6704	2,239.6704	0.0105	0.3383	2,340.7508
Worker	1.2169	0.7992	9.1516	0.0277	3.2636	0.0160	3.2796	0.8712	0.0147	0.8858		2,799.8014	2,799.8014	0.0874	0.0840	2,827.0103
Total	1.3240	5.6477	10.5435	0.0489	3.9423	0.0465	3.9888	1.0685	0.0439	1.1125		5,039.4718	5,039.4718	0.0979	0.4223	5,167.7611

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1047	4.8317	1.3683	0.0208	0.7251	0.0306	0.7557	0.2088	0.0293	0.2381		2,199.855 2	2,199.855 2	0.0101	0.3318	2,298.996 5
Worker	1.1307	0.7092	8.5119	0.0268	3.5406	0.0152	3.5557	0.9391	0.0140	0.9531		2,705.199 9	2,705.199 9	0.0788	0.0781	2,730.441 3
Total	1.2354	5.5410	9.8801	0.0476	4.2657	0.0458	4.3115	1.1479	0.0432	1.1911		4,905.055 1	4,905.055 1	0.0889	0.4099	5,029.437 8

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1047	4.8317	1.3683	0.0208	0.6787	0.0306	0.7093	0.1974	0.0293	0.2266		2,199.855 2	2,199.855 2	0.0101	0.3318	2,298.996 5
Worker	1.1307	0.7092	8.5119	0.0268	3.2636	0.0152	3.2788	0.8712	0.0140	0.8851		2,705.199 9	2,705.199 9	0.0788	0.0781	2,730.441 3
Total	1.2354	5.5410	9.8801	0.0476	3.9423	0.0458	3.9881	1.0685	0.0432	1.1118		4,905.055 1	4,905.055 1	0.0889	0.4099	5,029.437 8

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1026	4.8047	1.3489	0.0204	0.7252	0.0304	0.7556	0.2088	0.0291	0.2379		2,159.267 0	2,159.267 0	9.7300e- 003	0.3253	2,256.438 4
Worker	1.0581	0.6369	8.0490	0.0259	3.5406	0.0145	3.5551	0.9391	0.0134	0.9525		2,619.217 5	2,619.217 5	0.0716	0.0733	2,642.855 4
Total	1.1607	5.4416	9.3979	0.0463	4.2657	0.0450	4.3107	1.1479	0.0425	1.1904		4,778.484 6	4,778.484 6	0.0814	0.3986	4,899.293 8

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1026	4.8047	1.3489	0.0204	0.6787	0.0304	0.7091	0.1974	0.0291	0.2265		2,159.267 0	2,159.267 0	9.7300e- 003	0.3253	2,256.438 4
Worker	1.0581	0.6369	8.0490	0.0259	3.2636	0.0145	3.2781	0.8712	0.0134	0.8845		2,619.217 5	2,619.217 5	0.0716	0.0733	2,642.855 4
Total	1.1607	5.4416	9.3979	0.0463	3.9423	0.0450	3.9873	1.0685	0.0425	1.1110		4,778.484 6	4,778.484 6	0.0814	0.3986	4,899.293 8

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1007	4.7709	1.3321	0.0200	0.7252	0.0302	0.7554	0.2088	0.0289	0.2377		2,115.531 2	2,115.531 2	9.3900e-003	0.3183	2,210.614 4
Worker	0.9928	0.5773	7.5951	0.0252	3.5406	0.0137	3.5542	0.9391	0.0126	0.9517		2,542.271 6	2,542.271 6	0.0653	0.0693	2,564.568 5
Total	1.0936	5.3482	8.9272	0.0452	4.2657	0.0439	4.3096	1.1479	0.0415	1.1894		4,657.802 7	4,657.802 7	0.0747	0.3876	4,775.182 9

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.1007	4.7709	1.3321	0.0200	0.6787	0.0302	0.7089	0.1974	0.0289	0.2263		2,115.531 2	2,115.531 2	9.3900e- 003	0.3183	2,210.614 4
Worker	0.9928	0.5773	7.5951	0.0252	3.2636	0.0137	3.2773	0.8712	0.0126	0.8837		2,542.271 6	2,542.271 6	0.0653	0.0693	2,564.568 5
Total	1.0936	5.3482	8.9272	0.0452	3.9423	0.0439	3.9862	1.0685	0.0415	1.1101		4,657.802 7	4,657.802 7	0.0747	0.3876	4,775.182 9

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.0992	4.7464	1.3190	0.0196	0.7252	0.0300	0.7552	0.2088	0.0287	0.2375		2,074.018 8	2,074.018 8	9.1100e- 003	0.3116	2,167.113 4
Worker	0.9335	0.5285	7.2197	0.0245	3.5406	0.0128	3.5534	0.9391	0.0118	0.9509		2,473.532 7	2,473.532 7	0.0600	0.0661	2,494.724 2
Total	1.0327	5.2748	8.5387	0.0441	4.2657	0.0429	4.3086	1.1479	0.0405	1.1885		4,547.551 5	4,547.551 5	0.0691	0.3777	4,661.837 6

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.0992	4.7464	1.3190	0.0196	0.6787	0.0300	0.7087	0.1974	0.0287	0.2261		2,074.018 8	2,074.018 8	9.1100e- 003	0.3116	2,167.113 4
Worker	0.9335	0.5285	7.2197	0.0245	3.2636	0.0128	3.2765	0.8712	0.0118	0.8829		2,473.532 7	2,473.532 7	0.0600	0.0661	2,494.724 2
Total	1.0327	5.2748	8.5387	0.0441	3.9423	0.0429	3.9852	1.0685	0.0405	1.1091		4,547.551 5	4,547.551 5	0.0691	0.3777	4,661.837 6

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.0979	4.7185	1.3079	0.0192	0.7252	0.0298	0.7550	0.2088	0.0285	0.2373		2,033.840 6	2,033.840 6	8.8600e-003	0.3052	2,125.017 5
Worker	0.8792	0.4883	6.8998	0.0239	3.5406	0.0120	3.5526	0.9391	0.0111	0.9502		2,412.255 1	2,412.255 1	0.0553	0.0634	2,432.531 3
Total	0.9770	5.2068	8.2077	0.0431	4.2657	0.0418	4.3076	1.1479	0.0396	1.1875		4,446.095 7	4,446.095 7	0.0642	0.3686	4,557.548 7

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.0979	4.7185	1.3079	0.0192	0.6787	0.0298	0.7085	0.1974	0.0285	0.2259		2,033.840 6	2,033.840 6	8.8600e-003	0.3052	2,125.017 5
Worker	0.8792	0.4883	6.8998	0.0239	3.2636	0.0120	3.2756	0.8712	0.0111	0.8822		2,412.255 1	2,412.255 1	0.0553	0.0634	2,432.531 3
Total	0.9770	5.2068	8.2077	0.0431	3.9423	0.0418	3.9841	1.0685	0.0396	1.1081		4,446.095 7	4,446.095 7	0.0642	0.3686	4,557.548 7

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9847	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0306	0.0170	0.2401	8.3000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589
Total	0.0306	0.0170	0.2401	8.3000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9847	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0306	0.0170	0.2401	8.3000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589
Total	0.0306	0.0170	0.2401	8.3000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	177.9602					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	178.1310	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	0.1754	0.0974	1.3768	4.7600e-003	0.7065	2.4000e-003	0.7089	0.1874	2.2000e-003	0.1896		481.3316	481.3316	0.0110	0.0127	485.3775
Total	0.1754	0.0974	1.3768	4.7600e-003	0.7065	2.4000e-003	0.7089	0.1874	2.2000e-003	0.1896		481.3316	481.3316	0.0110	0.0127	485.3775

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	177.9602					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	178.1310	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	0.1754	0.0974	1.3768	4.7600e-003	0.6512	2.4000e-003	0.6536	0.1738	2.2000e-003	0.1760		481.3316	481.3316	0.0110	0.0127	485.3775
Total	0.1754	0.0974	1.3768	4.7600e-003	0.6512	2.4000e-003	0.6536	0.1738	2.2000e-003	0.1760		481.3316	481.3316	0.0110	0.0127	485.3775

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	177.9602					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	178.0909	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

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	0.1654	0.0908	1.3231	4.6500e-003	0.7065	2.2400e-003	0.7087	0.1874	2.0600e-003	0.1895		470.4661	470.4661	0.0102	0.0122	474.3601
Total	0.1654	0.0908	1.3231	4.6500e-003	0.7065	2.2400e-003	0.7087	0.1874	2.0600e-003	0.1895		470.4661	470.4661	0.0102	0.0122	474.3601

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	177.9602					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	178.0909	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

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	0.1654	0.0908	1.3231	4.6500e-003	0.6512	2.2400e-003	0.6535	0.1738	2.0600e-003	0.1759		470.4661	470.4661	0.0102	0.0122	474.3601
Total	0.1654	0.0908	1.3231	4.6500e-003	0.6512	2.2400e-003	0.6535	0.1738	2.0600e-003	0.1759		470.4661	470.4661	0.0102	0.0122	474.3601

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	38.1988	51.4047	342.6418	0.6239	76.6362	0.4969	77.1330	20.4292	0.4650	20.8942		63,613.47 11	63,613.47 11	4.8471	4.0988	64,956.08 86
Unmitigated	38.1988	51.4047	342.6418	0.6239	76.6362	0.4969	77.1330	20.4292	0.4650	20.8942		63,613.47 11	63,613.47 11	4.8471	4.0988	64,956.08 86

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,166.72	2,409.44	1858.88	6,251,800	6,251,800
Convenience Market with Gas Pumps	2,496.80	2,496.80	2496.80	1,339,294	1,339,294
Convenience Market with Gas Pumps	3,495.52	3,495.52	3495.52	1,875,012	1,875,012
Fast Food Restaurant with Drive Thru	1,083.19	1,417.08	1086.93	1,057,113	1,057,113
Fast Food Restaurant with Drive Thru	2,119.28	2,772.54	2126.61	2,068,265	2,068,265
Fast Food Restaurant with Drive Thru	1,412.85	1,848.36	1417.74	1,378,844	1,378,844
Fast Food Restaurant with Drive Thru	3,390.84	4,436.06	3402.58	3,309,224	3,309,224
Fast Food Restaurant with Drive Thru	3,202.46	4,189.62	3213.54	3,125,379	3,125,379
General Office Building	46.75	10.61	3.36	84,573	84,573
General Office Building	52.60	11.93	3.78	95,144	95,144
General Office Building	52.60	11.93	3.78	95,144	95,144
Hotel	927.96	909.09	660.45	1,685,331	1,685,331
Medical Office Building	146.16	35.99	5.96	216,069	216,069
Medical Office Building	194.88	47.99	7.95	288,092	288,092

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	503.04	540.24	431.82	590,925	590,925
Regional Shopping Center	56.63	69.18	31.65	96,170	96,170
Single Family Housing	3,030.24	3,062.34	2744.55	8,676,101	8,676,101
Total	24,378.50	27,764.73	22,991.91	32,232,478	32,232,478

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Condo/Townhouse	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Convenience Market with Gas Pumps	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Fast Food Restaurant with Drive Thru	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
General Office Building	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Hotel	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Medical Office Building	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Parking Lot	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Quality Restaurant	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Regional Shopping Center	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Single Family Housing	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

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	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622
NaturalGas Unmitigated	0.6275	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622

5.2 Energy by Land Use - NaturalGas

Unmitigated

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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					
Condo/Townhouse	15304.4	0.1651	1.4104	0.6002	9.0000e-003		0.1140	0.1140		0.1140	0.1140		1,800.5205	1,800.5205	0.0345	0.0330	1,811.2201
Convenience Market with Gas Pumps	126.904	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9299	14.9299	2.9000e-004	2.7000e-004	15.0186
Convenience Market with Gas Pumps	177.666	1.9200e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003		20.9019	20.9019	4.0000e-004	3.8000e-004	21.0261
Fast Food Restaurant with Drive Thru	1343.96	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1128	158.1128	3.0300e-003	2.9000e-003	159.0524
Fast Food Restaurant with Drive Thru	2030.87	0.0219	0.1991	0.1673	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.9260	238.9260	4.5800e-003	4.3800e-003	240.3459
Fast Food Restaurant with Drive Thru	2150.33	0.0232	0.2108	0.1771	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.9805	252.9805	4.8500e-003	4.6400e-003	254.4838
Fast Food Restaurant with Drive Thru	686.912	7.4100e-003	0.0673	0.0566	4.0000e-004		5.1200e-003	5.1200e-003		5.1200e-003	5.1200e-003		80.8132	80.8132	1.5500e-003	1.4800e-003	81.2935
Fast Food Restaurant with Drive Thru	895.973	9.6600e-003	0.0878	0.0738	5.3000e-004		6.6800e-003	6.6800e-003		6.6800e-003	6.6800e-003		105.4085	105.4085	2.0200e-003	1.9300e-003	106.0349
General Office Building	214.356	2.3100e-003	0.0210	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003		25.2184	25.2184	4.8000e-004	4.6000e-004	25.3682
General Office Building	241.151	5.2000e-003	0.0473	0.0397	2.8000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003		56.7413	56.7413	1.0900e-003	1.0400e-003	57.0785
Hotel	11683.9	0.1260	1.1455	0.9622	6.8700e-003		0.0871	0.0871		0.0871	0.0871		1,374.5725	1,374.5725	0.0264	0.0252	1,382.7409
Medical Office Building	187.562	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.0661	22.0661	4.2000e-004	4.0000e-004	22.1972
Medical Office Building	250.082	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4214	29.4214	5.6000e-004	5.4000e-004	29.5963
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1791.95	0.0193	0.1757	0.1476	1.0500e-003		0.0134	0.0134		0.0134	0.0134		210.8171	210.8171	4.0400e-003	3.8600e-003	212.0699
Regional Shopping Center	47.589	5.1000e-004	4.6700e-003	3.9200e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		5.5987	5.5987	1.1000e-004	1.0000e-004	5.6320
Single Family Housing	20806.8	0.2244	1.9175	0.8160	0.0122		0.1550	0.1550		0.1550	0.1550		2,447.8575	2,447.8575	0.0469	0.0449	2,462.4039
Total		0.6274	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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					
Condo/Townhouse	15.3044	0.1651	1.4104	0.6002	9.0000e-003		0.1140	0.1140		0.1140	0.1140		1,800.5205	1,800.5205	0.0345	0.0330	1,811.2201
Convenience Market with Gas Pumps	0.126904	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9299	14.9299	2.9000e-004	2.7000e-004	15.0186
Convenience Market with Gas Pumps	0.177666	1.9200e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003		20.9019	20.9019	4.0000e-004	3.8000e-004	21.0261
Fast Food Restaurant with Drive Thru	0.686912	7.4100e-003	0.0673	0.0566	4.0000e-004		5.1200e-003	5.1200e-003		5.1200e-003	5.1200e-003		80.8132	80.8132	1.5500e-003	1.4800e-003	81.2935
Fast Food Restaurant with Drive Thru	0.895973	9.6600e-003	0.0878	0.0738	5.3000e-004		6.6800e-003	6.6800e-003		6.6800e-003	6.6800e-003		105.4085	105.4085	2.0200e-003	1.9300e-003	106.0349
Fast Food Restaurant with Drive Thru	1.34396	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1128	158.1128	3.0300e-003	2.9000e-003	159.0524
Fast Food Restaurant with Drive Thru	2.03087	0.0219	0.1991	0.1673	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.9260	238.9260	4.5800e-003	4.3800e-003	240.3459
Fast Food Restaurant with Drive Thru	2.15033	0.0232	0.2108	0.1771	1.2600e-003		0.0160	0.0160		0.0160	0.0160		252.9805	252.9805	4.8500e-003	4.6400e-003	254.4838
General Office Building	0.214356	2.3100e-003	0.0210	0.0177	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003		25.2184	25.2184	4.8000e-004	4.6000e-004	25.3682
General Office Building	0.241151	5.2000e-003	0.0473	0.0397	2.8000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003		56.7413	56.7413	1.0900e-003	1.0400e-003	57.0785
Hotel	11.6839	0.1260	1.1455	0.9622	6.8700e-003		0.0871	0.0871		0.0871	0.0871		1,374.5725	1,374.5725	0.0264	0.0252	1,382.7409
Medical Office Building	0.187562	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.0661	22.0661	4.2000e-004	4.0000e-004	22.1972
Medical Office Building	0.250082	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4214	29.4214	5.6000e-004	5.4000e-004	29.5963
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.79195	0.0193	0.1757	0.1476	1.0500e-003		0.0134	0.0134		0.0134	0.0134		210.8171	210.8171	4.0400e-003	3.8600e-003	212.0699
Regional Shopping Center	0.047589	5.1000e-004	4.6700e-003	3.9200e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		5.5987	5.5987	1.1000e-004	1.0000e-004	5.6320
Single Family Housing	20.8068	0.2244	1.9175	0.8160	0.0122		0.1550	0.1550		0.1550	0.1550		2,447.8575	2,447.8575	0.0469	0.0449	2,462.4039
Total		0.6274	5.4917	3.2337	0.0342		0.4335	0.4335		0.4335	0.4335		6,844.8864	6,844.8864	0.1312	0.1255	6,885.5622

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965
Unmitigated	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.3632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	40.4437	11.5233	363.7018	1.2147		59.3958	59.3958		59.3958	59.3958	8,699.6437	7,186.2353	15,885.8789	40.8068	0.1318	16,945.3098
Landscaping	1.5204	0.5855	50.7892	2.6900e-003		0.2824	0.2824		0.2824	0.2824		91.7008	91.7008	0.0874		93.8867
Total	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.3632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	40.4437	11.5233	363.7018	1.2147		59.3958	59.3958		59.3958	59.3958	8,699.6437	7,186.2353	15,885.8789	40.8068	0.1318	16,945.3098
Landscaping	1.5204	0.5855	50.7892	2.6900e-003		0.2824	0.2824		0.2824	0.2824		91.7008	91.7008	0.0874		93.8867
Total	70.9029	12.1087	414.4909	1.2174		59.6782	59.6782		59.6782	59.6782	8,699.6437	7,277.9360	15,977.5797	40.8942	0.1318	17,039.1965

7.0 Water Detail

7.1 Mitigation Measures Water

2021 Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

The Previously Approved Cannery Park Project

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1,157.95	1000sqft	88.61	1,157,950.00	0
Apartment Low Rise	270.00	Dwelling Unit	11.27	270,000.00	856

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2030
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 - Actual Acreage;

Construction Phase - Construction schedule based on project size and details.

Off-road Equipment -

Demolition -

Grading -

Vehicle Trips - Trips consistent with Traffic Impact Assessment (Fehr & Peers). Institute of Transportation Engineers 2017.

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - Construction mitigation: Water Exposed Area 2x daily; Clean Paved Road (9% fugitive dust PM reduction); Unpaved road mitigation: Limit on-site construction vehicle speeds to 5 mph; Soil Stabilizer for unpaved (10% reduction)

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblLandUse	LotAcreage	26.58	88.61
tblLandUse	LotAcreage	16.88	11.27
tblWoodstoves	NumberCatalytic	11.27	0.00
tblWoodstoves	NumberNoncatalytic	11.27	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1466	1.5187	1.0031	2.0400e-003	0.9240	0.0705	0.9945	0.3761	0.0648	0.4409	0.0000	179.1788	179.1788	0.0564	1.6000e-004	180.6367
2023	0.4437	3.8720	3.9329	0.0113	1.0347	0.1430	1.1777	0.3478	0.1326	0.4804	0.0000	1,021.9140	1,021.9140	0.1580	0.0490	1,040.4755
2024	0.4207	3.1560	4.0409	0.0141	0.7792	0.0913	0.8704	0.2115	0.0859	0.2975	0.0000	1,295.0923	1,295.0923	0.0871	0.0945	1,325.4147
2025	0.3906	2.9985	3.8976	0.0138	0.7762	0.0796	0.8558	0.2107	0.0750	0.2857	0.0000	1,265.5188	1,265.5188	0.0850	0.0917	1,294.9604
2026	0.3780	2.9802	3.8131	0.0135	0.7762	0.0795	0.8556	0.2107	0.0748	0.2855	0.0000	1,241.9876	1,241.9876	0.0839	0.0894	1,270.7196
2027	0.3666	2.9621	3.7305	0.0133	0.7762	0.0793	0.8554	0.2107	0.0746	0.2854	0.0000	1,219.1403	1,219.1403	0.0829	0.0871	1,247.1722
2028	0.3551	2.9368	3.6486	0.0130	0.7732	0.0788	0.8520	0.2099	0.0742	0.2841	0.0000	1,193.5527	1,193.5527	0.0817	0.0847	1,220.8377
2029	3.8662	1.7673	2.4438	7.0400e-003	0.3597	0.0582	0.4179	0.0975	0.0544	0.1519	0.0000	640.7270	640.7270	0.0714	0.0364	653.3429
2030	6.9403	0.0347	0.1264	3.3000e-004	0.0324	8.4000e-004	0.0332	8.6100e-003	8.3000e-004	9.4400e-003	0.0000	29.8860	29.8860	7.8000e-004	4.9000e-004	30.0521
Maximum	6.9403	3.8720	4.0409	0.0141	1.0347	0.1430	1.1777	0.3761	0.1326	0.4804	0.0000	1,295.0923	1,295.0923	0.1580	0.0945	1,325.4147

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1466	1.5187	1.0031	2.0400e-003	0.4189	0.0705	0.4893	0.1701	0.0648	0.2349	0.0000	179.1785	179.1785	0.0564	1.6000e-004	180.6365
2023	0.4437	3.8720	3.9329	0.0113	0.6572	0.1430	0.8001	0.2092	0.1326	0.3419	0.0000	1,021.9134	1,021.9134	0.1580	0.0490	1,040.4749
2024	0.4207	3.1560	4.0409	0.0141	0.7212	0.0913	0.8125	0.1973	0.0859	0.2832	0.0000	1,295.0919	1,295.0919	0.0871	0.0945	1,325.4144
2025	0.3906	2.9985	3.8976	0.0138	0.7185	0.0796	0.7981	0.1966	0.0750	0.2715	0.0000	1,265.5184	1,265.5184	0.0850	0.0917	1,294.9600
2026	0.3780	2.9802	3.8131	0.0135	0.7185	0.0795	0.7979	0.1966	0.0748	0.2714	0.0000	1,241.9873	1,241.9873	0.0839	0.0894	1,270.7193
2027	0.3666	2.9621	3.7305	0.0133	0.7185	0.0793	0.7977	0.1966	0.0746	0.2712	0.0000	1,219.1400	1,219.1400	0.0829	0.0871	1,247.1718
2028	0.3551	2.9368	3.6486	0.0130	0.7157	0.0788	0.7945	0.1958	0.0742	0.2700	0.0000	1,193.5523	1,193.5523	0.0817	0.0847	1,220.8374
2029	3.8662	1.7673	2.4438	7.0400e-003	0.3329	0.0582	0.3911	0.0910	0.0544	0.1453	0.0000	640.7267	640.7267	0.0714	0.0364	653.3426
2030	6.9403	0.0347	0.1264	3.3000e-004	0.0299	8.4000e-004	0.0307	8.0000e-003	8.3000e-004	8.8200e-003	0.0000	29.8860	29.8860	7.8000e-004	4.9000e-004	30.0521
Maximum	6.9403	3.8720	4.0409	0.0141	0.7212	0.1430	0.8125	0.2092	0.1326	0.3419	0.0000	1,295.0919	1,295.0919	0.1580	0.0945	1,325.4144

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	19.27	0.00	17.37	22.43	0.00	16.76	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2022	11-30-2022	1.1971	1.1971

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2	12-1-2022	2-28-2023	1.2709	1.2709
3	3-1-2023	5-31-2023	1.2465	1.2465
4	6-1-2023	8-31-2023	1.0262	1.0262
5	9-1-2023	11-30-2023	0.9354	0.9354
6	12-1-2023	2-29-2024	0.9149	0.9149
7	3-1-2024	5-31-2024	0.8947	0.8947
8	6-1-2024	8-31-2024	0.8868	0.8868
9	9-1-2024	11-30-2024	0.8927	0.8927
10	12-1-2024	2-28-2025	0.8620	0.8620
11	3-1-2025	5-31-2025	0.8506	0.8506
12	6-1-2025	8-31-2025	0.8429	0.8429
13	9-1-2025	11-30-2025	0.8490	0.8490
14	12-1-2025	2-28-2026	0.8418	0.8418
15	3-1-2026	5-31-2026	0.8427	0.8427
16	6-1-2026	8-31-2026	0.8350	0.8350
17	9-1-2026	11-30-2026	0.8410	0.8410
18	12-1-2026	2-28-2027	0.8340	0.8340
19	3-1-2027	5-31-2027	0.8351	0.8351
20	6-1-2027	8-31-2027	0.8276	0.8276
21	9-1-2027	11-30-2027	0.8334	0.8334
22	12-1-2027	2-29-2028	0.8365	0.8365
23	3-1-2028	5-31-2028	0.8288	0.8288
24	6-1-2028	8-31-2028	0.8214	0.8214
25	9-1-2028	11-30-2028	0.8271	0.8271
26	12-1-2028	2-28-2029	0.8213	0.8213
27	3-1-2029	5-31-2029	0.8229	0.8229
28	6-1-2029	8-31-2029	0.3463	0.3463
29	9-1-2029	11-30-2029	1.8264	1.8264
30	12-1-2029	2-28-2030	6.2324	6.2324

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

31	3-1-2030	5-31-2030	2.8374	2.8374
		Highest	6.2324	6.2324

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	6.7079	0.1241	2.0531	7.5000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	120.2615	120.2615	5.4200e-003	2.1400e-003	121.0359
Energy	0.0893	0.8023	0.6139	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	2,203.8879	2,203.8879	0.2306	0.0421	2,222.1943
Mobile	12.9161	17.2534	111.6682	0.2494	29.7711	0.1888	29.9599	7.9557	0.1768	8.1325	0.0000	23,059.3187	23,059.3187	1.3736	1.2810	23,475.3951
Waste						0.0000	0.0000		0.0000	0.0000	272.0180	0.0000	272.0180	16.0758	0.0000	673.9132
Water						0.0000	0.0000		0.0000	0.0000	32.7926	72.3641	105.1567	3.3798	0.0810	213.7745
Total	19.7133	18.1799	114.3351	0.2550	29.7711	0.2698	30.0409	7.9557	0.2578	8.2135	304.8106	25,455.8321	25,760.6428	21.0652	1.4062	26,706.3129

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	6.7079	0.1241	2.0531	7.5000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	120.2615	120.2615	5.4200e-003	2.1400e-003	121.0359
Energy	0.0893	0.8023	0.6139	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	2,203.8879	2,203.8879	0.2306	0.0421	2,222.1943
Mobile	12.9161	17.2534	111.6682	0.2494	29.7711	0.1888	29.9599	7.9557	0.1768	8.1325	0.0000	23,059.3187	23,059.3187	1.3736	1.2810	23,475.3951
Waste						0.0000	0.0000		0.0000	0.0000	272.0180	0.0000	272.0180	16.0758	0.0000	673.9132
Water						0.0000	0.0000		0.0000	0.0000	32.7926	72.3641	105.1567	3.3798	0.0810	213.7745
Total	19.7133	18.1799	114.3351	0.2550	29.7711	0.2698	30.0409	7.9557	0.2578	8.2135	304.8106	25,455.8321	25,760.6428	21.0652	1.4062	26,706.3129

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-619.2560
Total	-619.2560

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
2	Grading	Grading	11/24/2022	6/28/2023	5	155	
3	Building Construction	Building Construction	6/29/2023	6/6/2029	5	1550	
4	Paving	Paving	6/7/2029	11/7/2029	5	110	
5	Architectural Coating	Architectural Coating	11/8/2029	4/10/2030	5	110	

Acres of Grading (Site Preparation Phase): 90**Acres of Grading (Grading Phase): 465****Acres of Paving: 0**

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 1,736,925; Non-Residential Outdoor: 578,975; Striped Parking Area: 0 (Architectural Coating – sqft)

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	565.00	219.00	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	113.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5897	0.0000	0.5897	0.3031	0.0000	0.3031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0951	0.9925	0.5909	1.1400e-003		0.0484	0.0484		0.0445	0.0445	0.0000	100.3182	100.3182	0.0324	0.0000	101.1293
Total	0.0951	0.9925	0.5909	1.1400e-003	0.5897	0.0484	0.6381	0.3031	0.0445	0.3476	0.0000	100.3182	100.3182	0.0324	0.0000	101.1293

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	4.3000e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270
Total	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	4.3000e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270

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					0.2654	0.0000	0.2654	0.1364	0.0000	0.1364	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0951	0.9925	0.5909	1.1400e-003		0.0484	0.0484		0.0445	0.0445	0.0000	100.3181	100.3181	0.0324	0.0000	101.1292
Total	0.0951	0.9925	0.5909	1.1400e-003	0.2654	0.0484	0.3138	0.1364	0.0445	0.1809	0.0000	100.3181	100.3181	0.0324	0.0000	101.1292

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3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270
Total	1.7100e-003	1.1900e-003	0.0134	4.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.4926	3.4926	1.1000e-004	1.1000e-004	3.5270

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3279	0.0000	0.3279	0.0713	0.0000	0.0713	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0489	0.5244	0.3921	8.4000e-004		0.0221	0.0221		0.0203	0.0203	0.0000	73.6217	73.6217	0.0238	0.0000	74.2170
Total	0.0489	0.5244	0.3921	8.4000e-004	0.3279	0.0221	0.3499	0.0713	0.0203	0.0916	0.0000	73.6217	73.6217	0.0238	0.0000	74.2170

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	2.1500e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635
Total	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	2.1500e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635

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					0.1475	0.0000	0.1475	0.0321	0.0000	0.0321	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0489	0.5244	0.3921	8.4000e-004		0.0221	0.0221		0.0203	0.0203	0.0000	73.6216	73.6216	0.0238	0.0000	74.2169
Total	0.0489	0.5244	0.3921	8.4000e-004	0.1475	0.0221	0.1696	0.0321	0.0203	0.0524	0.0000	73.6216	73.6216	0.0238	0.0000	74.2169

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3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635
Total	8.5000e-004	5.9000e-004	6.7200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7463	1.7463	6.0000e-005	5.0000e-005	1.7635

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6320	0.0000	0.6320	0.2385	0.0000	0.2385	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2126	2.2090	1.7953	3.9700e-003		0.0912	0.0912		0.0839	0.0839	0.0000	349.0253	349.0253	0.1129	0.0000	351.8474
Total	0.2126	2.2090	1.7953	3.9700e-003	0.6320	0.0912	0.7232	0.2385	0.0839	0.3224	0.0000	349.0253	349.0253	0.1129	0.0000	351.8474

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3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	0.0102	5.0000e-005	0.0103	2.7100e-003	5.0000e-005	2.7600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863
Total	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	0.0102	5.0000e-005	0.0103	2.7100e-003	5.0000e-005	2.7600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863

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					0.2844	0.0000	0.2844	0.1073	0.0000	0.1073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2126	2.2090	1.7953	3.9700e-003		0.0912	0.0912		0.0839	0.0839	0.0000	349.0249	349.0249	0.1129	0.0000	351.8470
Total	0.2126	2.2090	1.7953	3.9700e-003	0.2844	0.0912	0.3756	0.1073	0.0839	0.1912	0.0000	349.0249	349.0249	0.1129	0.0000	351.8470

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	9.4000e-003	5.0000e-005	9.4500e-003	2.5200e-003	5.0000e-005	2.5600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863
Total	3.7200e-003	2.4600e-003	0.0291	9.0000e-005	9.4000e-003	5.0000e-005	9.4500e-003	2.5200e-003	5.0000e-005	2.5600e-003	0.0000	8.0116	8.0116	2.4000e-004	2.3000e-004	8.0863

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9911	152.9911	0.0364	0.0000	153.9010
Total	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9911	152.9911	0.0364	0.0000	153.9010

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3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0153	0.6395	0.1882	2.9000e-003	0.0955	4.0900e-003	0.0996	0.0276	3.9100e-003	0.0315	0.0000	278.4846	278.4846	1.3700e-003	0.0421	291.0652
Worker	0.1083	0.0717	0.8482	2.5500e-003	0.2970	1.4700e-003	0.2985	0.0790	1.3500e-003	0.0803	0.0000	233.4013	233.4013	7.1100e-003	6.7000e-003	235.5757
Total	0.1236	0.7111	1.0364	5.4500e-003	0.3926	5.5600e-003	0.3981	0.1066	5.2600e-003	0.1118	0.0000	511.8859	511.8859	8.4800e-003	0.0488	526.6408

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	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9910	152.9910	0.0364	0.0000	153.9008
Total	0.1038	0.9494	1.0721	1.7800e-003		0.0462	0.0462		0.0435	0.0435	0.0000	152.9910	152.9910	0.0364	0.0000	153.9008

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0153	0.6395	0.1882	2.9000e-003	0.0895	4.0900e-003	0.0936	0.0261	3.9100e-003	0.0300	0.0000	278.4846	278.4846	1.3700e-003	0.0421	291.0652
Worker	0.1083	0.0717	0.8482	2.5500e-003	0.2739	1.4700e-003	0.2754	0.0733	1.3500e-003	0.0746	0.0000	233.4013	233.4013	7.1100e-003	6.7000e-003	235.5757
Total	0.1236	0.7111	1.0364	5.4500e-003	0.3634	5.5600e-003	0.3689	0.0994	5.2600e-003	0.1047	0.0000	511.8859	511.8859	8.4800e-003	0.0488	526.6408

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0296	1.2700	0.3663	5.6700e-003	0.1896	8.1800e-003	0.1978	0.0548	7.8300e-003	0.0626	0.0000	544.1628	544.1628	2.6000e-003	0.0822	568.7154
Worker	0.1983	0.1249	1.5568	4.8800e-003	0.5896	2.7400e-003	0.5923	0.1567	2.5200e-003	0.1593	0.0000	447.2072	447.2072	0.0127	0.0123	451.1814
Total	0.2279	1.3949	1.9230	0.0106	0.7792	0.0109	0.7901	0.2115	0.0104	0.2219	0.0000	991.3700	991.3700	0.0153	0.0944	1,019.8969

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

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0296	1.2700	0.3663	5.6700e-003	0.1776	8.1800e-003	0.1858	0.0518	7.8300e-003	0.0597	0.0000	544.1628	544.1628	2.6000e-003	0.0822	568.7154
Worker	0.1983	0.1249	1.5568	4.8800e-003	0.5437	2.7400e-003	0.5464	0.1455	2.5200e-003	0.1480	0.0000	447.2072	447.2072	0.0127	0.0123	451.1814
Total	0.2279	1.3949	1.9230	0.0106	0.7212	0.0109	0.7322	0.1973	0.0104	0.2077	0.0000	991.3700	991.3700	0.0153	0.0944	1,019.8969

3.4 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

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3.4 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	0.0288	1.2608	0.3586	5.5500e-003	0.1889	8.1500e-003	0.1970	0.0546	7.8000e-003	0.0624	0.0000	532.4462	532.4462	2.4900e-003	0.0803	556.4361
Worker	0.1833	0.1104	1.4399	4.6900e-003	0.5873	2.6000e-003	0.5899	0.1562	2.3900e-003	0.1585	0.0000	430.4177	430.4177	0.0114	0.0114	434.0908
Total	0.2121	1.3712	1.7985	0.0102	0.7762	0.0108	0.7869	0.2107	0.0102	0.2209	0.0000	962.8639	962.8639	0.0139	0.0917	990.5269

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

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3.4 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	0.0288	1.2608	0.3586	5.5500e-003	0.1769	8.1500e-003	0.1850	0.0516	7.8000e-003	0.0595	0.0000	532.4462	532.4462	2.4900e-003	0.0803	556.4361
Worker	0.1833	0.1104	1.4399	4.6900e-003	0.5416	2.6000e-003	0.5442	0.1449	2.3900e-003	0.1473	0.0000	430.4177	430.4177	0.0114	0.0114	434.0908
Total	0.2121	1.3712	1.7985	0.0102	0.7185	0.0108	0.7292	0.1966	0.0102	0.2068	0.0000	962.8639	962.8639	0.0139	0.0917	990.5269

3.4 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	0.1785	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

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3.4 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	0.0283	1.2537	0.3535	5.4500e-003	0.1889	8.1200e-003	0.1970	0.0546	7.7600e-003	0.0624	0.0000	522.6202	522.6202	2.4000e-003	0.0787	546.1335
Worker	0.1712	0.0992	1.3605	4.5400e-003	0.5873	2.4800e-003	0.5898	0.1562	2.2800e-003	0.1584	0.0000	416.7125	416.7125	0.0103	0.0107	420.1526
Total	0.1995	1.3529	1.7140	9.9900e-003	0.7762	0.0106	0.7868	0.2107	0.0100	0.2208	0.0000	939.3327	939.3327	0.0127	0.0894	966.2861

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	0.0283	1.2537	0.3535	5.4500e-003	0.1769	8.1200e-003	0.1850	0.0517	7.7600e-003	0.0594	0.0000	522.6202	522.6202	2.4000e-003	0.0787	546.1335
Worker	0.1712	0.0992	1.3605	4.5400e-003	0.5416	2.4800e-003	0.5441	0.1449	2.2800e-003	0.1472	0.0000	416.7125	416.7125	0.0103	0.0107	420.1526
Total	0.1995	1.3529	1.7140	9.9900e-003	0.7185	0.0106	0.7291	0.1966	0.0100	0.2066	0.0000	939.3327	939.3327	0.0127	0.0894	966.2861

3.4 Building Construction - 2027

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

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3.4 Building Construction - 2027

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	0.0278	1.2449	0.3491	5.3400e-003	0.1889	8.0600e-003	0.1969	0.0546	7.7100e-003	0.0623	0.0000	512.0315	512.0315	2.3200e-003	0.0770	535.0395
Worker	0.1604	0.0899	1.2824	4.4100e-003	0.5873	2.3400e-003	0.5897	0.1562	2.1500e-003	0.1583	0.0000	404.4540	404.4540	9.4000e-003	0.0101	407.6992
Total	0.1882	1.3348	1.6315	9.7500e-003	0.7762	0.0104	0.7866	0.2107	9.8600e-003	0.2206	0.0000	916.4854	916.4854	0.0117	0.0871	942.7387

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

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3.4 Building Construction - 2027

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	0.0278	1.2449	0.3491	5.3400e-003	0.1769	8.0600e-003	0.1850	0.0517	7.7100e-003	0.0594	0.0000	512.0315	512.0315	2.3200e-003	0.0770	535.0395
Worker	0.1604	0.0899	1.2824	4.4100e-003	0.5416	2.3400e-003	0.5439	0.1449	2.1500e-003	0.1471	0.0000	404.4540	404.4540	9.4000e-003	0.0101	407.6992
Total	0.1882	1.3348	1.6315	9.7500e-003	0.7185	0.0104	0.7289	0.1966	9.8600e-003	0.2064	0.0000	916.4854	916.4854	0.0117	0.0871	942.7387

3.4 Building Construction - 2028

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

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3.4 Building Construction - 2028

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	0.0273	1.2337	0.3443	5.2100e-003	0.1882	7.9800e-003	0.1961	0.0544	7.6300e-003	0.0620	0.0000	500.0585	500.0585	2.2400e-003	0.0751	522.4990
Worker	0.1500	0.0820	1.2133	4.2700e-003	0.5851	2.1800e-003	0.5872	0.1556	2.0100e-003	0.1576	0.0000	391.9988	391.9988	8.5800e-003	9.5900e-003	395.0717
Total	0.1773	1.3157	1.5576	9.4800e-003	0.7732	0.0102	0.7834	0.2099	9.6400e-003	0.2196	0.0000	892.0574	892.0574	0.0108	0.0847	917.5707

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

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3.4 Building Construction - 2028

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	0.0273	1.2337	0.3443	5.2100e-003	0.1762	7.9800e-003	0.1842	0.0515	7.6300e-003	0.0591	0.0000	500.0585	500.0585	2.2400e-003	0.0751	522.4990
Worker	0.1500	0.0820	1.2133	4.2700e-003	0.5395	2.1800e-003	0.5417	0.1444	2.0100e-003	0.1464	0.0000	391.9988	391.9988	8.5800e-003	9.5900e-003	395.0717
Total	0.1773	1.3157	1.5576	9.4800e-003	0.7157	0.0102	0.7259	0.1958	9.6400e-003	0.2055	0.0000	892.0574	892.0574	0.0108	0.0847	917.5707

3.4 Building Construction - 2029

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	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0345	131.0345	0.0308	0.0000	131.8046
Total	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0345	131.0345	0.0308	0.0000	131.8046

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3.4 Building Construction - 2029

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	0.0117	0.5330	0.1484	2.2200e-003	0.0818	3.4400e-003	0.0852	0.0236	3.2900e-003	0.0269	0.0000	213.1222	213.1222	9.5000e-004	0.0320	222.6742
Worker	0.0613	0.0329	0.5036	1.8100e-003	0.2543	8.9000e-004	0.2552	0.0676	8.2000e-004	0.0684	0.0000	166.1451	166.1451	3.4400e-003	4.0000e-003	167.4230
Total	0.0730	0.5660	0.6520	4.0300e-003	0.3360	4.3300e-003	0.3404	0.0912	4.1100e-003	0.0954	0.0000	379.2673	379.2673	4.3900e-003	0.0360	390.0973

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	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0343	131.0343	0.0308	0.0000	131.8044
Total	0.0773	0.7045	0.9088	1.5200e-003		0.0298	0.0298		0.0280	0.0280	0.0000	131.0343	131.0343	0.0308	0.0000	131.8044

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3.4 Building Construction - 2029

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	0.0117	0.5330	0.1484	2.2200e-003	0.0766	3.4400e-003	0.0800	0.0224	3.2900e-003	0.0257	0.0000	213.1222	213.1222	9.5000e-004	0.0320	222.6742
Worker	0.0613	0.0329	0.5036	1.8100e-003	0.2345	8.9000e-004	0.2354	0.0627	8.2000e-004	0.0636	0.0000	166.1451	166.1451	3.4400e-003	4.0000e-003	167.4230
Total	0.0730	0.5660	0.6520	4.0300e-003	0.3111	4.3300e-003	0.3154	0.0851	4.1100e-003	0.0892	0.0000	379.2673	379.2673	4.3900e-003	0.0360	390.0973

3.5 Paving - 2029

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	0.0503	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1059	110.1059	0.0356	0.0000	110.9962
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0503	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1059	110.1059	0.0356	0.0000	110.9962

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3.5 Paving - 2029

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	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.5700e-003	2.0000e-005	6.5900e-003	1.7500e-003	2.0000e-005	1.7700e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269
Total	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.5700e-003	2.0000e-005	6.5900e-003	1.7500e-003	2.0000e-005	1.7700e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269

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	0.0503	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1058	110.1058	0.0356	0.0000	110.9960
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0503	0.4720	0.8018	1.2500e-003		0.0230	0.0230		0.0212	0.0212	0.0000	110.1058	110.1058	0.0356	0.0000	110.9960

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3.5 Paving - 2029

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	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.0600e-003	2.0000e-005	6.0800e-003	1.6200e-003	2.0000e-005	1.6400e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269
Total	1.5800e-003	8.5000e-004	0.0130	5.0000e-005	6.0600e-003	2.0000e-005	6.0800e-003	1.6200e-003	2.0000e-005	1.6400e-003	0.0000	4.2938	4.2938	9.0000e-005	1.0000e-004	4.3269

3.6 Architectural Coating - 2029

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	3.6566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2500e-003	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578
Total	3.6598	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578

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3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1200e-003	2.2100e-003	0.0339	1.2000e-004	0.0171	6.0000e-005	0.0172	4.5500e-003	6.0000e-005	4.6000e-003	0.0000	11.1744	11.1744	2.3000e-004	2.7000e-004	11.2603
Total	4.1200e-003	2.2100e-003	0.0339	1.2000e-004	0.0171	6.0000e-005	0.0172	4.5500e-003	6.0000e-005	4.6000e-003	0.0000	11.1744	11.1744	2.3000e-004	2.7000e-004	11.2603

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	3.6566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2500e-003	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578
Total	3.6598	0.0218	0.0344	6.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	4.8512	4.8512	2.6000e-004	0.0000	4.8578

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3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1200e-003	2.2100e-003	0.0339	1.2000e-004	0.0158	6.0000e-005	0.0158	4.2200e-003	6.0000e-005	4.2700e-003	0.0000	11.1744	11.1744	2.3000e-004	2.7000e-004	11.2603
Total	4.1200e-003	2.2100e-003	0.0339	1.2000e-004	0.0158	6.0000e-005	0.0158	4.2200e-003	6.0000e-005	4.2700e-003	0.0000	11.1744	11.1744	2.3000e-004	2.7000e-004	11.2603

3.6 Architectural Coating - 2030

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	6.9283					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7100e-003	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010
Total	6.9330	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3500e-003	3.9100e-003	0.0616	2.3000e-004	0.0324	1.1000e-004	0.0325	8.6100e-003	1.0000e-004	8.7100e-003	0.0000	20.6943	20.6943	4.1000e-004	4.9000e-004	20.8511
Total	7.3500e-003	3.9100e-003	0.0616	2.3000e-004	0.0324	1.1000e-004	0.0325	8.6100e-003	1.0000e-004	8.7100e-003	0.0000	20.6943	20.6943	4.1000e-004	4.9000e-004	20.8511

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	6.9283					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7100e-003	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010
Total	6.9330	0.0308	0.0647	1.1000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	9.1917	9.1917	3.7000e-004	0.0000	9.2010

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3500e-003	3.9100e-003	0.0616	2.3000e-004	0.0299	1.1000e-004	0.0300	8.0000e-003	1.0000e-004	8.0900e-003	0.0000	20.6943	20.6943	4.1000e-004	4.9000e-004	20.8511
Total	7.3500e-003	3.9100e-003	0.0616	2.3000e-004	0.0299	1.1000e-004	0.0300	8.0000e-003	1.0000e-004	8.0900e-003	0.0000	20.6943	20.6943	4.1000e-004	4.9000e-004	20.8511

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	12.9161	17.2534	111.6682	0.2494	29.7711	0.1888	29.9599	7.9557	0.1768	8.1325	0.0000	23,059.3187	23,059.3187	1.3736	1.2810	23,475.3951
Unmitigated	12.9161	17.2534	111.6682	0.2494	29.7711	0.1888	29.9599	7.9557	0.1768	8.1325	0.0000	23,059.3187	23,059.3187	1.3736	1.2810	23,475.3951

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,976.40	2,197.80	1695.60	5,702,655	5,702,655
Regional Shopping Center	43,712.61	53,404.65	24432.75	74,240,051	74,240,051
Total	45,689.01	55,602.45	26,128.35	79,942,706	79,942,706

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Regional Shopping Center	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

5.0 Energy Detail

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	1,320.3817	1,320.3817	0.2136	0.0259	1,333.4379
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,320.3817	1,320.3817	0.2136	0.0259	1,333.4379
NaturalGas Mitigated	0.0893	0.8023	0.6139	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	883.5062	883.5062	0.0169	0.0162	888.7564
NaturalGas Unmitigated	0.0893	0.8023	0.6139	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	883.5062	883.5062	0.0169	0.0162	888.7564

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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 Low Rise	3.14722e+006	0.0170	0.1450	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.9476	167.9476	3.2200e-003	3.0800e-003	168.9457
Regional Shopping Center	1.34091e+007	0.0723	0.6573	0.5521	3.9400e-003		0.0500	0.0500		0.0500	0.0500	0.0000	715.5586	715.5586	0.0137	0.0131	719.8108
Total		0.0893	0.8023	0.6139	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	883.5062	883.5062	0.0169	0.0162	888.7564

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.14722e+006	0.0170	0.1450	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.9476	167.9476	3.2200e-003	3.0800e-003	168.9457
Regional Shopping Center	1.34091e+007	0.0723	0.6573	0.5521	3.9400e-003		0.0500	0.0500		0.0500	0.0500	0.0000	715.5586	715.5586	0.0137	0.0131	719.8108
Total		0.0893	0.8023	0.6139	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	883.5062	883.5062	0.0169	0.0162	888.7564

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.10484e+006	102.2237	0.0165	2.0000e-003	103.2345
Regional Shopping Center	1.31659e+007	1,218.1579	0.1971	0.0239	1,230.2034
Total		1,320.3817	0.2136	0.0259	1,333.4379

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.10484e+006	102.2237	0.0165	2.0000e-003	103.2345
Regional Shopping Center	1.31659e+007	1,218.1579	0.1971	0.0239	1,230.2034
Total		1,320.3817	0.2136	0.0259	1,333.4379

6.0 Area Detail

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.7079	0.1241	2.0531	7.5000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	120.2615	120.2615	5.4200e-003	2.1400e-003	121.0359
Unmitigated	6.7079	0.1241	2.0531	7.5000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	120.2615	120.2615	5.4200e-003	2.1400e-003	121.0359

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	1.0585					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.5769					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0118	0.1010	0.0430	6.4000e-004		8.1700e-003	8.1700e-003		8.1700e-003	8.1700e-003	0.0000	116.9660	116.9660	2.2400e-003	2.1400e-003	117.6611
Landscaping	0.0608	0.0232	2.0101	1.1000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	3.2955	3.2955	3.1700e-003	0.0000	3.3748
Total	6.7079	0.1242	2.0531	7.5000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	120.2615	120.2615	5.4100e-003	2.1400e-003	121.0359

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	1.0585					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.5769					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0118	0.1010	0.0430	6.4000e-004		8.1700e-003	8.1700e-003		8.1700e-003	8.1700e-003	0.0000	116.9660	116.9660	2.2400e-003	2.1400e-003	117.6611
Landscaping	0.0608	0.0232	2.0101	1.1000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	3.2955	3.2955	3.1700e-003	0.0000	3.3748
Total	6.7079	0.1242	2.0531	7.5000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	120.2615	120.2615	5.4100e-003	2.1400e-003	121.0359

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	105.1567	3.3798	0.0810	213.7745
Unmitigated	105.1567	3.3798	0.0810	213.7745

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	17.5916 / 11.0903	17.9796	0.5752	0.0138	36.4662
Regional Shopping Center	85.7723 / 52.5701	87.1771	2.8046	0.0672	177.3084
Total		105.1567	3.3798	0.0810	213.7745

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	17.5916 / 11.0903	17.9796	0.5752	0.0138	36.4662
Regional Shopping Center	85.7723 / 52.5701	87.1771	2.8046	0.0672	177.3084
Total		105.1567	3.3798	0.0810	213.7745

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	272.0180	16.0758	0.0000	673.9132
Unmitigated	272.0180	16.0758	0.0000	673.9132

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	124.2	25.2115	1.4900	0.0000	62.4604
Regional Shopping Center	1215.85	246.8066	14.5859	0.0000	611.4528
Total		272.0180	16.0758	0.0000	673.9132

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	124.2	25.2115	1.4900	0.0000	62.4604
Regional Shopping Center	1215.85	246.8066	14.5859	0.0000	611.4528
Total		272.0180	16.0758	0.0000	673.9132

9.0 Operational Offroad

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-619.2560	0.0000	0.0000	-619.2560

The Previously Approved Cannery Park Project - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**11.1 Vegetation Land Change****Vegetation Type**

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	99.88 / 0	-619.2560	0.0000	0.0000	-619.2560
Total		-619.2560	0.0000	0.0000	-619.2560

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

The Previously Approved Cannery Park Project

San Joaquin County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1,157.95	1000sqft	88.61	1,157,950.00	0
Apartment Low Rise	270.00	Dwelling Unit	11.27	270,000.00	856

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2030
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 - Actual Acreage;

Construction Phase - Construction schedule based on project size and details.

Off-road Equipment -

Demolition -

Grading -

Vehicle Trips - Trips consistent with Traffic Impact Assessment (Fehr & Peers). Institute of Transportation Engineers 2017.

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - Construction mitigation: Water Exposed Area 2x daily; Clean Paved Road (9% fugitive dust PM reduction); Unpaved road mitigation: Limit on-site construction vehicle speeds to 5 mph; Soil Stabilizer for unpaved (10% reduction)

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblLandUse	LotAcreage	26.58	88.61
tblLandUse	LotAcreage	16.88	11.27
tblWoodstoves	NumberCatalytic	11.27	0.00
tblWoodstoves	NumberNoncatalytic	11.27	0.00

2.0 Emissions Summary

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6959	38.8834	29.6001	0.0636	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,165.353 3	6,165.353 3	1.9487	4.0500e- 003	6,215.275 5
2023	3.6509	34.5505	33.4368	0.1125	9.3679	1.4253	10.7932	3.6973	1.3113	5.0086	0.0000	11,410.13 25	11,410.13 25	1.9482	0.8072	11,669.25 72
2024	3.3987	23.5917	32.1844	0.1104	6.1255	0.6966	6.8221	1.6584	0.6558	2.3143	0.0000	11,191.59 96	11,191.59 96	0.7267	0.7875	11,444.43 60
2025	3.1651	22.4887	31.0772	0.1083	6.1255	0.6099	6.7354	1.6584	0.5743	2.2327	0.0000	10,972.66 94	10,972.66 94	0.7122	0.7675	11,219.20 31
2026	3.0553	22.3590	30.3486	0.1062	6.1255	0.6087	6.7342	1.6584	0.5732	2.2316	0.0000	10,764.13 17	10,764.13 17	0.7030	0.7486	11,004.80 30
2027	2.9571	22.2299	29.6337	0.1043	6.1255	0.6072	6.7327	1.6585	0.5718	2.2302	0.0000	10,562.56 17	10,562.56 17	0.6949	0.7299	10,797.42 93
2028	2.8690	22.1302	29.0472	0.1025	6.1255	0.6057	6.7312	1.6585	0.5704	2.2288	0.0000	10,377.64 66	10,377.64 66	0.6881	0.7125	10,607.18 44
2029	192.8637	22.0334	28.5522	0.1008	6.1256	0.6042	6.7297	1.6585	0.5690	2.2274	0.0000	10,206.45 75	10,206.45 75	0.7154	0.6964	10,431.02 88
2030	192.8091	0.9550	3.6950	9.7300e- 003	0.9283	0.0233	0.9515	0.2462	0.0230	0.2692	0.0000	964.7130	964.7130	0.0229	0.0142	969.5035
Maximum	192.8637	38.8834	33.4368	0.1125	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	11,410.13 25	11,410.13 25	1.9487	0.8072	11,669.25 72

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6959	38.8834	29.6001	0.0636	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	6,165.353 3	6,165.353 3	1.9487	4.0500e- 003	6,215.275 5
2023	3.6509	34.5505	33.4368	0.1125	5.6673	1.4253	6.4511	1.6846	1.3113	2.9959	0.0000	11,410.13 25	11,410.13 25	1.9482	0.8072	11,669.25 72
2024	3.3987	23.5917	32.1844	0.1104	5.6673	0.6966	6.3640	1.5460	0.6558	2.2018	0.0000	11,191.59 96	11,191.59 96	0.7267	0.7875	11,444.43 60
2025	3.1651	22.4887	31.0772	0.1083	5.6674	0.6099	6.2772	1.5460	0.5743	2.1202	0.0000	10,972.66 94	10,972.66 94	0.7122	0.7675	11,219.20 31
2026	3.0553	22.3590	30.3486	0.1062	5.6674	0.6087	6.2761	1.5460	0.5732	2.1192	0.0000	10,764.13 17	10,764.13 17	0.7030	0.7486	11,004.80 30
2027	2.9571	22.2299	29.6337	0.1043	5.6674	0.6072	6.2746	1.5460	0.5718	2.1178	0.0000	10,562.56 17	10,562.56 17	0.6949	0.7299	10,797.42 93
2028	2.8690	22.1302	29.0472	0.1025	5.6674	0.6057	6.2731	1.5460	0.5704	2.1164	0.0000	10,377.64 66	10,377.64 66	0.6881	0.7125	10,607.18 44
2029	192.8637	22.0334	28.5522	0.1008	5.6674	0.6042	6.2716	1.5460	0.5690	2.1150	0.0000	10,206.45 75	10,206.45 75	0.7154	0.6964	10,431.02 88
2030	192.8091	0.9550	3.6950	9.7300e- 003	0.8557	0.0233	0.8789	0.2284	0.0230	0.2514	0.0000	964.7130	964.7130	0.0229	0.0142	969.5035
Maximum	192.8637	38.8834	33.4368	0.1125	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	11,410.13 25	11,410.13 25	1.9487	0.8072	11,669.25 72

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	25.94	0.00	24.42	34.38	0.00	27.21	0.00	0.00	0.00	0.00	0.00	0.00

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5
Energy	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0
Mobile	108.1495	110.9425	777.5670	1.8154	210.9697	1.2992	212.2689	56.2389	1.2168	57.4557		184,973.1 695	184,973.1 695	9.7304	9.3623	188,006.4 017
Total	145.9602	118.0593	804.3129	1.8590	210.9697	1.9602	212.9300	56.2389	1.8779	58.1168	0.0000	193,494.6 701	193,494.6 701	9.9319	9.5178	196,579.2 731

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	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5
Energy	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0
Mobile	108.1495	110.9425	777.5670	1.8154	210.9697	1.2992	212.2689	56.2389	1.2168	57.4557		184,973.1 695	184,973.1 695	9.7304	9.3623	188,006.4 017
Total	145.9602	118.0593	804.3129	1.8590	210.9697	1.9602	212.9300	56.2389	1.8779	58.1168	0.0000	193,494.6 701	193,494.6 701	9.9319	9.5178	196,579.2 731

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
2	Grading	Grading	11/24/2022	6/28/2023	5	155	
3	Building Construction	Building Construction	6/29/2023	6/6/2029	5	1550	
4	Paving	Paving	6/7/2029	11/7/2029	5	110	
5	Architectural Coating	Architectural Coating	11/8/2029	4/10/2030	5	110	

Acres of Grading (Site Preparation Phase): 90

Acres of Grading (Grading Phase): 465

Acres of Paving: 0

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 1,736,925; Non-Residential Outdoor: 578,975; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	565.00	219.00	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	113.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0639	0.0360	0.5028	1.3700e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337
Total	0.0639	0.0360	0.5028	1.3700e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0639	0.0360	0.5028	1.3700e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337
Total	0.0639	0.0360	0.5028	1.3700e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		138.5485	138.5485	4.0000e-003	3.6400e-003	139.7337

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0710	0.0400	0.5586	1.5200e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596
Total	0.0710	0.0400	0.5586	1.5200e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	4.1416	1.6349	5.7765	1.6442	1.5041	3.1483	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0710	0.0400	0.5586	1.5200e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596
Total	0.0710	0.0400	0.5586	1.5200e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		153.9427	153.9427	4.4500e-003	4.0500e-003	155.2596

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	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		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0651	0.0349	0.5092	1.4700e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429
Total	0.0651	0.0349	0.5092	1.4700e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	4.1416	1.4245	5.5661	1.6442	1.3105	2.9547	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0651	0.0349	0.5092	1.4700e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429
Total	0.0651	0.0349	0.5092	1.4700e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		148.9370	148.9370	3.9700e-003	3.7100e-003	150.1429

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2385	9.2769	2.8094	0.0439	1.4841	0.0619	1.5460	0.4273	0.0592	0.4865		4,647.4535	4,647.4535	0.0232	0.7023	4,857.3144
Worker	1.8396	0.9853	14.3834	0.0416	4.6413	0.0222	4.6635	1.2311	0.0204	1.2515		4,207.4691	4,207.4691	0.1120	0.1049	4,241.5367
Total	2.0781	10.2622	17.1928	0.0856	6.1255	0.0841	6.2095	1.6584	0.0796	1.7380		8,854.9225	8,854.9225	0.1352	0.8072	9,098.8511

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2385	9.2769	2.8094	0.0439	1.3890	0.0619	1.4509	0.4040	0.0592	0.4632		4,647.4535	4,647.4535	0.0232	0.7023	4,857.3144
Worker	1.8396	0.9853	14.3834	0.0416	4.2783	0.0222	4.3005	1.1420	0.0204	1.1624		4,207.4691	4,207.4691	0.1120	0.1049	4,241.5367
Total	2.0781	10.2622	17.1928	0.0856	5.6673	0.0841	5.7514	1.5460	0.0796	1.6256		8,854.9225	8,854.9225	0.1352	0.8072	9,098.8511

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2330	9.2824	2.7541	0.0433	1.4842	0.0624	1.5466	0.4273	0.0597	0.4870		4,575.2317	4,575.2317	0.0222	0.6906	4,781.5866
Worker	1.6941	0.8655	13.2635	0.0402	4.6413	0.0209	4.6623	1.2311	0.0192	1.2503		4,060.6690	4,060.6690	0.1002	0.0969	4,092.0418
Total	1.9271	10.1479	16.0176	0.0834	6.1255	0.0833	6.2088	1.6584	0.0789	1.7374		8,635.9007	8,635.9007	0.1223	0.7875	8,873.6283

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2330	9.2824	2.7541	0.0433	1.3890	0.0624	1.4514	0.4040	0.0597	0.4637		4,575.2317	4,575.2317	0.0222	0.6906	4,781.5866
Worker	1.6941	0.8655	13.2635	0.0402	4.2783	0.0209	4.2992	1.1420	0.0192	1.1612		4,060.6690	4,060.6690	0.1002	0.0969	4,092.0418
Total	1.9271	10.1479	16.0176	0.0834	5.6673	0.0833	5.7507	1.5460	0.0789	1.6249		8,635.9007	8,635.9007	0.1223	0.7875	8,873.6283

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2281	9.2506	2.7064	0.0425	1.4842	0.0624	1.5466	0.4273	0.0597	0.4870		4,493.854 6	4,493.854 6	0.0213	0.6774	4,696.256 1
Worker	1.5696	0.7684	12.2862	0.0388	4.6413	0.0199	4.6612	1.2311	0.0183	1.2494		3,922.340 5	3,922.340 5	0.0900	0.0901	3,951.448 9
Total	1.7977	10.0191	14.9925	0.0813	6.1255	0.0823	6.2078	1.6584	0.0780	1.7364		8,416.195 0	8,416.195 0	0.1113	0.7675	8,647.705 0

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2281	9.2506	2.7064	0.0425	1.3891	0.0624	1.4515	0.4040	0.0597	0.4637		4,493.854 6	4,493.854 6	0.0213	0.6774	4,696.256 1
Worker	1.5696	0.7684	12.2862	0.0388	4.2783	0.0199	4.2982	1.1420	0.0183	1.1603		3,922.340 5	3,922.340 5	0.0900	0.0901	3,951.448 9
Total	1.7977	10.0191	14.9925	0.0813	5.6674	0.0823	5.7497	1.5460	0.0780	1.6240		8,416.195 0	8,416.195 0	0.1113	0.7675	8,647.705 0

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2238	9.1990	2.6674	0.0417	1.4842	0.0621	1.5463	0.4273	0.0594	0.4868		4,410.910 0	4,410.910 0	0.0206	0.6640	4,609.292 9
Worker	1.4641	0.6903	11.5966	0.0376	4.6413	0.0190	4.6604	1.2311	0.0175	1.2486		3,796.747 3	3,796.747 3	0.0815	0.0847	3,824.012 0
Total	1.6879	9.8893	14.2639	0.0793	6.1255	0.0811	6.2067	1.6584	0.0769	1.7354		8,207.657 3	8,207.657 3	0.1021	0.7486	8,433.304 9

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2238	9.1990	2.6674	0.0417	1.3891	0.0621	1.4512	0.4040	0.0594	0.4634		4,410.910 0	4,410.910 0	0.0206	0.6640	4,609.292 9
Worker	1.4641	0.6903	11.5966	0.0376	4.2783	0.0190	4.2973	1.1420	0.0175	1.1595		3,796.747 3	3,796.747 3	0.0815	0.0847	3,824.012 0
Total	1.6879	9.8893	14.2639	0.0793	5.6674	0.0811	5.7485	1.5460	0.0769	1.6229		8,207.657 3	8,207.657 3	0.1021	0.7486	8,433.304 9

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2201	9.1343	2.6337	0.0409	1.4842	0.0617	1.5459	0.4274	0.0590	0.4864		4,321.521 7	4,321.521 7	0.0199	0.6498	4,515.643 0
Worker	1.3696	0.6259	10.9154	0.0365	4.6413	0.0179	4.6593	1.2311	0.0165	1.2476		3,684.565 6	3,684.565 6	0.0741	0.0801	3,710.288 3
Total	1.5897	9.7602	13.5491	0.0773	6.1255	0.0796	6.2052	1.6585	0.0755	1.7340		8,006.087 3	8,006.087 3	0.0940	0.7299	8,225.931 2

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2201	9.1343	2.6337	0.0409	1.3891	0.0617	1.4508	0.4040	0.0590	0.4630		4,321.521 7	4,321.521 7	0.0199	0.6498	4,515.643 0
Worker	1.3696	0.6259	10.9154	0.0365	4.2783	0.0179	4.2962	1.1420	0.0165	1.1585		3,684.565 6	3,684.565 6	0.0741	0.0801	3,710.288 3
Total	1.5897	9.7602	13.5491	0.0773	5.6674	0.0796	5.7470	1.5460	0.0755	1.6215		8,006.087 3	8,006.087 3	0.0940	0.7299	8,225.931 2

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2170	9.0874	2.6071	0.0401	1.4842	0.0613	1.5455	0.4274	0.0587	0.4860		4,236.689 9	4,236.689 9	0.0193	0.6362	4,426.751 4
Worker	1.2846	0.5731	10.3554	0.0355	4.6413	0.0168	4.6582	1.2311	0.0155	1.2466		3,584.482 4	3,584.482 4	0.0679	0.0764	3,608.935 0
Total	1.5016	9.6605	12.9625	0.0755	6.1255	0.0781	6.2037	1.6585	0.0741	1.7326		7,821.172 3	7,821.172 3	0.0871	0.7125	8,035.686 4

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2170	9.0874	2.6071	0.0401	1.3891	0.0613	1.4504	0.4040	0.0587	0.4627		4,236.689 9	4,236.689 9	0.0193	0.6362	4,426.751 4
Worker	1.2846	0.5731	10.3554	0.0355	4.2783	0.0168	4.2951	1.1420	0.0155	1.1575		3,584.482 4	3,584.482 4	0.0679	0.0764	3,608.935 0
Total	1.5016	9.6605	12.9625	0.0755	5.6674	0.0781	5.7455	1.5460	0.0741	1.6201		7,821.172 3	7,821.172 3	0.0871	0.7125	8,035.686 4

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2142	9.0340	2.5848	0.0393	1.4842	0.0609	1.5451	0.4274	0.0582	0.4856		4,154.591 6	4,154.591 6	0.0188	0.6231	4,340.737 6
Worker	1.2065	0.5297	9.8827	0.0346	4.6413	0.0157	4.6571	1.2311	0.0145	1.2456		3,495.391 6	3,495.391 6	0.0624	0.0733	3,518.793 1
Total	1.4208	9.5637	12.4675	0.0739	6.1256	0.0766	6.2022	1.6585	0.0727	1.7312		7,649.983 2	7,649.983 2	0.0812	0.6964	7,859.530 7

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2142	9.0340	2.5848	0.0393	1.3891	0.0609	1.4500	0.4040	0.0582	0.4622		4,154.591 6	4,154.591 6	0.0188	0.6231	4,340.737 6
Worker	1.2065	0.5297	9.8827	0.0346	4.2783	0.0157	4.2940	1.1420	0.0145	1.1565		3,495.391 6	3,495.391 6	0.0624	0.0733	3,518.793 1
Total	1.4208	9.5637	12.4675	0.0739	5.6674	0.0766	5.7440	1.5460	0.0727	1.6187		7,649.983 2	7,649.983 2	0.0812	0.6964	7,859.530 7

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
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		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0320	0.0141	0.2624	9.2000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193
Total	0.0320	0.0141	0.2624	9.2000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
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	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0320	0.0141	0.2624	9.2000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193
Total	0.0320	0.0141	0.2624	9.2000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		92.7980	92.7980	1.6600e-003	1.9500e-003	93.4193

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	192.4515					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	192.6224	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	0.2413	0.1060	1.9765	6.9200e-003	0.9283	3.1500e-003	0.9314	0.2462	2.9000e-003	0.2491		699.0783	699.0783	0.0125	0.0147	703.7586
Total	0.2413	0.1060	1.9765	6.9200e-003	0.9283	3.1500e-003	0.9314	0.2462	2.9000e-003	0.2491		699.0783	699.0783	0.0125	0.0147	703.7586

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	192.4515					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	192.6224	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	0.2413	0.1060	1.9765	6.9200e-003	0.8557	3.1500e-003	0.8588	0.2284	2.9000e-003	0.2313		699.0783	699.0783	0.0125	0.0147	703.7586
Total	0.2413	0.1060	1.9765	6.9200e-003	0.8557	3.1500e-003	0.8588	0.2284	2.9000e-003	0.2313		699.0783	699.0783	0.0125	0.0147	703.7586

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	192.4515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	192.5823	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

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	0.2268	0.0987	1.8973	6.7600e-003	0.9283	2.9500e-003	0.9312	0.2462	2.7100e-003	0.2489		683.2650	683.2650	0.0116	0.0142	687.7707
Total	0.2268	0.0987	1.8973	6.7600e-003	0.9283	2.9500e-003	0.9312	0.2462	2.7100e-003	0.2489		683.2650	683.2650	0.0116	0.0142	687.7707

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	192.4515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	192.5823	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

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	0.2268	0.0987	1.8973	6.7600e-003	0.8557	2.9500e-003	0.8586	0.2284	2.7100e-003	0.2311		683.2650	683.2650	0.0116	0.0142	687.7707
Total	0.2268	0.0987	1.8973	6.7600e-003	0.8557	2.9500e-003	0.8586	0.2284	2.7100e-003	0.2311		683.2650	683.2650	0.0116	0.0142	687.7707

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	108.1495	110.9425	777.5670	1.8154	210.9697	1.2992	212.2689	56.2389	1.2168	57.4557		184,973.1695	184,973.1695	9.7304	9.3623	188,006.4017
Unmitigated	108.1495	110.9425	777.5670	1.8154	210.9697	1.2992	212.2689	56.2389	1.2168	57.4557		184,973.1695	184,973.1695	9.7304	9.3623	188,006.4017

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,976.40	2,197.80	1695.60	5,702,655	5,702,655
Regional Shopping Center	43,712.61	53,404.65	24432.75	74,240,051	74,240,051
Total	45,689.01	55,602.45	26,128.35	79,942,706	79,942,706

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Regional Shopping Center	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

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	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0
NaturalGas Unmitigated	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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 Low Rise	8622.52	0.0930	0.7946	0.3381	5.0700e-003		0.0643	0.0643		0.0643	0.0643		1,014.4142	1,014.4142	0.0194	0.0186	1,020.4423
Regional Shopping Center	36737.2	0.3962	3.6017	3.0254	0.0216		0.2737	0.2737		0.2737	0.2737		4,322.0181	4,322.0181	0.0828	0.0792	4,347.7016
Total		0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.4322	5,336.4322	0.1023	0.0978	5,368.1440

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	8.62252	0.0930	0.7946	0.3381	5.0700e-003		0.0643	0.0643		0.0643	0.0643		1,014.4142	1,014.4142	0.0194	0.0186	1,020.4423
Regional Shopping Center	36.7372	0.3962	3.6017	3.0254	0.0216		0.2737	0.2737		0.2737	0.2737		4,322.0181	4,322.0181	0.0828	0.0792	4,347.7016
Total		0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.4322	5,336.4322	0.1023	0.0978	5,368.1440

6.0 Area Detail

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5
Unmitigated	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.7999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2883	2.4634	1.0482	0.0157		0.1992	0.1992		0.1992	0.1992	0.0000	3,144.705 9	3,144.705 9	0.0603	0.0577	3,163.393 3
Landscaping	0.6753	0.2572	22.3341	1.1900e-003		0.1240	0.1240		0.1240	0.1240		40.3625	40.3625	0.0389		41.3342
Total	37.3216	2.7205	23.3824	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.7999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2883	2.4634	1.0482	0.0157		0.1992	0.1992		0.1992	0.1992	0.0000	3,144.705 9	3,144.705 9	0.0603	0.0577	3,163.393 3
Landscaping	0.6753	0.2572	22.3341	1.1900e-003		0.1240	0.1240		0.1240	0.1240		40.3625	40.3625	0.0389		41.3342
Total	37.3216	2.7205	23.3824	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5

7.0 Water Detail

7.1 Mitigation Measures Water

The Previously Approved Cannery Park Project - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**The Previously Approved Cannery Park Project**

San Joaquin County, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1,157.95	1000sqft	88.61	1,157,950.00	0
Apartment Low Rise	270.00	Dwelling Unit	11.27	270,000.00	856

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2030
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 - Actual Acreage;

Construction Phase - Construction schedule based on project size and details.

Off-road Equipment -

Demolition -

Grading -

Vehicle Trips - Trips consistent with Traffic Impact Assessment (Fehr & Peers). Institute of Transportation Engineers 2017.

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - Construction mitigation: Water Exposed Area 2x daily; Clean Paved Road (9% fugitive dust PM reduction); Unpaved road mitigation: Limit on-site construction vehicle speeds to 5 mph; Soil Stabilizer for unpaved (10% reduction)

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblLandUse	LotAcreage	26.58	88.61
tblLandUse	LotAcreage	16.88	11.27
tblWoodstoves	NumberCatalytic	11.27	0.00
tblWoodstoves	NumberNoncatalytic	11.27	0.00

2.0 Emissions Summary

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6913	38.8919	29.5416	0.0635	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,150.462 1	6,150.462 1	1.9492	4.6000e- 003	6,200.564 8
2023	3.5237	34.5578	32.0974	0.1086	9.3679	1.4253	10.7932	3.6973	1.3113	5.0086	0.0000	11,013.30 29	11,013.30 29	1.9487	0.8235	11,277.64 21
2024	3.2859	24.4150	31.0125	0.1066	6.1255	0.6968	6.8223	1.6584	0.6560	2.3145	0.0000	10,809.97 04	10,809.97 04	0.7404	0.8025	11,067.63 16
2025	3.0639	23.2887	30.0434	0.1046	6.1255	0.6100	6.7356	1.6584	0.5744	2.2329	0.0000	10,605.24 14	10,605.24 14	0.7249	0.7816	10,856.26 97
2026	2.9645	23.1385	29.3969	0.1027	6.1255	0.6089	6.7344	1.6584	0.5734	2.2318	0.0000	10,409.45 38	10,409.45 38	0.7148	0.7618	10,654.34 80
2027	2.8751	22.9911	28.7676	0.1009	6.1255	0.6074	6.7329	1.6585	0.5719	2.2304	0.0000	10,219.06 95	10,219.06 95	0.7058	0.7423	10,457.93 20
2028	2.7942	22.8770	28.2486	0.0992	6.1255	0.6059	6.7314	1.6585	0.5705	2.2290	0.0000	10,043.99 48	10,043.99 48	0.6982	0.7245	10,277.33 80
2029	192.8529	22.7673	27.8066	0.0976	6.1256	0.6043	6.7299	1.6585	0.5691	2.2276	0.0000	9,881.431 8	9,881.431 8	0.7156	0.7078	10,109.64 99
2030	192.7995	0.9755	3.5362	9.0900e- 003	0.9283	0.0233	0.9515	0.2462	0.0230	0.2692	0.0000	899.6186	899.6186	0.0248	0.0160	905.0199
Maximum	192.8529	38.8919	32.0974	0.1086	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	11,013.30 29	11,013.30 29	1.9492	0.8235	11,277.64 21

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6913	38.8919	29.5416	0.0635	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	6,150.462 1	6,150.462 1	1.9492	4.6000e- 003	6,200.564 8
2023	3.5237	34.5578	32.0974	0.1086	5.6673	1.4253	6.4513	1.6846	1.3113	2.9959	0.0000	11,013.30 29	11,013.30 29	1.9487	0.8235	11,277.64 21
2024	3.2859	24.4150	31.0125	0.1066	5.6673	0.6968	6.3642	1.5460	0.6560	2.2020	0.0000	10,809.97 04	10,809.97 04	0.7404	0.8025	11,067.63 16
2025	3.0639	23.2887	30.0434	0.1046	5.6674	0.6100	6.2774	1.5460	0.5744	2.1204	0.0000	10,605.24 14	10,605.24 14	0.7249	0.7816	10,856.26 97
2026	2.9645	23.1385	29.3969	0.1027	5.6674	0.6089	6.2763	1.5460	0.5734	2.1193	0.0000	10,409.45 38	10,409.45 38	0.7148	0.7618	10,654.34 80
2027	2.8751	22.9911	28.7676	0.1009	5.6674	0.6074	6.2748	1.5460	0.5719	2.1179	0.0000	10,219.06 95	10,219.06 95	0.7058	0.7423	10,457.93 20
2028	2.7942	22.8770	28.2486	0.0992	5.6674	0.6059	6.2732	1.5460	0.5705	2.1165	0.0000	10,043.99 48	10,043.99 48	0.6982	0.7245	10,277.33 80
2029	192.8529	22.7673	27.8066	0.0976	5.6674	0.6043	6.2717	1.5460	0.5691	2.1151	0.0000	9,881.431 8	9,881.431 8	0.7156	0.7078	10,109.64 99
2030	192.7995	0.9755	3.5362	9.0900e- 003	0.8557	0.0233	0.8789	0.2284	0.0230	0.2514	0.0000	899.6186	899.6186	0.0248	0.0160	905.0199
Maximum	192.8529	38.8919	32.0974	0.1086	8.9820	1.6357	10.5953	4.5825	1.5049	6.0667	0.0000	11,013.30 29	11,013.30 29	1.9492	0.8235	11,277.64 21

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	25.94	0.00	24.42	34.38	0.00	27.21	0.00	0.00	0.00	0.00	0.00	0.00

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5
Energy	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0
Mobile	84.6514	125.0591	822.0266	1.6860	210.9697	1.3006	212.2703	56.2389	1.2181	57.4571		171,908.7 987	171,908.7 987	11.1846	10.0812	175,192.6 080
Total	122.4621	132.1759	848.7725	1.7296	210.9697	1.9616	212.9314	56.2389	1.8792	58.1182	0.0000	180,430.2 993	180,430.2 993	11.3861	10.2367	183,765.4 795

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	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5
Energy	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0
Mobile	84.6514	125.0591	822.0266	1.6860	210.9697	1.3006	212.2703	56.2389	1.2181	57.4571		171,908.7 987	171,908.7 987	11.1846	10.0812	175,192.6 080
Total	122.4621	132.1759	848.7725	1.7296	210.9697	1.9616	212.9314	56.2389	1.8792	58.1182	0.0000	180,430.2 993	180,430.2 993	11.3861	10.2367	183,765.4 795

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
2	Grading	Grading	11/24/2022	6/28/2023	5	155	
3	Building Construction	Building Construction	6/29/2023	6/6/2029	5	1550	
4	Paving	Paving	6/7/2029	11/7/2029	5	110	
5	Architectural Coating	Architectural Coating	11/8/2029	4/10/2030	5	110	

Acres of Grading (Site Preparation Phase): 90

Acres of Grading (Grading Phase): 465

Acres of Paving: 0

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 1,736,925; Non-Residential Outdoor: 578,975; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	565.00	219.00	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	113.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0598	0.0436	0.4501	1.2400e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941
Total	0.0598	0.0436	0.4501	1.2400e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0598	0.0436	0.4501	1.2400e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941
Total	0.0598	0.0436	0.4501	1.2400e-003	0.1363	7.5000e-004	0.1371	0.0364	6.9000e-004	0.0371		125.1464	125.1464	4.5300e-003	4.1400e-003	126.4941

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0664	0.0484	0.5001	1.3800e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490
Total	0.0664	0.0484	0.5001	1.3800e-003	0.1643	8.3000e-004	0.1651	0.0436	7.7000e-004	0.0444		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	4.1416	1.6349	5.7765	1.6442	1.5041	3.1483	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0664	0.0484	0.5001	1.3800e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490
Total	0.0664	0.0484	0.5001	1.3800e-003	0.1514	8.3000e-004	0.1523	0.0404	7.7000e-004	0.0412		139.0515	139.0515	5.0300e-003	4.6000e-003	140.5490

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	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		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0611	0.0422	0.4584	1.3300e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479
Total	0.0611	0.0422	0.4584	1.3300e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	4.1416	1.4245	5.5661	1.6442	1.3105	2.9547	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

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	0.0611	0.0422	0.4584	1.3300e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479
Total	0.0611	0.0422	0.4584	1.3300e-003	0.1514	7.9000e-004	0.1522	0.0404	7.2000e-004	0.0412		134.5767	134.5767	4.5100e-003	4.2200e-003	135.9479

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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	0.2247	9.9183	2.9047	0.0440	1.4841	0.0621	1.5462	0.4273	0.0594	0.4867		4,656.301 9	4,656.301 9	0.0225	0.7042	4,866.709 3
Worker	1.7263	1.1932	12.9488	0.0376	4.6413	0.0222	4.6635	1.2311	0.0204	1.2515		3,801.791 1	3,801.791 1	0.1274	0.1193	3,840.526 7
Total	1.9509	11.1115	15.8534	0.0816	6.1255	0.0843	6.2097	1.6584	0.0798	1.7382		8,458.093 0	8,458.093 0	0.1499	0.8235	8,707.236 0

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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	0.2247	9.9183	2.9047	0.0440	1.3890	0.0621	1.4511	0.4040	0.0594	0.4634		4,656.301 9	4,656.301 9	0.0225	0.7042	4,866.709 3
Worker	1.7263	1.1932	12.9488	0.0376	4.2783	0.0222	4.3005	1.1420	0.0204	1.1624		3,801.791 1	3,801.791 1	0.1274	0.1193	3,840.526 7
Total	1.9509	11.1115	15.8534	0.0816	5.6673	0.0843	5.7516	1.5460	0.0798	1.6258		8,458.093 0	8,458.093 0	0.1499	0.8235	8,707.236 0

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2191	9.9236	2.8488	0.0433	1.4842	0.0626	1.5468	0.4273	0.0599	0.4872		4,583.9982	4,583.9982	0.0215	0.6924	4,790.8824
Worker	1.5953	1.0476	11.9969	0.0363	4.6413	0.0209	4.6623	1.2311	0.0192	1.2503		3,670.2733	3,670.2733	0.1145	0.1101	3,705.9416
Total	1.8143	10.9712	14.8457	0.0797	6.1255	0.0835	6.2090	1.6584	0.0791	1.7376		8,254.2715	8,254.2715	0.1360	0.8025	8,496.8240

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2191	9.9236	2.8488	0.0433	1.3890	0.0626	1.4516	0.4040	0.0599	0.4639		4,583.9982	4,583.9982	0.0215	0.6924	4,790.8824
Worker	1.5953	1.0476	11.9969	0.0363	4.2783	0.0209	4.2992	1.1420	0.0192	1.1612		3,670.2733	3,670.2733	0.1145	0.1101	3,705.9416
Total	1.8143	10.9712	14.8457	0.0797	5.6673	0.0835	5.7508	1.5460	0.0791	1.6251		8,254.2715	8,254.2715	0.1360	0.8025	8,496.8240

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2142	9.8893	2.8004	0.0426	1.4842	0.0626	1.5468	0.4273	0.0599	0.4872		4,502.507 3	4,502.507 3	0.0207	0.6792	4,705.422 8
Worker	1.4823	0.9297	11.1583	0.0351	4.6413	0.0199	4.6612	1.2311	0.0183	1.2494		3,546.259 7	3,546.259 7	0.1033	0.1024	3,579.348 8
Total	1.6965	10.8190	13.9587	0.0777	6.1255	0.0825	6.2080	1.6584	0.0782	1.7366		8,048.767 0	8,048.767 0	0.1240	0.7816	8,284.771 6

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2142	9.8893	2.8004	0.0426	1.3891	0.0626	1.4517	0.4040	0.0599	0.4639		4,502.507 3	4,502.507 3	0.0207	0.6792	4,705.422 8
Worker	1.4823	0.9297	11.1583	0.0351	4.2783	0.0199	4.2982	1.1420	0.0183	1.1603		3,546.259 7	3,546.259 7	0.1033	0.1024	3,579.348 8
Total	1.6965	10.8190	13.9587	0.0777	5.6674	0.0825	5.7498	1.5460	0.0782	1.6242		8,048.767 0	8,048.767 0	0.1240	0.7816	8,284.771 6

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2100	9.8339	2.7608	0.0418	1.4842	0.0623	1.5465	0.4273	0.0596	0.4869		4,419.434 4	4,419.434 4	0.0199	0.6657	4,618.317 9
Worker	1.3871	0.8350	10.5515	0.0340	4.6413	0.0190	4.6604	1.2311	0.0175	1.2486		3,433.545 0	3,433.545 0	0.0939	0.0961	3,464.532 1
Total	1.5971	10.6688	13.3122	0.0758	6.1255	0.0813	6.2068	1.6584	0.0771	1.7355		7,852.979 4	7,852.979 4	0.1138	0.7618	8,082.849 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2100	9.8339	2.7608	0.0418	1.3891	0.0623	1.4514	0.4040	0.0596	0.4636		4,419.434 4	4,419.434 4	0.0199	0.6657	4,618.317 9
Worker	1.3871	0.8350	10.5515	0.0340	4.2783	0.0190	4.2973	1.1420	0.0175	1.1595		3,433.545 0	3,433.545 0	0.0939	0.0961	3,464.532 1
Total	1.5971	10.6688	13.3122	0.0758	5.6674	0.0813	5.7487	1.5460	0.0771	1.6231		7,852.979 4	7,852.979 4	0.1138	0.7618	8,082.849 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2062	9.7647	2.7265	0.0409	1.4842	0.0619	1.5461	0.4274	0.0592	0.4865		4,329.918 9	4,329.918 9	0.0192	0.6514	4,524.528 6
Worker	1.3015	0.7568	9.9564	0.0330	4.6413	0.0179	4.6593	1.2311	0.0165	1.2476		3,332.676 2	3,332.676 2	0.0857	0.0909	3,361.905 3
Total	1.5077	10.5214	12.6829	0.0739	6.1255	0.0798	6.2053	1.6585	0.0757	1.7341		7,662.595 1	7,662.595 1	0.1049	0.7423	7,886.433 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2062	9.7647	2.7265	0.0409	1.3891	0.0619	1.4510	0.4040	0.0592	0.4632		4,329.918 9	4,329.918 9	0.0192	0.6514	4,524.528 6
Worker	1.3015	0.7568	9.9564	0.0330	4.2783	0.0179	4.2962	1.1420	0.0165	1.1585		3,332.676 2	3,332.676 2	0.0857	0.0909	3,361.905 3
Total	1.5077	10.5214	12.6829	0.0739	5.6674	0.0798	5.7472	1.5460	0.0757	1.6217		7,662.595 1	7,662.595 1	0.1049	0.7423	7,886.433 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2031	9.7146	2.6996	0.0401	1.4842	0.0615	1.5457	0.4274	0.0588	0.4862		4,244.954 4	4,244.954 4	0.0187	0.6378	4,435.493 7
Worker	1.2238	0.6928	9.4643	0.0321	4.6413	0.0168	4.6582	1.2311	0.0155	1.2466		3,242.566 1	3,242.566 1	0.0786	0.0866	3,270.346 2
Total	1.4268	10.4073	12.1639	0.0722	6.1255	0.0783	6.2038	1.6585	0.0743	1.7327		7,487.520 4	7,487.520 4	0.0973	0.7245	7,705.839 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2031	9.7146	2.6996	0.0401	1.3891	0.0615	1.4506	0.4040	0.0588	0.4628		4,244.954 4	4,244.954 4	0.0187	0.6378	4,435.493 7
Worker	1.2238	0.6928	9.4643	0.0321	4.2783	0.0168	4.2951	1.1420	0.0155	1.1575		3,242.566 1	3,242.566 1	0.0786	0.0866	3,270.346 2
Total	1.4268	10.4073	12.1639	0.0722	5.6674	0.0783	5.7457	1.5460	0.0743	1.6203		7,487.520 4	7,487.520 4	0.0973	0.7245	7,705.839 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2003	9.6576	2.6770	0.0394	1.4842	0.0610	1.5452	0.4274	0.0584	0.4857		4,162.720 5	4,162.720 5	0.0181	0.6247	4,349.334 8
Worker	1.1525	0.6401	9.0450	0.0313	4.6413	0.0157	4.6571	1.2311	0.0145	1.2456		3,162.236 9	3,162.236 9	0.0725	0.0831	3,188.817 1
Total	1.3528	10.2976	11.7220	0.0707	6.1256	0.0768	6.2023	1.6585	0.0729	1.7313		7,324.957 4	7,324.957 4	0.0907	0.7078	7,538.151 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

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	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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	0.2003	9.6576	2.6770	0.0394	1.3891	0.0610	1.4501	0.4040	0.0584	0.4624		4,162.720 5	4,162.720 5	0.0181	0.6247	4,349.334 8
Worker	1.1525	0.6401	9.0450	0.0313	4.2783	0.0157	4.2940	1.1420	0.0145	1.1565		3,162.236 9	3,162.236 9	0.0725	0.0831	3,188.817 1
Total	1.3528	10.2976	11.7220	0.0707	5.6674	0.0768	5.7442	1.5460	0.0729	1.6189		7,324.957 4	7,324.957 4	0.0907	0.7078	7,538.151 9

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
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		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0306	0.0170	0.2401	8.3000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589
Total	0.0306	0.0170	0.2401	8.3000e-004	0.1232	4.2000e-004	0.1236	0.0327	3.8000e-004	0.0331		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

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	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
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	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0306	0.0170	0.2401	8.3000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589
Total	0.0306	0.0170	0.2401	8.3000e-004	0.1136	4.2000e-004	0.1140	0.0303	3.8000e-004	0.0307		83.9532	83.9532	1.9300e-003	2.2100e-003	84.6589

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	192.4515					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	192.6224	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	0.2305	0.1280	1.8090	6.2600e-003	0.9283	3.1500e-003	0.9314	0.2462	2.9000e-003	0.2491		632.4474	632.4474	0.0145	0.0166	637.7634
Total	0.2305	0.1280	1.8090	6.2600e-003	0.9283	3.1500e-003	0.9314	0.2462	2.9000e-003	0.2491		632.4474	632.4474	0.0145	0.0166	637.7634

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2029

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	192.4515					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	192.6224	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	0.2305	0.1280	1.8090	6.2600e-003	0.8557	3.1500e-003	0.8588	0.2284	2.9000e-003	0.2313		632.4474	632.4474	0.0145	0.0166	637.7634
Total	0.2305	0.1280	1.8090	6.2600e-003	0.8557	3.1500e-003	0.8588	0.2284	2.9000e-003	0.2313		632.4474	632.4474	0.0145	0.0166	637.7634

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	192.4515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	192.5823	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

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	0.2173	0.1192	1.7384	6.1200e-003	0.9283	2.9500e-003	0.9312	0.2462	2.7100e-003	0.2489		618.1705	618.1705	0.0134	0.0160	623.2871
Total	0.2173	0.1192	1.7384	6.1200e-003	0.9283	2.9500e-003	0.9312	0.2462	2.7100e-003	0.2489		618.1705	618.1705	0.0134	0.0160	623.2871

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

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	192.4515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	192.5823	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

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	0.2173	0.1192	1.7384	6.1200e-003	0.8557	2.9500e-003	0.8586	0.2284	2.7100e-003	0.2311		618.1705	618.1705	0.0134	0.0160	623.2871
Total	0.2173	0.1192	1.7384	6.1200e-003	0.8557	2.9500e-003	0.8586	0.2284	2.7100e-003	0.2311		618.1705	618.1705	0.0134	0.0160	623.2871

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	84.6514	125.0591	822.0266	1.6860	210.9697	1.3006	212.2703	56.2389	1.2181	57.4571		171,908.7987	171,908.7987	11.1846	10.0812	175,192.6080
Unmitigated	84.6514	125.0591	822.0266	1.6860	210.9697	1.3006	212.2703	56.2389	1.2181	57.4571		171,908.7987	171,908.7987	11.1846	10.0812	175,192.6080

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,976.40	2,197.80	1695.60	5,702,655	5,702,655
Regional Shopping Center	43,712.61	53,404.65	24432.75	74,240,051	74,240,051
Total	45,689.01	55,602.45	26,128.35	79,942,706	79,942,706

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685
Regional Shopping Center	0.560100	0.053949	0.173371	0.131047	0.021297	0.005494	0.012620	0.016451	0.000441	0.000312	0.021225	0.001008	0.002685

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	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0
NaturalGas Unmitigated	0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.432 2	5,336.432 2	0.1023	0.0978	5,368.144 0

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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 Low Rise	8622.52	0.0930	0.7946	0.3381	5.0700e-003		0.0643	0.0643		0.0643	0.0643		1,014.4142	1,014.4142	0.0194	0.0186	1,020.4423
Regional Shopping Center	36737.2	0.3962	3.6017	3.0254	0.0216		0.2737	0.2737		0.2737	0.2737		4,322.0181	4,322.0181	0.0828	0.0792	4,347.7016
Total		0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.4322	5,336.4322	0.1023	0.0978	5,368.1440

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	8.62252	0.0930	0.7946	0.3381	5.0700e-003		0.0643	0.0643		0.0643	0.0643		1,014.4142	1,014.4142	0.0194	0.0186	1,020.4423
Regional Shopping Center	36.7372	0.3962	3.6017	3.0254	0.0216		0.2737	0.2737		0.2737	0.2737		4,322.0181	4,322.0181	0.0828	0.0792	4,347.7016
Total		0.4892	4.3963	3.3636	0.0267		0.3380	0.3380		0.3380	0.3380		5,336.4322	5,336.4322	0.1023	0.0978	5,368.1440

6.0 Area Detail

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5
Unmitigated	37.3216	2.7205	23.3823	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.068 4	3,185.068 4	0.0991	0.0577	3,204.727 5

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.7999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2883	2.4634	1.0482	0.0157		0.1992	0.1992		0.1992	0.1992	0.0000	3,144.7059	3,144.7059	0.0603	0.0577	3,163.3933
Landscaping	0.6753	0.2572	22.3341	1.1900e-003		0.1240	0.1240		0.1240	0.1240		40.3625	40.3625	0.0389		41.3342
Total	37.3216	2.7205	23.3824	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.0684	3,185.0684	0.0991	0.0577	3,204.7275

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.7999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2883	2.4634	1.0482	0.0157		0.1992	0.1992		0.1992	0.1992	0.0000	3,144.7059	3,144.7059	0.0603	0.0577	3,163.3933
Landscaping	0.6753	0.2572	22.3341	1.1900e-003		0.1240	0.1240		0.1240	0.1240		40.3625	40.3625	0.0389		41.3342
Total	37.3216	2.7205	23.3824	0.0169		0.3231	0.3231		0.3231	0.3231	0.0000	3,185.0684	3,185.0684	0.0991	0.0577	3,204.7275

7.0 Water Detail

7.1 Mitigation Measures Water

The Previously Approved Cannery Park Project - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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

EXHIBIT 1

Source: EMFAC2021 (v1.0.1) Emissions Inventory

Region Type: County

Region: San Joaquin

Calendar Year: 2022, 2030

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	MPG (Derived)
San Joaquin	2022	All Other Buses	Aggregate	Aggregate	Diesel	64.18276106	983114.2639	983114.2639	0	166798.1594	113.790052	8.64
San Joaquin	2030	All Other Buses	Aggregate	Aggregate	Diesel	77.91699798	1052062.811	1052062.811	0	202490.6944	115.9209951	9.08
San Joaquin	2022	LDA	Aggregate	Aggregate	Gasoline	245832.5119	3415793856	3415793856	0	394415289.6	121526.7684	28.11
San Joaquin	2022	LDA	Aggregate	Aggregate	Diesel	747.597033	8552210.782	8552210.782	0	1116714.388	202.5712829	42.22
San Joaquin	2030	LDA	Aggregate	Aggregate	Gasoline	254418.6659	3555081583	3555081583	0	406617917.6	111881.2187	31.78
San Joaquin	2030	LDA	Aggregate	Aggregate	Diesel	397.5680304	4402636.879	4402636.879	0	595374.5304	96.77963754	45.49
San Joaquin	2022	LDT1	Aggregate	Aggregate	Gasoline	22627.08052	254906082.1	254906082.1	0	33921505.03	10869.91585	23.45
San Joaquin	2022	LDT1	Aggregate	Aggregate	Diesel	7.047782881	28643.33409	28643.33409	0	7315.906291	1.17050914	24.47
San Joaquin	2030	LDT1	Aggregate	Aggregate	Gasoline	19319.25133	230400973.5	230400973.5	0	29270642	8647.502649	26.64
San Joaquin	2030	LDT1	Aggregate	Aggregate	Diesel	0.386071985	2532.723059	2532.723059	0	432.8538191	0.094372393	26.84
San Joaquin	2022	LDT2	Aggregate	Aggregate	Gasoline	97154.07981	1327006241	1327006241	0	156148852	59035.46063	22.48
San Joaquin	2022	LDT2	Aggregate	Aggregate	Diesel	248.8605386	3715266.012	3715266.012	0	408516.5971	118.6311075	31.32
San Joaquin	2030	LDT2	Aggregate	Aggregate	Gasoline	121581.9972	1694407768	1694407768	0	195618928.1	65317.16905	25.94
San Joaquin	2030	LDT2	Aggregate	Aggregate	Diesel	401.6587951	5921566.017	5921566.017	0	660840.358	169.5648313	34.92
San Joaquin	2022	LHD1	Aggregate	Aggregate	Gasoline	10032.88768	112383473.8	112383473.8	0	48878350.34	12349.75639	9.10
San Joaquin	2022	LHD1	Aggregate	Aggregate	Diesel	9047.421916	103983412.9	103983412.9	0	37214295.84	6588.299532	15.78
San Joaquin	2030	LHD1	Aggregate	Aggregate	Gasoline	8636.175694	100584529.7	100584529.7	0	42073831.03	9749.636516	10.32
San Joaquin	2030	LHD1	Aggregate	Aggregate	Diesel	7266.804252	78711686.22	78711686.22	0	29890172.66	4898.611729	16.07
San Joaquin	2022	LHD2	Aggregate	Aggregate	Gasoline	1192.956774	13475070.21	13475070.21	0	5811862.047	1640.891005	8.21
San Joaquin	2022	LHD2	Aggregate	Aggregate	Diesel	3132.378704	37931318.99	37931318.99	0	12884252.43	2924.634355	12.97
San Joaquin	2030	LHD2	Aggregate	Aggregate	Gasoline	1010.080889	11363912.65	11363912.65	0	4920924.973	1248.168074	9.10
San Joaquin	2030	LHD2	Aggregate	Aggregate	Diesel	2911.506548	32424366.9	32424366.9	0	1197570.33	2395.577479	13.54
San Joaquin	2022	MCY	Aggregate	Aggregate	Gasoline	12156.83121	22852866.91	22852866.91	0	8436840.858	574.2253718	39.80
San Joaquin	2030	MCY	Aggregate	Aggregate	Gasoline	11782.19458	21599699.48	21599699.48	0	8176843.039	527.0198516	40.98
San Joaquin	2022	MDV	Aggregate	Aggregate	Gasoline	95564.44336	1148172249	1148172249	0	150054305.6	62988.61289	18.23
San Joaquin	2022	MDV	Aggregate	Aggregate	Diesel	1375.554752	18880934.92	18880934.92	0	2249263.776	797.8242725	23.67
San Joaquin	2030	MDV	Aggregate	Aggregate	Gasoline	89351.24041	1090180335	1090180335	0	139702643.5	52283.062	20.85
San Joaquin	2030	MDV	Aggregate	Aggregate	Diesel	1300.084582	15515711.18	15515711.18	0	2039048.221	609.1285809	25.47
San Joaquin	2022	MH	Aggregate	Aggregate	Gasoline	1600.88645	4527842.043	4527842.043	0	52369.92651	1026.718509	4.41
San Joaquin	2022	MH	Aggregate	Aggregate	Diesel	647.0575838	1864836.858	1864836.858	0	21158.78299	198.2342323	9.41
San Joaquin	2030	MH	Aggregate	Aggregate	Gasoline	1046.923284	3051532.968	3051532.968	0	34248.08516	691.0838834	9.42
San Joaquin	2030	MH	Aggregate	Aggregate	Diesel	593.6778597	1625897.118	1625897.118	0	19413.26601	173.3330579	4.38
San Joaquin	2022	Motor Coach	Aggregate	Aggregate	Diesel	17.36532658	725245.3317	725245.3317	0	116524.1198	132.125375	5.49
San Joaquin	2030	Motor Coach	Aggregate	Aggregate	Diesel	21.84279383	755114.0864	755114.0864	0	146568.6415	129.0916579	5.85
San Joaquin	2022	OBUS	Aggregate	Aggregate	Gasoline	190.8863856	2783028.979	2783028.979	0	1248896.32	598.6307691	4.65
San Joaquin	2030	OBUS	Aggregate	Aggregate	Gasoline	142.7858447	1844530.505	1844530.505	0	934192.9523	365.1457621	5.05
San Joaquin	2022	PTO	Aggregate	Aggregate	Diesel	0	6090118.27	6090118.27	0	0	1257.295456	4.84
San Joaquin	2030	PTO	Aggregate	Aggregate	Diesel	0	6114484.956	6114484.956	0	0	1145.873619	5.34
San Joaquin	2022	SBUS	Aggregate	Aggregate	Gasoline	125.3894152	2223699.452	2223699.452	0	164009.355	219.7856778	10.12
San Joaquin	2022	SBUS	Aggregate	Aggregate	Diesel	485.9784004	3614694.546	3614694.546	0	2301088.287	443.7107543	8.15
San Joaquin	2030	SBUS	Aggregate	Aggregate	Gasoline	137.6688984	2474022.098	2474022.098	0	180070.9192	240.659992	10.28
San Joaquin	2030	SBUS	Aggregate	Aggregate	Diesel	472.583377	3294922.647	3294922.647	0	2237663.387	394.6247407	8.35
San Joaquin	2022	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.0890437	210293.2226	210293.2226	0	72336.02194	23.84738494	8.82
San Joaquin	2030	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.03357054	207845.9831	207845.9831	0	71938.29275	22.31020272	9.32
San Joaquin	2022	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	13.58227373	288484.4857	288484.4857	0	97381.64291	32.62553013	8.84
San Joaquin	2030	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	12.9245166	287261.2642	287261.2642	0	92665.68211	30.92075047	9.29
San Joaquin	2022	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	41.03348839	753818.2147	753818.2147	0	294200.2637	84.43793674	8.93
San Joaquin	2030	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	50.00197369	731928.2792	731928.2792	0	358502.1509	77.80206275	9.41
San Joaquin	2022	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	72.78191568	4728328.863	4728328.863	0	521828.8677	495.7091624	9.54
San Joaquin	2030	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	81.09772518	4969148.526	4969148.526	0	581451.2261	474.4552717	10.47
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	239.0980349	2541147.718	2541147.718	0	1064521.835	312.100003	8.14
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	254.8998619	2622134.491	2622134.491	0	1134875.361	306.4146501	8.56
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	153.4261699	1652891.973	1652891.973	0	683090.1306	204.7820753	8.07
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	166.0285585	1709497.809	1709497.809	0	739198.9892	200.5510915	8.52
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	669.7781872	7173217.658	7173217.658	0	2982013.236	882.4034098	8.13
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	719.8306466	7412214.514	7412214.514	0	3204858.798	866.628937	8.55
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	121.8173307	2064596.796	2064596.796	0	542359.924	253.4340811	8.15
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	145.1086383	2277007.302	2277007.302	0	646058.4837	269.33536	8.45
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	458.6664735	5647630.508	5647630.508	0	1654281.543	670.5535241	8.42
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	463.4914259	5759891.182	5759891.182	0	1671683.796	652.3873729	8.83
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	1145.440922	15945159.88	15945159.88	0	4131284.681	1880.533752	8.48
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	1302.613735	16357453.3	16357453.3	0	4698163.011	1854.852574	8.82
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	900.2348993	11843070.67	11843070.67	0	3246895.216	1391.681049	8.51
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	967.5241645	12136875.29	12136875.29	0	3489588.754	1369.65408	8.86
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	546.2729605	7887491.996	7887491.996	0	1970253.612	908.6706235	8.68
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	700.7841908	8283914.957	8283914.957	0	2527532.357	934.6947684	8.86
San Joaquin	2022	T6 Instate Tractor	Aggregate	Aggregate	Diesel	10.69873229	156796.7583	156796.7583	0	38587.33171	18.49124984	8.48
San Joaquin	2030	T6 Instate Tractor	Aggregate	Aggregate	Diesel	11.19156734	157945.7835	157945.7835	0	40364.84976	17.66922796	8.94
San Joaquin	2022	T6 Instate Tractor	Aggregate	Aggregate	Diesel	714.4980333	13263547.77	13263547.77	0	2576994.347	1484.370826	8.94
San Joaquin	2030	T6 Instate Tractor	Aggregate	Aggregate	Diesel	883.514131	14477150.86	14477150.86	0	3186588.087	1552.189976	9.33
San Joaquin	2022	T6 OOS Class 4	Aggregate	Aggregate	Diesel	5.824249623	120402.6041	120402.6041	0	41758.47198	13.64837299	8.82
San Joaquin	2030	T6 OOS Class 4	Aggregate</									

EXHIBIT 1

San Joaquin	2022	T6 Utility Class 7	Aggregate	Aggregate	Diesel	7.184731387	110634.8643	110634.8643	0	28692.94327	12.6401735	8.75
San Joaquin	2030	T6 Utility Class 7	Aggregate	Aggregate	Diesel	6.55183963	101043.6339	101043.6339	0	26165.42675	10.94312101	9.23
San Joaquin	2022	T6TS	Aggregate	Aggregate	Gasoline	579.4901376	8873213.878	8873213.878	0	3791381.446	1932.185198	4.59
San Joaquin	2030	T6TS	Aggregate	Aggregate	Gasoline	474.584898	8426557.293	8426557.293	0	3105026.747	1664.950995	5.06
San Joaquin	2022	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1465.651998	94322580.13	94322580.13	0	10508373.07	15770.2762	5.98
San Joaquin	2030	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1609.245461	101613876.1	101613876.1	0	11537903.74	15064.7061	6.75
San Joaquin	2022	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1314.51908	111518369.3	111518369.3	0	9424786.321	18648.32321	5.98
San Joaquin	2030	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1522.891634	131105894.1	131105894.1	0	10918767.52	18285.23877	7.17
San Joaquin	2022	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	547.746265	40512642.66	40512642.66	0	3927209.261	6815.550603	5.94
San Joaquin	2030	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	658.5047048	47628442.51	47628442.51	0	4721320.692	6863.504085	6.94
San Joaquin	2022	T7 Other Port Cla	Aggregate	Aggregate	Diesel	29.96782331	1613813.406	1613813.406	0	152965.3599	275.8291853	5.85
San Joaquin	2030	T7 Other Port Cla	Aggregate	Aggregate	Diesel	27.91380238	2026458.222	2026458.222	0	142480.9798	312.2690391	6.49
San Joaquin	2022	T7 POAK Class 8	Aggregate	Aggregate	Diesel	130.9212733	4012315.2	4012315.2	0	668264.0737	701.2895659	5.72
San Joaquin	2030	T7 POAK Class 8	Aggregate	Aggregate	Diesel	129.8802176	4415506.402	4415506.402	0	662950.1924	705.494381	6.26
San Joaquin	2022	T7 POLA Class 8	Aggregate	Aggregate	Diesel	133.7447014	5448794.577	5448794.577	0	682675.7542	952.8299882	5.72
San Joaquin	2030	T7 POLA Class 8	Aggregate	Aggregate	Diesel	159.2318432	7377820.897	7377820.897	0	812770.2817	1237.769376	5.96
San Joaquin	2022	T7 Public Class 8	Aggregate	Aggregate	Diesel	387.8868943	5120839.782	5120839.782	0	620836.2476	1005.029197	5.10
San Joaquin	2030	T7 Public Class 8	Aggregate	Aggregate	Diesel	378.7173382	4998369.929	4998369.929	0	606159.8229	912.6515986	5.48
San Joaquin	2022	T7 Single Concret	Aggregate	Aggregate	Diesel	116.7544211	2677818.424	2677818.424	0	343145.9137	460.6989897	5.81
San Joaquin	2030	T7 Single Concret	Aggregate	Aggregate	Diesel	112.6092183	2344443.502	2344443.502	0	330962.997	374.2047054	6.27
San Joaquin	2022	T7 Single Dump C	Aggregate	Aggregate	Diesel	478.1812367	9536301.569	9536301.569	0	1405393.782	1654.245052	5.76
San Joaquin	2030	T7 Single Dump C	Aggregate	Aggregate	Diesel	552.6697334	9041303.241	9041303.241	0	1624318.453	1515.628914	5.97
San Joaquin	2022	T7 Single Other C	Aggregate	Aggregate	Diesel	984.7457086	17434952.94	17434952.94	0	2894207.028	2999.030833	5.81
San Joaquin	2030	T7 Single Other C	Aggregate	Aggregate	Diesel	1393.522707	18377799.27	18377799.27	0	4095618.977	3026.5809	6.07
San Joaquin	2022	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	177.8487212	3596616.494	3596616.494	0	255248.4847	1442.776049	2.49
San Joaquin	2030	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	143.1275202	2896116.632	2896116.632	0	205416.617	1074.048992	2.70
San Joaquin	2022	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	2518.433603	64864115.78	64864115.78	0	11416966.16	10747.18356	6.04
San Joaquin	2030	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	3532.497356	73001804.65	73001804.65	0	16014082.21	11333.27524	6.44
San Joaquin	2022	T7 Utility Class 8	Aggregate	Aggregate	Diesel	22.55419755	333131.8573	333131.8573	0	90072.44333	58.51013889	5.69
San Joaquin	2030	T7 Utility Class 8	Aggregate	Aggregate	Diesel	25.09559532	333435.0862	333435.0862	0	100221.7695	55.50666475	6.01
San Joaquin	2022	T7I5	Aggregate	Aggregate	Gasoline	2.652755373	18719.50027	18719.50027	0	17355.95975	6.072843609	3.08
San Joaquin	2030	T7I5	Aggregate	Aggregate	Gasoline	0.44185209	20186.51451	20186.51451	0	2890.868556	4.519734977	4.47
San Joaquin	2022	UBUS	Aggregate	Aggregate	Gasoline	48.76869755	1201484.843	1201484.843	0	63789.4564	255.7319762	4.70
San Joaquin	2022	UBUS	Aggregate	Aggregate	Diesel	81.19085432	1839458.611	1839458.611	0	106197.6375	209.6089245	8.78
San Joaquin	2030	UBUS	Aggregate	Aggregate	Gasoline	29.25530087	767161.6504	767161.6504	0	38265.93354	163.2503579	4.70
San Joaquin	2030	UBUS	Aggregate	Aggregate	Diesel	38.98485383	895451.8408	895451.8408	0	50992.18881	97.21612892	9.21

On-road Mobile (Operational) Energy Usage

Unmitigated:

Step 1:

Therefore:

Average Daily VMT:

88,308	Source: CalEEMod Output

Step 2:

Given:

Fleet Mix (CalEEMod Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
56.01%	5.39%	17.34%	13.10%	2.13%	0.55%	1.26%	1.65%	0.04%	0.03%	2.12%	0.10%	0.27%

And:

Gasoline MPG Factors for each Vehicle Class - Year 2030 (EMFAC2021 Output)

LDA	LDT1	LDT2	MDV	MCY	MH	OBUS
31.78	26.64	25.94	20.85	40.98	4.42	5.05

Diesel MPG Factors for each Vehicle Class - Year 2030 (EMFAC2021 Output)

LHD1	LHD2	MHD	HHD	UBUS	SBUS
16.06816187	13.53509423	8.504393618	5.493562034	9.210939077	8.34950855

Therefore:

Weighted Average MPG Factors

Gasoline:	29.0	Diesel:	10.9

Step 3:

Therefore:

2,869	daily gallons of gasoline	465	daily gallons of diesel

or

1,047,147	annual gallons of gasoline	169,779	annual gallons of diesel

Off-road Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source.
Demolition (if applicable), Site preparation and grading off-road mobile vehicle on-site gallons of fuel are calculated below.

Given Factor:	979.7 metric tons	CO2	(provided in CalEEMod Output File)
Conversion Factor:	2204.6262 pounds	per metric ton	
Intermediate Result:	2,159,823 pounds	CO2	
Conversion Factor:	22.38 pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	96,506.84 gallons	diesel fuel	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Site Preparation - 2022	100.32
Grading - 2022	73.62
Grading - 2023	349.02
Building Construction - 2023	152.99

On-road Mobile (Construction) Energy Usage - Site Preparation

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

194

Step 2: **Given:**

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

7.6 Worker daily gallons of gasoline

Step 4: **60 # of Days (CalEEMod Output)**

60

Therefore:

Result: 457 Total gallons of gasoline

457

On-road Mobile (Construction) Energy Usage - Grading

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

20

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

216

Step 2: **Given:**

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

8.5 Worker daily gallons of gasoline

Step 4: **155 # of Days (CalEEMod Output)**

Therefore:

Result: 1,311 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Building Construction

Step 1: **Total Daily Worker Trips (CalEEMod Output)** **Total Daily Vendor Trips (CalEEMod Output)**

565	5%	28	219	5%	11

Note: Assumes 5% of Plan Area under construction at given point in time (on average) until buildout.

Worker Trip Length (miles) (CalEEMod Output) **Vendor Trip Length (miles) (CalEEMod Output)**

10.8	7.3

Therefore:

Average Worker Daily VMT: **Average Vendor Daily VMT:**

305	80

Step 2: Given: **Assumed Fleet Mix for Workers** (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Assumed Fleet Mix for Vendors

Fleet Mix for Workers (CalEEMod Output)

MHD	HHD
0%	100%

And:

MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

Gasoline:

LDA	LDT1	LDT2
28.11	23.45	22.48

Diesel:

MHD	HHD
8.50	5.49

Therefore:

Weighted Average Worker (Gasoline) MPG Factor **Weighted Average Vendor (Diesel) MPG Factor**

25.5	5.5

Step 3: **Therefore:** **12 Worker daily gallons of gasoline**

Therefore: **15 Vendor daily gallons of diesel**

Step 4: **1550 # of Days (CalEEMod Output)**

Therefore:

18,519 Total gallons of gasoline

Therefore:

22,554 Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Paving

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

162

Step 2: **Given:**

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

6.3 Worker daily gallons of gasoline

Step 4: **110 # of Days (CalEEMod Output)**

Therefore:

Result: 698 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Architectural Coating

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

133	5%	7

Note: Assumes 5% of Plan Area under construction at given point in time (on average) until buildout.

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

72

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

2.8 Worker daily gallons of gasoline

Step 4: **110 # of Days (CalEEMod Output)**

Therefore:

Result: 309 Total gallons of gasoline

EXHIBIT 1

Source: EMFAC2021 (v1.0.1) Emissions Inventory

Region Type: County

Region: San Joaquin

Calendar Year: 2022, 2030

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	MPG (Derived)
San Joaquin	2022	All Other Buses	Aggregate	Aggregate	Diesel	64.18276106	983114.2639	983114.2639	0	166798.1594	113.790052	8.64
San Joaquin	2030	All Other Buses	Aggregate	Aggregate	Diesel	77.91699798	1052062.811	1052062.811	0	202490.6944	115.9209951	9.08
San Joaquin	2022	LDA	Aggregate	Aggregate	Gasoline	245832.5119	3415793856	3415793856	0	394415289.6	121526.7684	28.11
San Joaquin	2022	LDA	Aggregate	Aggregate	Diesel	747.597033	8552210.782	8552210.782	0	1116714.388	202.5712829	42.22
San Joaquin	2030	LDA	Aggregate	Aggregate	Diesel	397.5680304	4402636.879	4402636.879	0	595374.5304	96.77963754	45.49
San Joaquin	2030	LDA	Aggregate	Aggregate	Gasoline	254418.6659	3555081583	3555081583	0	406617917.6	111881.2187	31.78
San Joaquin	2022	LDT1	Aggregate	Aggregate	Gasoline	22627.08052	254906082.1	254906082.1	0	33921505.03	10869.91585	23.45
San Joaquin	2022	LDT1	Aggregate	Aggregate	Diesel	7.047782881	28643.33409	28643.33409	0	7315.906291	1.17050914	24.47
San Joaquin	2030	LDT1	Aggregate	Aggregate	Diesel	0.386071985	2532.723059	2532.723059	0	432.8538191	0.094372393	26.84
San Joaquin	2030	LDT1	Aggregate	Aggregate	Gasoline	19319.25133	230400973.5	230400973.5	0	29270642	8647.502649	26.64
San Joaquin	2022	LDT2	Aggregate	Aggregate	Gasoline	97154.07981	1327006241	1327006241	0	156148852	59035.46063	22.48
San Joaquin	2022	LDT2	Aggregate	Aggregate	Diesel	248.8605386	3715266.012	3715266.012	0	408516.5971	118.6311075	31.32
San Joaquin	2030	LDT2	Aggregate	Aggregate	Diesel	401.6587951	5921566.017	5921566.017	0	660840.358	169.5648313	34.92
San Joaquin	2030	LDT2	Aggregate	Aggregate	Gasoline	121581.9972	1694407768	1694407768	0	195618928.1	65317.16905	25.94
San Joaquin	2022	LHD1	Aggregate	Aggregate	Gasoline	10032.88768	112383473.8	112383473.8	0	48878350.34	12349.75639	9.10
San Joaquin	2022	LHD1	Aggregate	Aggregate	Diesel	9047.421916	103983412.9	103983412.9	0	37214295.84	6588.299532	15.78
San Joaquin	2030	LHD1	Aggregate	Aggregate	Diesel	7266.804252	78711686.22	78711686.22	0	29890172.66	4898.611729	16.07
San Joaquin	2030	LHD1	Aggregate	Aggregate	Gasoline	8636.175694	100584529.7	100584529.7	0	42073831.03	9749.636516	10.32
San Joaquin	2022	LHD2	Aggregate	Aggregate	Gasoline	1192.956774	13475070.21	13475070.21	0	5811862.047	1640.891005	8.21
San Joaquin	2022	LHD2	Aggregate	Aggregate	Diesel	3132.378704	37931318.99	37931318.99	0	12884252.43	2924.634355	12.97
San Joaquin	2030	LHD2	Aggregate	Aggregate	Diesel	2911.506548	32424366.9	32424366.9	0	11975750.33	2395.577479	13.54
San Joaquin	2030	LHD2	Aggregate	Aggregate	Gasoline	1010.080889	11363912.65	11363912.65	0	4920924.973	1248.168074	9.10
San Joaquin	2022	MCY	Aggregate	Aggregate	Gasoline	12156.83121	22852866.91	22852866.91	0	8436840.858	574.2253718	39.80
San Joaquin	2030	MCY	Aggregate	Aggregate	Gasoline	11782.19458	21599699.48	21599699.48	0	8176843.039	527.0198516	40.98
San Joaquin	2022	MDV	Aggregate	Aggregate	Gasoline	95564.44336	1148172249	1148172249	0	150054305.6	62988.61289	18.23
San Joaquin	2022	MDV	Aggregate	Aggregate	Diesel	1375.554752	18880934.92	18880934.92	0	2249263.776	797.8247275	23.67
San Joaquin	2030	MDV	Aggregate	Aggregate	Diesel	1300.084582	15515711.18	15515711.18	0	2039048.221	609.1285809	25.47
San Joaquin	2030	MDV	Aggregate	Aggregate	Gasoline	89351.24041	1090180335	1090180335	0	139702643.5	52283.062	20.85
San Joaquin	2022	MH	Aggregate	Aggregate	Gasoline	1600.88645	4527842.043	4527842.043	0	52369.92651	1026.718509	4.41
San Joaquin	2022	MH	Aggregate	Aggregate	Diesel	647.0575838	1864836.858	1864836.858	0	21158.78299	198.2342323	9.41
San Joaquin	2030	MH	Aggregate	Aggregate	Diesel	593.6778597	1625897.118	1625897.118	0	19413.26601	173.330579	9.38
San Joaquin	2030	MH	Aggregate	Aggregate	Gasoline	1046.923284	3051532.968	3051532.968	0	34248.08516	691.0838834	4.42
San Joaquin	2022	Motor Coach	Aggregate	Aggregate	Diesel	17.36532658	725245.3317	725245.3317	0	116524.1198	132.125375	5.49
San Joaquin	2030	Motor Coach	Aggregate	Aggregate	Diesel	21.84279383	755114.0864	755114.0864	0	146568.6415	129.0916579	5.85
San Joaquin	2022	OBUS	Aggregate	Aggregate	Gasoline	190.8863856	2783028.979	2783028.979	0	1248896.32	598.6307691	4.65
San Joaquin	2030	OBUS	Aggregate	Aggregate	Gasoline	142.7858447	1844530.505	1844530.505	0	934192.9523	365.1457621	5.05
San Joaquin	2022	PTO	Aggregate	Aggregate	Diesel	0	6090118.27	6090118.27	0	0	1257.295456	4.84
San Joaquin	2030	PTO	Aggregate	Aggregate	Diesel	0	6114484.956	6114484.956	0	0	1145.873619	5.34
San Joaquin	2022	SBUS	Aggregate	Aggregate	Gasoline	125.3894152	2223699.452	2223699.452	0	164009.355	219.7856778	10.12
San Joaquin	2022	SBUS	Aggregate	Aggregate	Diesel	485.9784004	3614694.546	3614694.546	0	2301088.287	443.7107543	8.15
San Joaquin	2030	SBUS	Aggregate	Aggregate	Diesel	472.583377	3294922.647	3294922.647	0	2237663.387	394.6247407	8.35
San Joaquin	2030	SBUS	Aggregate	Aggregate	Gasoline	137.6688984	2474022.098	2474022.098	0	180070.9192	240.659992	10.28
San Joaquin	2022	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.0890437	210293.2226	210293.2226	0	72336.02194	23.84738494	8.82
San Joaquin	2030	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.03357054	207845.9831	207845.9831	0	71938.29275	22.31020272	9.32
San Joaquin	2022	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	13.58227373	288484.4857	288484.4857	0	97381.64291	32.62553013	8.84
San Joaquin	2030	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	12.9245166	287261.2642	287261.2642	0	92665.68211	30.92075047	9.29
San Joaquin	2022	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	41.03348839	753818.2147	753818.2147	0	294200.2637	84.43793674	8.93
San Joaquin	2030	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	50.00197369	731928.2792	731928.2792	0	358502.1509	77.80206275	9.41
San Joaquin	2022	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	72.78191568	4728328.863	4728328.863	0	521828.8677	495.7091624	9.54
San Joaquin	2030	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	81.09772518	4969148.526	4969148.526	0	581451.2261	474.4552717	10.47
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	239.0980349	2541147.718	2541147.718	0	1064521.835	312.100003	8.14
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	254.8998619	2622134.491	2622134.491	0	1134875.361	306.4146501	8.56
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	153.4261699	1652891.973	1652891.973	0	683090.1306	204.7820753	8.07
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	166.0285585	1709497.809	1709497.809	0	739198.9892	200.5510915	8.52
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	669.7781872	7173217.658	7173217.658	0	2982013.236	882.4034098	8.13
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	719.8306466	7412214.514	7412214.514	0	3204858.798	866.628937	8.55
San Joaquin	2022	T6 Instate Deliver	Aggregate	Aggregate	Diesel	121.8173307	2064596.796	2064596.796	0	542359.9924	253.4340811	8.15
San Joaquin	2030	T6 Instate Deliver	Aggregate	Aggregate	Diesel	145.1086383	2277007.302	2277007.302	0	646058.4837	269.33536	8.45
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	458.6664735	5647630.508	5647630.508	0	1654281.543	670.5535241	8.42
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	463.4914259	5759891.182	5759891.182	0	1671683.796	652.3873729	8.83
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	1145.440922	15945159.88	15945159.88	0	4131284.681	1880.533752	8.48
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	1302.613735	16357453.3	16357453.3	0	4698163.011	1854.852574	8.82
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	900.2348993	11843070.67	11843070.67	0	3246895.216	1391.681049	8.51
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	967.5241645	12136875.29	12136875.29	0	3489588.754	1369.65408	8.86
San Joaquin	2022	T6 Instate Other (	Aggregate	Aggregate	Diesel	546.2729605	7887491.996	7887491.996	0	1970253.612	908.6706235	8.68
San Joaquin	2030	T6 Instate Other (	Aggregate	Aggregate	Diesel	700.7841908	8283914.957	8283914.957	0	2527532.357	934.6947684	8.86
San Joaquin	2022	T6 Instate Tractor	Aggregate	Aggregate	Diesel	10.69873229	156796.7583	156796.7583	0	38587.33171	18.49124984	8.47
San Joaquin	2030	T6 Instate Tractor	Aggregate	Aggregate	Diesel	11.19156734	157945.7835	157945.7835	0	40364.84976	17.66922796	8.94
San Joaquin	2022	T6 Instate Tractor	Aggregate	Aggregate	Diesel	714.4980333	13263547.77	13263547.77	0	2576994.347	1484.370826	8.94
San Joaquin	2030	T6 Instate Tractor	Aggregate	Aggregate	Diesel	883.514131	14477150.86	14477150.86	0	3186588.087	1552.189976	9.33
San Joaquin	2022	T6 OOS										

EXHIBIT 1

San Joaquin	2022	T6 Utility Class 7	Aggregate	Aggregate	Diesel	7.184731387	110634.8643	110634.8643	0	28692.94327	12.6401735	8.75
San Joaquin	2030	T6 Utility Class 7	Aggregate	Aggregate	Diesel	6.55183963	101043.6339	101043.6339	0	26165.42675	10.94312101	9.23
San Joaquin	2022	T6TS	Aggregate	Aggregate	Gasoline	579.4901376	8873213.878	8873213.878	0	3791381.446	1932.185198	4.59
San Joaquin	2030	T6TS	Aggregate	Aggregate	Gasoline	474.584898	8426557.293	8426557.293	0	3105026.747	1664.950995	5.06
San Joaquin	2022	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1465.651998	94322580.13	94322580.13	0	10508373.07	15770.2762	5.98
San Joaquin	2030	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1609.245461	101613876.1	101613876.1	0	11537903.74	15064.7061	6.75
San Joaquin	2022	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1314.51908	111518369.3	111518369.3	0	9424786.321	18648.32321	5.98
San Joaquin	2030	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1522.891634	131105894.1	131105894.1	0	10918767.52	18285.23877	7.17
San Joaquin	2022	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	547.746265	40512642.66	40512642.66	0	3927209.261	6815.550603	5.94
San Joaquin	2030	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	658.5047048	47628442.51	47628442.51	0	4721320.692	6863.504085	6.94
San Joaquin	2022	T7 Other Port Cla	Aggregate	Aggregate	Diesel	29.96782331	1613813.406	1613813.406	0	152965.3599	275.8291853	5.85
San Joaquin	2030	T7 Other Port Cla	Aggregate	Aggregate	Diesel	27.91380238	2026458.222	2026458.222	0	142480.9798	312.2690391	6.49
San Joaquin	2022	T7 POAK Class 8	Aggregate	Aggregate	Diesel	130.9212733	4012315.2	4012315.2	0	668264.0737	701.2895659	5.72
San Joaquin	2030	T7 POAK Class 8	Aggregate	Aggregate	Diesel	129.8802176	4415506.402	4415506.402	0	662950.1924	705.494381	6.26
San Joaquin	2022	T7 POLA Class 8	Aggregate	Aggregate	Diesel	133.7447014	5448794.577	5448794.577	0	682675.7542	952.8299882	5.72
San Joaquin	2030	T7 POLA Class 8	Aggregate	Aggregate	Diesel	159.2318432	7377820.897	7377820.897	0	812770.2817	1237.769376	5.96
San Joaquin	2022	T7 Public Class 8	Aggregate	Aggregate	Diesel	387.8868943	5120839.782	5120839.782	0	620836.2476	1005.029197	5.10
San Joaquin	2030	T7 Public Class 8	Aggregate	Aggregate	Diesel	378.7173382	4998369.929	4998369.929	0	606159.8229	912.6515986	5.48
San Joaquin	2022	T7 Single Concret	Aggregate	Aggregate	Diesel	116.7544211	2677818.424	2677818.424	0	343145.9137	460.6989897	5.81
San Joaquin	2030	T7 Single Concret	Aggregate	Aggregate	Diesel	112.6092183	2344443.502	2344443.502	0	330962.997	374.2047054	6.27
San Joaquin	2022	T7 Single Dump C	Aggregate	Aggregate	Diesel	478.1812367	9536301.569	9536301.569	0	1405393.782	1654.245052	5.76
San Joaquin	2030	T7 Single Dump C	Aggregate	Aggregate	Diesel	552.6697334	9041303.241	9041303.241	0	1624318.453	1515.628914	5.97
San Joaquin	2022	T7 Single Other C	Aggregate	Aggregate	Diesel	984.7457086	17434952.94	17434952.94	0	2894207.028	2999.030833	5.81
San Joaquin	2030	T7 Single Other C	Aggregate	Aggregate	Diesel	1393.522707	18377799.27	18377799.27	0	4095618.977	3026.5809	6.07
San Joaquin	2022	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	177.8487212	3596616.494	3596616.494	0	255248.4847	1442.776049	2.49
San Joaquin	2030	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	143.1275202	2896116.632	2896116.632	0	205416.617	1074.048992	2.70
San Joaquin	2022	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	2518.433603	64864115.78	64864115.78	0	11416966.16	10747.18356	6.04
San Joaquin	2030	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	3532.497356	73001804.65	73001804.65	0	16014082.21	11333.27524	6.44
San Joaquin	2022	T7 Utility Class 8	Aggregate	Aggregate	Diesel	22.55419755	333131.8573	333131.8573	0	90072.44333	58.51013889	5.69
San Joaquin	2030	T7 Utility Class 8	Aggregate	Aggregate	Diesel	25.09559532	333435.0862	333435.0862	0	100221.7695	55.50666475	6.01
San Joaquin	2022	T7I5	Aggregate	Aggregate	Gasoline	2.652755373	18719.50027	18719.50027	0	17355.95975	6.072843609	3.08
San Joaquin	2030	T7I5	Aggregate	Aggregate	Gasoline	0.44185209	20186.51451	20186.51451	0	2890.868556	4.519734977	4.47
San Joaquin	2022	UBUS	Aggregate	Aggregate	Gasoline	48.76869755	1201484.843	1201484.843	0	63789.4564	255.7319762	4.70
San Joaquin	2022	UBUS	Aggregate	Aggregate	Diesel	81.19085432	1839458.611	1839458.611	0	106197.6375	209.6089245	8.78
San Joaquin	2030	UBUS	Aggregate	Aggregate	Gasoline	29.25530087	767161.6504	767161.6504	0	38265.93354	163.2503579	4.70
San Joaquin	2030	UBUS	Aggregate	Aggregate	Diesel	38.98485383	895451.8408	895451.8408	0	50992.18881	97.21612892	9.21

On-road Mobile (Operational) Energy Usage

Unmitigated:

Step 1:

Therefore:

Average Daily VMT:

219,021 Source: CalEEMod Output

Step 2:

Given:

Fleet Mix (CalEEMod Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
56.01%	5.39%	17.34%	13.10%	2.13%	0.55%	1.26%	1.65%	0.04%	0.03%	2.12%	0.10%	0.27%

And:

Gasoline MPG Factors for each Vehicle Class - Year 2030 (EMFAC2021 Output)

LDA	LDT1	LDT2	MDV	MCY	MH	OBUS
31.78	26.64	25.94	20.85	40.98	4.42	5.05

Diesel MPG Factors for each Vehicle Class - Year 2030 (EMFAC2021 Output)

LHD1	LHD2	MHD	HHD	UBUS	SBUS
16.06816187	13.53509423	8.504393618	5.493562034	9.210939077	8.34950855

Therefore:

Weighted Average MPG Factors

Gasoline: 29.0 Diesel: 10.9

Step 3:

Therefore:

7,119 daily gallons of gasoline 1,145 daily gallons of diesel

or

2,598,340 annual gallons of gasoline 417,861 annual gallons of diesel

Off-road Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source.
Demolition (if applicable), Site preparation and grading off-road mobile vehicle on-site gallons of fuel are calculated below.

Given Factor:	986.6 metric tons	CO2	(provided in CalEEMod Output File)
Conversion Factor:	2,204.6262 pounds	per metric ton	
Intermediate Result:	2,175,109 pounds	CO2	
Conversion Factor:	22.38 pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	97,189.87 gallons	diesel fuel	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Site Preparation - 2022	101.13
Grading - 2022	74.22
Grading - 2023	351.85
Building Construction - 2023	153.90

On-road Mobile (Construction) Energy Usage - Site Preparation

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

194

Step 2: **Given:**

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

7.6 Worker daily gallons of gasoline

Step 4: **60 # of Days (CalEEMod Output)**

Therefore:

Result: 457 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Grading

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

20

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

216

Step 2: **Given:**

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

8.5 Worker daily gallons of gasoline

Step 4: **155 # of Days (CalEEMod Output)**

Therefore:

Result: 1,311 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Building Construction

Step 1: **Total Daily Worker Trips (CalEEMod Output)** **Total Daily Vendor Trips (CalEEMod Output)**

565	5%	28	219	5%	11

Note: Assumes 5% of Plan Area under construction at given point in time (on average) until buildout.

Worker Trip Length (miles) (CalEEMod Output) **Vendor Trip Length (miles) (CalEEMod Output)**

10.8	7.3

Therefore:

Average Worker Daily VMT: **Average Vendor Daily VMT:**

305	80

Step 2: Given: **Assumed Fleet Mix for Workers** (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Assumed Fleet Mix for Vendors

Fleet Mix for Workers (CalEEMod Output)

MHD	HHD
0%	100%

And:

MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

Gasoline:

LDA	LDT1	LDT2
28.11	23.45	22.48

Diesel:

MHD	HHD
8.50	5.49

Therefore:

Weighted Average Worker (Gasoline) MPG Factor **Weighted Average Vendor (Diesel) MPG Factor**

25.5	5.5

Step 3: **Therefore:** **12 Worker daily gallons of gasoline**

Therefore: **15 Vendor daily gallons of diesel**

Step 4: **1550 # of Days (CalEEMod Output)**

Therefore:

18,519 Total gallons of gasoline

Therefore:

22,554 Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Paving

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

162

Step 2: **Given:**

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

6.3 Worker daily gallons of gasoline

Step 4: **110 # of Days (CalEEMod Output)**

Therefore:

Result: 698 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Architectural Coating

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

113	5%	6

Note: Assumes 5% of Plan Area under construction at given point in time (on average) until buildout.

Worker Trip Length (miles) (CalEEMod Output)

10.8

Therefore:

Average Worker Daily VMT:

61

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2022

LDA	LDT1	LDT2
28.11	23.45	22.48

Therefore:

Weighted Average Worker MPG Factor

25.5

Step 3: **Therefore:**

2.4 Worker daily gallons of gasoline

Step 4: **# of Days (CalEEMod Output)**

110

Therefore:

Result: **263** Total gallons of gasoline

Appendix B: Noise Report



Environmental Noise Assessment

Cannery Park Project

City of Stockton, California

May 12, 2022

Project #220114

Prepared for:

DE NOVO PLANNING GROUP



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Appendix A: Acoustical Terminology
Appendix B: Continuous Ambient Noise Measurement Results
Appendix C: FHWA Barrier Calculations
Appendix D: Interior Noise Reduction Calculations

This section provides a general description of the existing noise sources in the project vicinity, a discussion of the regulatory setting, and identifies potential noise impacts associated with the proposed project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for significant noise-related impacts.

3.10.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response. A-weighted dB values are expressed as dBA.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
L_(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L ₅₀ is the sound level exceeded 50 percent of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

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FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dB) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dB is generally perceived as a doubling in loudness. For example, a 70-dB sound is half as loud as an 80-dB sound, and twice as loud as a 60-dB sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to L_{dn} , but includes

a +5-dB penalty for evening noise. Table 3.10-1 lists several examples of the noise levels associated with common situations.

TABLE 3.10-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL (dB)	COMMON INDOOR ACTIVITIES
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a 1 dB change cannot be perceived;
- Outside of the laboratory, a 3-dB change is considered a just-perceivable difference;
- A change in level of at least 5-dB is required before any noticeable change in human response would be expected; and

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- A 10-dB change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS

Existing and Surrounding Land Uses

North: Eight Mile Road and existing single family residential uses border the northern boundary.

East: Highway 99 and the Highway 99 Frontage road border the eastern boundary.

South: Existing single-family residences border the southern boundary of the overall project site.

West: Existing commercial uses and future single family residential uses border the western boundary of the overall project site.

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the Project Vicinity, a continuous (24-hour) noise level measurement was conducted on the project site on February 9th, 2022. The noise measurement location is shown on Figure 3.10-1. The noise level measurement survey results are provided in Table 3.10-2. Appendix B of Appendix F shows the complete results of the noise monitoring survey.

The sound level meters were programmed to collect hourly noise level intervals at each site during the survey. The maximum value (L_{max}) represents the highest noise level measured during an interval. The average value (L_{eq}) represents the energy average of all of the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval.

A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 3.10-2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

SITE	LOCATION	DATE/TIME	L _{DN}	AVERAGE MEASURED HOURLY NOISE LEVELS, DB					
				DAYTIME (7AM-10PM)			NIGHTTIME (10PM-7AM)		
				L _{EQ}	L ₅₀	L _{MAX}	L _{EQ}	L ₅₀	L _{MAX}
Continuous (24-hour) Noise Level Measurements									
LT-1	Eastern side of project site, 135 feet to Hwy 99 Centerline	2/9/2022	77	73	72	87	70	68	83

SOURCE: SAXELBY ACOUSTICS, 2022.

EVALUATION OF FUTURE OPERATIONAL NOISE ON PROPOSED HIGH DENSITY RESIDENTIAL USES

Operational Noise Levels

The proposed project includes the construction of high-density residential housing on 12.34 acres surrounded by 19.76 acres of new commercial development. The commercial development will be distributed over 15 lots. The primary noise generating components of the new commercial development would be parking lot circulation, HVAC units, a gas station car wash, and drive-thru speaker boxes. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar operations.

- On-Site Circulation:** The commercial component of the project is projected to generate 21,863 daily trips with 2,420 trips in the morning peak hour (KD Anderson & Associates). Saxelby Acoustics assumed that 2% of these trips could be trucks. Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. Nighttime traffic outside of the AM or PM peak hour is estimated to be approximately 1/4 of daytime trips during nighttime hours (10:00 p.m. to 7:00 a.m.). Saxelby Acoustics data.
- Rooftop HVAC Units:** Each commercial building was assumed to have three ten-ton packaged units operating continuously during the daytime, and 50% of the time at night. Manufacturer's data.
- Rooftop Condensing Unit:** Each commercial building was assumed to have one ten-ton air-cooled chiller package operating continuously during the daytime, and 50% of the time at night. Manufacturer's data.
- Car Wash Blowers:** 64-65 dBA Leq at a distance of 50 feet during the peak hour. Typical manufacturer's data.

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Vacuum Station: One canister type vacuum station utilized at the gas station car wash at 64 dBA at 25 feet. Running continuously during the peak hour of usage. Manufacturer's data.

Drive-Through Speakers: One speaker per drive-through restaurant at 65 dBA each at 20 feet. Running continuously during the peak hour of usage, day and night. Saxelby Acoustics data.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. Figure 3.10-2 shows the noise level contours resulting from operation of the project.

EVALUATION OF TRANSPORTATION NOISE ON PROPOSED SINGLE FAMILY RESIDENTIAL USES

Traffic Noise Levels

Highway 99

Future (2043) traffic noise levels are predicted to be 77 dB L_{dn} at a distance of 160 feet from the centerline of Highway 99, assuming no shielding from intervening buildings or sound walls. The proposed residential uses are located approximately 160 feet from the centerline Highway 99. Therefore, maximum exterior noise levels of 77 dB L_{dn} are predicted for these uses.

CONSTRUCTION NOISE ENVIRONMENT

During the construction of the proposed project, including roads, water, and sewer lines and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. As indicated in Table 3.10-3, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 3.10-3: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	MAXIMUM LEVEL, DB	
	25 FEET	50 FEET
Backhoe	84	78
Compactor	89	83
Compressor (air)	84	78
Concrete Saw	96	90
Dozer	88	82
Dump Truck	82	76
Excavator	87	81
Generator	87	81
Jackhammer	94	89
Pneumatic Tools	91	85

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would happen during construction when activities such as grading, utilities placement, and road construction occur. Table 3.10-4 shows the typical vibration levels produced by construction placement.

TABLE 3.10-4: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	PEAK PARTICLE VELOCITY @ 25 FEET (INCHES/SECOND)	PEAK PARTICLE VELOCITY @ 100 FEET (INCHES/SECOND)
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

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3.10.2 REGULATORY SETTING

FEDERAL

There are no federal regulations related to noise that apply to the proposed project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room.

Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment

CITY OF STOCKTON

City of Stockton General Plan

POLICY SAF-2.5

Protect the community from health hazards and annoyance associated with excessive noise levels.

- A. Prohibit new commercial, industrial, or other noise-generating land uses adjacent to existing sensitive noise receptors such as residential uses, schools, health care facilities, libraries, and churches if noise levels are expected to exceed 70 dBA Community Noise Equivalent (CNEL) (decibels on A-weighted scale CNEL) when measured at the property line of the noise sensitive land use.
- B. Require projects that would locate noise sensitive land uses where the projected ambient noise level is greater than the "normally acceptable" noise level indicated on **Table 3.10-5** to provide an acoustical analysis that shall:

- a. Be the responsibility of the applicant;
 - b. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics;
 - c. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions;
 - d. Estimate existing and projected (20-year) noise levels in terms of Ldn/CNEL and compare the levels to the adopted noise policies and actions in this General Plan;
 - e. Recommend appropriate mitigation to achieve compatibility with the adopted noise policies and standards;
 - f. Where the noise source in question consists of intermittent single events, address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance;
 - g. Estimate noise exposure after the prescribed mitigation measures have been implemented;
 - h. If the project does not comply with the adopted standards and policies of this General Plan, provide acoustical information for a statement of overriding considerations for the project; and
 - i. Describe a post-project assessment program, which could be used to evaluate the effectiveness of the proposed mitigation measures.
- C. Require noise produced by commercial uses to not exceed 75 dB Ldn/CNEL at the nearest property line.
- D. Grant exceptions to the noise standards for commercial and industrial uses only if a recorded noise easement is conveyed by the affected property owners.
- E. Require all new habitable structures to be set back from railroad tracks to protect residents from noise, vibration, and safety impacts.

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TABLE 3.10-5: LAND USE COMPATIBILITY FOR COMMUNITY NOISE EXPOSURE

TABLE 4.11-10 LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

Land Use Type	Noise Level, L_{dn} (dBA)						
	0-55	56-60	61-65	66-70	71-75	75-80	>81
Residential							
Urban Residential Infill							
Hotels, Motels							
Schools, Libraries, Churches, Hospitals, Extended Care Facilities							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Mining, Industrial, Manufacturing, Utilities, Agriculture							
	<i>Normally Acceptable.</i> Specified land use is satisfactory based on the assumption that any buildings involved are of normal, conventional construction, without any special noise insulation requirements.						
	<i>Conditionally Acceptable.</i> New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed insulation features have been included in the design.						
	<i>Unacceptable.</i> New construction or development should not be undertaken.						

Notes: If existing noise standards are currently exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA. Urban residential infill applies to residential uses in the Greater Downtown.

Source: Stockton General Plan 2035, Goal Policies Report; Table 11-1

City of Stockton Development Code

CHAPTER 16.60 - NOISE STANDARDS.

16.60.010 Purpose.

The purpose of this chapter is to:

- Establish standards to protect the health, safety, and welfare of those living and working in the City;
- Implement goals and policies of the General Plan Noise Element;
- Facilitate compliance with the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC);
- Provide community noise control regulations and standards which are consistent with, or exceed, the guidelines of the State Office of Noise Control and the standards adopted by the Federal Highway Administration (FHWA), California Department of Transportation (CalTrans), or other government or regulatory agencies; and

- E. Consolidate and/or reference all applicable City noise regulations. (Prior code § 16-340.010)

16.60.020 Activities exempt from noise regulations:

The following activities shall be exempt from the provisions of this chapter.

- A. Emergency Exemption. The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work. Does not include permanently installed emergency generators.
- B. Warning Device. Warning devices necessary for the protection of public safety, (e.g., police, fire and ambulance sirens, properly operating home and car burglar alarms, and train horns).
- C. Outdoor Play/School Ground Activities. Activities conducted on parks and playgrounds and school grounds, between 7:00 a.m. and 10:00 p.m., except for additional hours that may be granted by the City Manager. Otherwise, outdoor activities shall meet standards in Table 3-7.
- D. Railroad Activities. The operation of locomotives, rail cars, and facilities by a railroad that is regulated by the State Public Utilities Commission.
- E. State or Federal Pre-Exempted Activities. Any activity, to the extent the regulation of it has been preempted by State or Federal law.
- F. Public Health and Safety Activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public rights-of-way, and those situations that may occur on private property deemed necessary to serve the best interest of the public and to protect the public's health and well-being, including, debris and limb removal, removal of damaged poles and vehicles, removal of downed wires, repairing traffic signals, repair of water hydrants and mains, gas lines, oil lines, and sewers, restoring electrical service, street sweeping, unplugging sewers, vacuuming catch basins, etc. The regular testing of motorized equipment and pumps shall not be exempt.
- G. Maintenance of Residential Real Property. Noise sources associated with the minor maintenance of residential real property, provided the activities take place between the hours of 7:00 a.m. and 10:00 p.m. (Prior code § 16-340.020)

16.60.030 Activities deemed violations of this chapter:

The following acts are a violation of this chapter and are therefore prohibited.

- A. Construction Noise: Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work between the

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hours of 10:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities.

- B. Loading and Unloading Operations. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects on private property between the hours of 10:00 p.m. and 7:00 a.m. in a manner to cause a noise disturbance.
- C. Public Nuisance Noise. Public nuisance noise is noise that is generally not associated with a particular land use but creates a nuisance situation by reason of its being disturbing, excessive, or offensive. Examples would include excessively loud noise from alarms, animals, horns, musical instruments, stereos, tape players, televisions, vehicle or motorboat repairs and testing, and similar noise as required by Chapter 8.20 and Sections 9.40.040 and 9.40.050 of the Municipal Code.
- D. Stationary Nonemergency Signaling Devices. Sounding or allowing the sounding of an electronically amplified signal from a stationary bell, chime, siren, whistle, or similar device intended primarily for nonemergency purposes, from private property for more than 10 consecutive seconds in any hourly period as required by Section 8.20.030(B) of the Municipal Code.
- E. Refuse Collection Vehicles.
- F. Operating or allowing the operation of the compacting mechanism of any motor vehicle that compacts refuse and that creates, during the compacting cycle, a sound level in excess of 85 dBA when measured at 50 feet from any point of the vehicle.
- G. Collecting refuse or operating or allowing the operation of the compacting mechanism of any motor vehicle that compacts refuse in a residential zoning district between the hours of 5:00 p.m. and 5:00 a.m. the following day.
- H. Sweepers and Associated Equipment. Operating or allowing the operation of sweepers or associated sweeping equipment (e.g., blowers) on private property between the hours of 10:00 p.m. and 7:00 a.m. the following day in, or adjacent to, a residential zoning district.
- I. Vehicle or Motorboat Repairs and Testing. Modifying, rebuilding, repairing, or testing any motor vehicle, motorcycle, or motorboat in a manner as to cause a noise disturbance across the property line of a noise-sensitive use greater than the noise level standards in Table 3-7, below. (Prior code § 16-340.030)

16.60.040 Standards.

The following provisions shall apply to all uses and properties, as described below, and shall establish the City's standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses and transportation-related sources:

- A. Standards For Proposed Noise-Sensitive Land Uses on Noise-Impacted Sites (Except Infill Areas). Excluding proposed noise-sensitive land uses on infill sites, which shall comply with subsection C of this section:
 - 1. Existing Transportation-Related Noise Sources. Proposed noise sensitive land uses that will be impacted by existing or projected transportation noise sources shall be required to mitigate the noise levels from these transportation noise sources so that the resulting noise levels on the proposed noise-sensitive land use(s) do not exceed the standards in Table 3-7, Part I.
 - 2. Existing Land Use-Related Noise Sources. Proposed noise sensitive land uses that will be impacted by existing land use-related noise sources shall be required to mitigate the noise levels from those noise sources so that the resulting noise levels on the proposed noise-sensitive land use(s) do not exceed the standards in Table 3-7, Part II.
- B. Standards for Proposed Noise-Generating Land Uses and Transportation-Related Sources. Excluding noise-generating projects on infill sites, which shall comply with subsection C of this section, the following shall apply:
 - 1. Transportation-Related Noise Sources (Except Infill Sites). Transportation-related projects that include the development of new transportation facilities or the expansion of existing transportation facilities shall be required to mitigate their noise levels so that the resulting noise:
 - a. Does not adversely impact noise-sensitive land uses; and
 - b. Does not exceed the standards in Table 3-7, Part I.

Noise levels shall be measured at the property line of the nearest site, which is occupied by, and/or zoned or designated to allow the development of, noise-sensitive land uses.

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TABLE 3.10-6: PART I: TRANSPORTATION-RELATED NOISE STANDARDS (OUTDOOR/INDOOR)

NOISE LEVEL DESCRIPTOR, dB	MAXIMUM ALLOWABLE NOISE EXPOSURE (L_{DN} dB)	
	OUTDOOR ACTIVITY AREAS	INDOOR SPACES
Residential (all types)	65	45
Child care	--	45
Educational Facilities	--	45
Libraries and museums	--	45
Live-work facilities	65	45
Lodging	65	45
Medical services	--	45
Multi-use (with residential)	65	45

TABLE 3.10-7: PART II: LAND USE-RELATED NOISE STANDARDS

NOISE LEVEL DESCRIPTOR, dB	DAYTIME (7 A.M. TO 10 P.M.)	NIGHTTIME (10 P.M. TO 7 A.M.)
Hourly L_{eq}	55	45
Maximum Sound Level L_{max}	75	65

NOTES:

(1) THE NOISE STANDARD MUST BE APPLIED AT THE PROPERTY LINE OF THE RECEIVING LAND USE. WHEN DETERMINING THE EFFECTIVENESS OF NOISE MITIGATION MEASURES, THE STANDARDS MUST BE APPLIED ON THE RECEIVING SIDE OF NOISE BARRIERS OR OTHER PROPERTY LINE NOISE MITIGATION MEASURES.

(2) EACH OF THE NOISE LEVEL STANDARDS SPECIFIED MUST BE DECREASED BY 5 FOR IMPULSE NOISE, SIMPLE TONE NOISE, OR NOISE CONSISTING PRIMARILY OF SPEECH OR MUSIC.

SOURCE: CITY OF STOCKTON MUNICIPAL CODE SECTION 16.60.040, STANDARDS.

2. Commercial, Industrial, and Other Land Use-Related Noise Sources (Except Infill Sites).

- a. New and Expanded Noise Sources. Land use-related projects that will create new noise sources or expand existing noise sources shall be required to mitigate their noise levels so that the resulting noise:
 - i. Does not adversely impact noise-sensitive land uses; and

- ii. Does not exceed the standards specified in Table 3-7, Part II.

Noise levels shall be measured at the property line of the nearest site which is occupied by, zoned for, and/or designated on the City's General Plan Diagram to allow the development of, noise-sensitive land uses.

- b. Maximum Sound Level.

- i. Commercial.

- a) The maximum sound level (Lmax) produced by commercial land uses or by other permitted noise-generating activities on any retail commercial zoning district (i.e., CO, CN, CG, CD, CL, or CA districts) shall not exceed 75 dB; and
 - b) The hourly equivalent sound level (Leq) from these land uses shall not exceed 65 dB during daytime or nighttime hours as measured at the property line of any other adjoining retail commercial zoning district (CO, CN, CG, CD, CL, or CA districts).

- ii. Industrial.

- a) The maximum sound level (Lmax) produced by industrial land uses or by other permitted noise-generating activities on any industrial (IL, IG, or PT) or public facilities (PF) zoning district shall not exceed 80 dB; and
 - b) The hourly equivalent sound level (Leq) from these land uses shall not exceed 70 dB during daytime or nighttime hours as measured at the property line of any other adjoining IL, IG, PT, or PF district.
 - c) Where industrial or public facilities uses abut a retail commercial use or zone, the maximum noise levels shall not exceed the above-listed standards for commercial uses and zones (i.e., Lmax = 75 dB and Leq = 65 dB).

- c. Adjacent to Other Uses. If commercial, industrial, or public facilities land uses are adjacent to any noise-sensitive land uses or vacant residential (RE, RL, RM, or RH) or open space (OS) zoning districts, these uses shall comply with the performance standards contained in Table 3-7, Part II.

VIBRATION STANDARDS

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the

3.10 NOISE

vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities are addressed as potential noise impacts associated with project implementation.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3.10-8 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). A threshold of 0.20 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 3.10-8: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		HUMAN REACTION	EFFECT ON BUILDINGS
MM/SEC.	IN./SEC.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBOEN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

3.10.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact related to noise if it will result in:

Would the project:

- a. Generate 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. Generate 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?

Determination of a Significant Increase in Noise Levels

Temporary Construction Noise Impacts

With temporary noise impacts (construction), identification of “substantial increases” depends upon the duration of the impact, the temporal daily nature of the impact, and the absolute change in decibel levels. Per the City of Stockton noise ordinance, construction activities operating between 10 p.m. and 7 a.m. which create a noise disturbance at the property boundary of a residence are prohibited and would be considered a significant impact.

Operational Impacts

The noise standards applicable to the project include the relevant portions of the City of Stockton General Plan and Development Code described in the Regulatory Framework Section above (Section 3.10.2), and the following standards. Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

Another means of determining a potential noise impact is Table 5-1 of the Stockton General Plan 2040 Safety Element. Table 5-1 provides specific guidance for assessing increases in ambient noise

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as follows: If existing noise standards are currently exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA. It should be noted that Caltrans assumes a 12 dBA increase is significant. Therefore, use of the 3 dBA test is considered to be conservative relative to the expected reaction from persons affected by the noise increase.

IMPACTS AND MITIGATION MEASURES

IMPACT 1: WOULD THE PROJECT GENERATE 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?

TRAFFIC NOISE INCREASES AT EXISTING SENSITIVE RECEPTORS

The proposed project is predicted to generate a total of 27,060 daily trips. This is less than the approved land uses which would generate 45,688 trips. Therefore, the proposed project traffic noise increases will be compatible with the surrounding land uses. This would be a *less than significant* impact.

CONSTRUCTION NOISE

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in Table 3.10-3, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would occur during daytime hours.

Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could experience maximum instantaneous noise levels of greater than 60 dBA when on-site construction-related noise levels exceed approximately 90 dBA at the boundary of the construction site. As previously discussed, nearby noise-sensitive receptors consist predominantly of residential dwellings located near the western and northern boundaries of the project site.

The City of Stockton Noise Ordinance places limitations on the acceptable hours of construction. During development of the proposed project, construction activities occurring during the more

noise-sensitive late evening and nighttime hours (i.e., 10 PM to 7 AM) are prohibited. Additionally, there are several residential uses directly adjacent the project site which may be subject to construction noise. As a result, noise-generating construction activities would be considered to have a ***potentially significant*** short-term impact. Implementation of Mitigation Measure 3.10-1 will ensure that these potential impacts are reduced to a ***less-than-significant*** level.

EXTERIOR NON-TRANSPORTATION NOISE AT PROPOSED HIGH DENSITY RESIDENTIAL USES

The proposed Project includes the development of 15 commercial lots on land with an existing commercial designation adjacent to a future high-density residential use immediately to the south and east of the commercial use. The high density residential site has not been site planned, however, the intent is to incorporate the commercial and high density uses into an integrated and compatible plan with the commercial use, rather than building two isolated land uses.

As shown in Figures 3.10-2 and 3.10-3, the proposed commercial uses are predicted to generate noise levels of up to 57 dBA at the future residential property line during daytime (7:00 a.m. to 10:00 p.m.) hours and up to 48 dBA during nighttime (10:00 p.m. to 7:00 a.m.) hours. This exceeds the City of Stockton daytime noise level standard of 55 dBA L_{eq} and nighttime noise level standard of 45 dBA L_{eq} .

While the high density residential site has not been site planned, the area where the noise threshold is exceeded at the parcel line is anticipated to be used for landscape buffers and parking space. The high density residential buildings are anticipated to be designed with a setback from the property line and commercial uses such that they would be built in an area that is within the City of Stockton noise level standards shown in Table NOISE-1. In order to ensure compliance with the City's daytime and nighttime noise standards, an evaluation of the high density residential site is necessary after it is designed for architectural design review. The City would need to review the site plan during that process to ensure that there are no buildings placed along the property line where the exceedance occurs. Implementation of Mitigation Measure 3.10-2 will ensure that these potential impacts are reduced to a ***less-than-significant*** level.

EXTERIOR TRAFFIC NOISE AT PROPOSED SINGLE FAMILY RESIDENTIAL USES

Table 3.10-9 shows the predicted traffic noise levels at the proposed residential uses adjacent to Highway 99. Based upon Table 3.10-9, exterior noise levels would exceed the City's 60 dBA L_{dn} normally acceptable exterior noise standard, as well as the City 65 dBA L_{dn} maximum acceptable noise exposure. The 60 dBA L_{dn} noise contours for Highway 99 were found to extend to an approximate distance of 2,037 feet from the roadway centerline. This would encroach into the outdoor activity areas of proposed residences. Therefore, use of a physical barrier would be the only feasible method to reduce exterior noise levels to within the City's allowable exterior noise standard range.

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TABLE 3.10-9: FUTURE (2043) TRANSPORTATION NOISE LEVELS AT PROPOSED RESIDENTIAL USES

SEGMENT	APPROXIMATE RESIDENTIAL SETBACK, FEET ¹	PREDICTED NOISE LEVELS, DB L _{DN} ²					
		NO BARRIER	10' BARRIER	11' BARRIER	12' BARRIER	13' BARRIER	14' BARRIER
Highway 99	135	78	67	66	65	64	63

NOTES:

¹ SETBACK DISTANCES ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS TO THE CENTER OF RESIDENTIAL BACKYARDS.

² THE MODELED NOISE BARRIERS ASSUME FLAT SITE CONDITIONS WHERE ROADWAY ELEVATIONS, BASE OF WALL ELEVATIONS, AND BUILDING PAD ELEVATIONS ARE APPROXIMATELY EQUIVALENT. SOUND BARRIER HEIGHT MAY BE ACHIEVED THROUGH THE USE A WALL AND EARTHEN BERM TO ACHIEVE THE TOTAL HEIGHT (E.G. A 6-FOOT WALL ON 2-FOOT BERM IS EQUIVALENT TO AN 8-FOOT TALL BARRIER).

SOURCE: SAXELBY ACOUSTICS. 2022.

The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent. Appendix C of Appendix F shows the full barrier height calculations.

Based upon the data in Table 3.10-9, a 12-foot-tall barrier may be used to achieve compliance with the City's exterior maximum noise level standard of 65 dBA L_{dn} for outdoor activity areas of residential uses. The proposed wall location is shown on Figure 3.10-4. Implementation of Mitigation Measure 3.10-3 will ensure that these potential impacts are reduced to a **less-than-significant** level.

INTERIOR NOISE IMPACTS AT PROPOSED SINGLE FAMILY RESIDENTIAL USES

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dB L_{dn}, or less, will typically comply with the City of Stockton 45 dB L_{dn} interior noise level standard. Additional noise reduction measures, such as acoustically-rated windows, are generally required for exterior noise levels exceeding 70 dB L_{dn}.

It should be noted that noise barriers do not typically reduce exterior noise levels at second floor locations. The proposed residential uses are predicted to be exposed to unmitigated first-floor exterior transportation noise levels up to 77 dBA L_{dn}. Mitigated first-floor noise levels of 63-65 dBA L_{dn} are expected after construction of sound barriers. The second-floor locations are not expected to receive adequate shielding from the proposed sound walls and may be exposed to noise levels 2-3 dB higher than ground floor receivers. Therefore, noise levels of 80 dB L_{dn} are expected at the second-floor facades of the proposed residences.

Based upon a 25-dB exterior-to-interior noise level reduction, interior noise levels are predicted to be up to 55 dB L_{dn} at second floors and 40 dBA L_{dn} at first floors. Accordingly, predicted interior noise levels along the first row of residential uses along Highway 99 are predicted to exceed the City's 45 dB L_{dn} interior noise level standard at second floor locations.

Appendix D (See Appendix F of this EIR) shows an estimate of the interior noise control measures required to meet the City's interior noise level standards. Implementation of Mitigation Measure 3.10-4 will ensure that these potential impacts are reduced to a ***less-than-significant*** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.10-1: *The City shall establish the following as conditions of approval for any permit that results in the use of construction equipment:*

- *Construction shall be limited to 7:00 a.m. to 10:00 p.m.*
- *All construction equipment powered by internal combustion engines shall be properly muffled and maintained.*
- *Quiet construction equipment, particularly air compressors, are to be selected whenever possible.*
- *All stationery noise-generating construction equipment such as generators or air compressors are to be located as far as is practical from existing residences. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.*
- *Unnecessary idling of internal combustion engines is prohibited.*
- *The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.*

Timing/Implementation: Implemented prior to approval of grading and/or building permits
Enforcement/Monitoring: City of Stockton Community Development Services Department

Mitigation Measure 3.10-2: *The high density residential development shall be designed with landscaping and parking space, or another non-sensitive use, in the area along the property line closest to the commercial site. There shall be no noise sensitive outdoor activity areas, or residential buildings placed within the noise contour that exceeds the City's 55 dBA day and night noise standard for land uses. The intent is to ensure that outdoor areas in the high density residential uses are not adversely affected by noise in the commercial areas. Alternatively, once a specific site plan has been developed, the developer of the future high-density parcel may submit a noise study prepared by a qualified acoustic engineer documenting a site plan design or required noise control measures to meet the noise standards of the City of Stockton.*

Mitigation Measure 3.10-3: *A 12-foot-tall barrier shall be constructed along Highway 99 and the Highway 99 Frontage Road, adjacent to proposed residential uses, in order to achieve the City's exterior noise standards. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials that achieve the required total height. Wood is not recommended due to eventual warping and degradation of acoustical*

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performance. These requirements shall be included in the improvements plans prior to their approval by the City's Public Works Department. Figure 3.10-4 shows the recommended sound wall locations.

Mitigation Measure 3.10-4: For the first rows of lots adjacent to the Highway 99 and Highway 99 Frontage Road right of way, second floor exterior facades with a view of Highway 99 would need the following noise control measures:

- Windows shall have a sound transmission class (STC) rating of 40.
- Interior gypsum at exterior walls shall be 5/8" hung on resilient channels;
- Ceiling gypsum shall be 5/8";
- Exterior finish shall be stucco with sheathing, fiber cement lap siding with sheathing, or system with equivalent weight per square foot;
- Mechanical ventilation shall be installed in all residential uses to allow residents to keep doors and windows closed, as desired for acoustical isolation.
- As an alternative to the above-listed interior noise control measures, the applicant may provide a detailed analysis of interior noise control measures once building plans become available. The analysis should be prepared by a qualified noise control engineer and shall outline the specific measures required to meet the City of Stockton 45 dB L_{dn} interior noise level standard.

IMPACT 2: WOULD THE PROJECT GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The Table 3.10-8 data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. This is a **less-than-significant** impact and no mitigation is required.

IMPACT 3: 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?

There are no airports within two miles of the project vicinity. Therefore, this impact is not applicable to the proposed project.



Cannery Park

City of Stockton, California

Figure 3.10-1

Noise Measurement Sites

Legend

- Project Site
- ▲ Noise Measurement - Long Term



Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/15/2022



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LARGE LOT 1, C

CITY OF STOCKTON, SAN JOAQUIN COUNTY



Cannery Park

City of Stockton, California

Figure 3.10-2

Daytime (10:00 p.m. to 7:00 a.m.)
Project Noise Contours (dBA L_{eq})

Signs and symbols

 Proposed Building

Levels in dB(A)

	<= 55
	55 - 56
	56 - 57
	57 - 58
	58 - 59
	59 - 60
	> 60

1 : 3200

0 15 30 60 90 120 m

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LARGE LOT 1, C

CITY OF STOCKTON, SAN JOAQUIN COUNTY



Cannery Park

City of Stockton, California

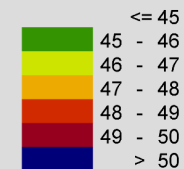
Figure 3.10-3

Nighttime (10:00 p.m. to 7:00 a.m.)
Project Noise Contours (dBA L_{eq})

Signs and symbols

 Proposed Building

Levels in dB(A)



1 : 3200

0 15 30 60 90 120
m

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Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.



Appendix B: Continuous Ambient Noise Measurement Results



Appendix B1: Continuous Noise Monitoring Results

Site: LT-1

Project: Cannery Park

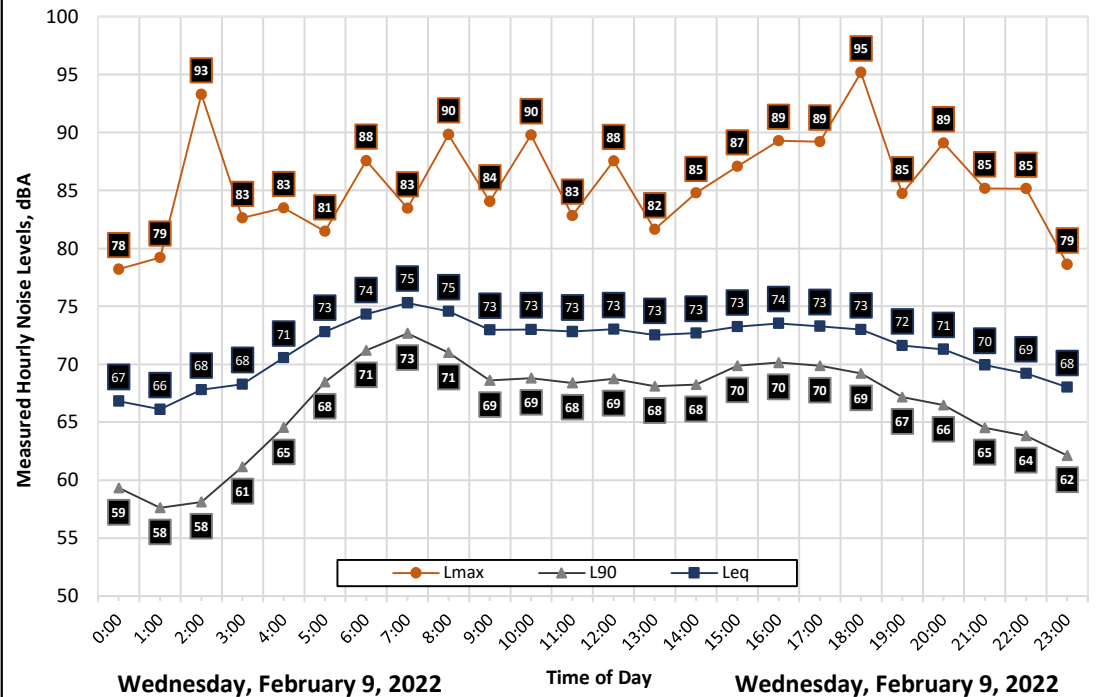
Meter: LDL 820-8

Location: Eastern Project Boundary

Calibrator: CAL200

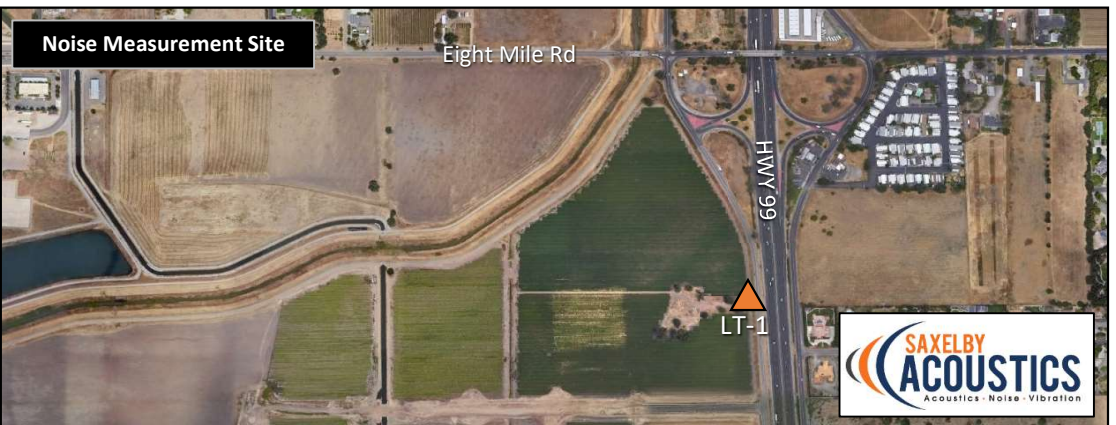
Coordinates: 38.0533165°, -121.2597168°

Measured Ambient Noise Levels vs. Time of Day



Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Wednesday, February 9, 2022	0:00	67	78	65	59
Wednesday, February 9, 2022	1:00	66	79	63	58
Wednesday, February 9, 2022	2:00	68	93	64	58
Wednesday, February 9, 2022	3:00	68	83	67	61
Wednesday, February 9, 2022	4:00	71	83	69	65
Wednesday, February 9, 2022	5:00	73	81	72	68
Wednesday, February 9, 2022	6:00	74	88	74	71
Wednesday, February 9, 2022	7:00	75	83	75	73
Wednesday, February 9, 2022	8:00	75	90	74	71
Wednesday, February 9, 2022	9:00	73	84	72	69
Wednesday, February 9, 2022	10:00	73	90	72	69
Wednesday, February 9, 2022	11:00	73	83	72	68
Wednesday, February 9, 2022	12:00	73	88	72	69
Wednesday, February 9, 2022	13:00	73	82	72	68
Wednesday, February 9, 2022	14:00	73	85	72	68
Wednesday, February 9, 2022	15:00	73	87	73	70
Wednesday, February 9, 2022	16:00	74	89	73	70
Wednesday, February 9, 2022	17:00	73	89	73	70
Wednesday, February 9, 2022	18:00	73	95	72	69
Wednesday, February 9, 2022	19:00	72	85	71	67
Wednesday, February 9, 2022	20:00	71	89	70	66
Wednesday, February 9, 2022	21:00	70	85	69	65
Wednesday, February 9, 2022	22:00	69	85	68	64
Wednesday, February 9, 2022	23:00	68	79	67	62

Statistics	Leq	Lmax	L50	L90
Day Average	73	87	72	69
Night Average	70	83	68	63
Day Low	70	82	69	65
Day High	75	95	75	73
Night Low	66	78	63	58
Night High	74	93	74	71
Ldn	77	Day %		78
CNEL	77	Night %		22





Appendix C: Exterior to Interior Noise Level Reduction Calculations

Appendix C1: Interior Noise Calculation Sheet

Project: 220114 Cannery Park
Room Description: Bedroom

Inputs

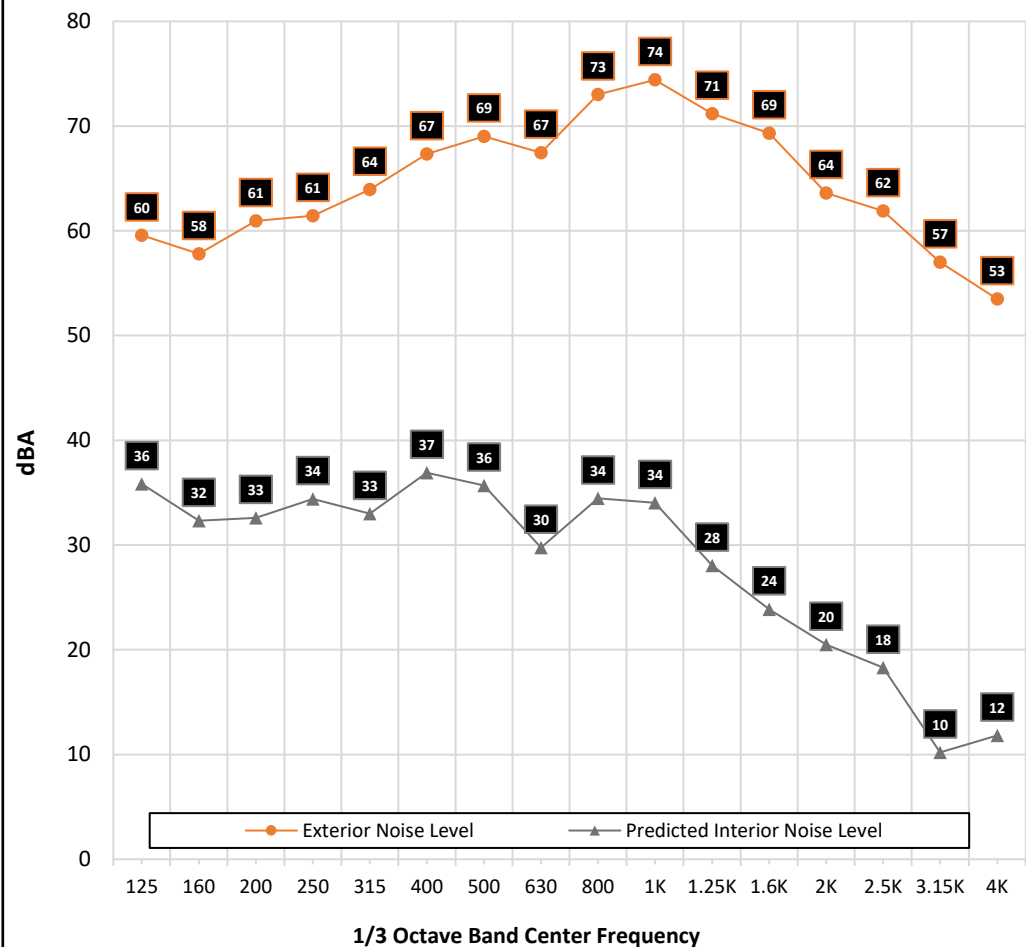
Parallel Exterior level, dBA: 80.0 Ldn
Correction Factor, dBA: 5
Noise Source: Freeway Traffic - SR99 Turlock
Room Perimeter, ft: 42
Room Area, ft: 120
Room Height, ft: 9
Transmitting Panel Length, ft: 12
Window Area, ft: 24

Ceiling Finish: Gyp Board
Ceiling, sf: 120
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 354
Wall Finish 2: Glass
Wall Finish 2, sf: 24
Floor: Vinyl Plank
Floor, sf: 120
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 84
Transmitting Element 2: Window - Millgard 7520 Casement STC 40
Element 2, sf: 24
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 44

Noise Reduction, dBA: -36



Appendix C2: Interior Noise Calculation Sheet

Project: 220114 Cannery Park
Room Description: Living Room

Inputs

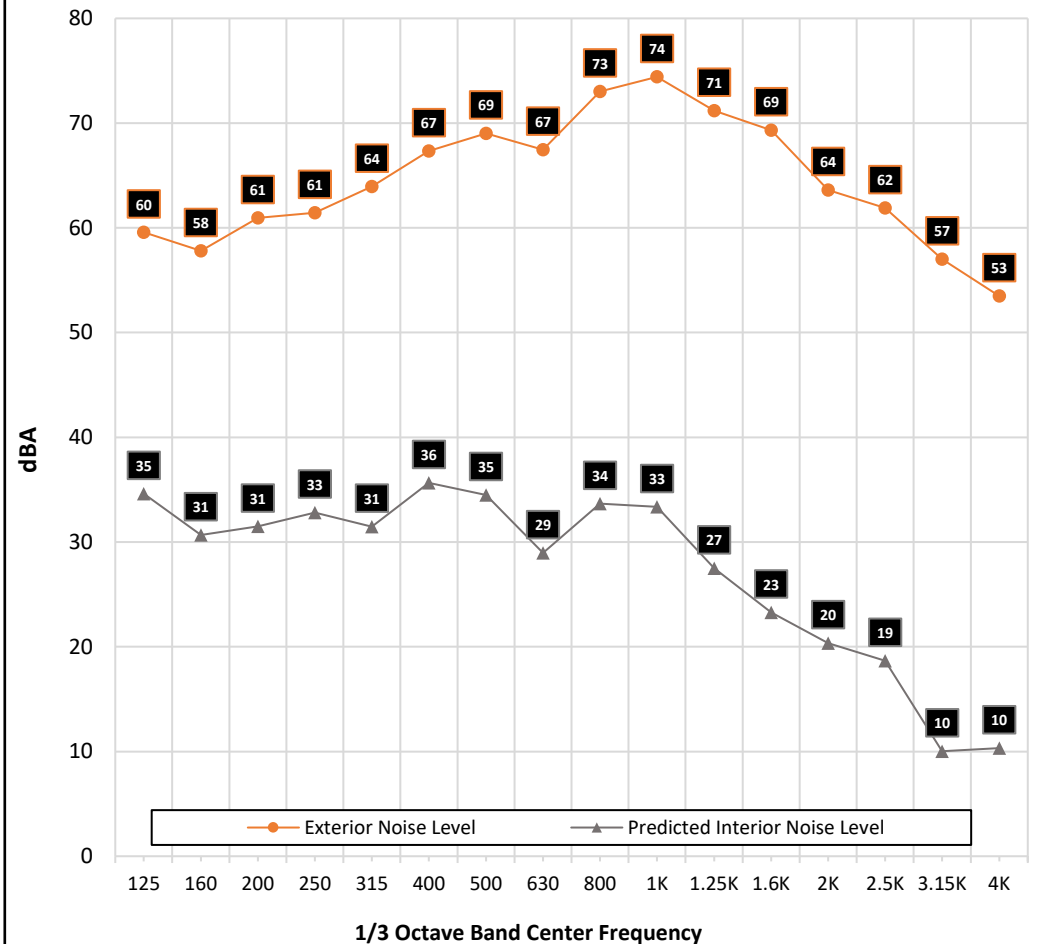
Parallel Exterior level, dBA: 80.0 Ldn
Correction Factor, dBA: 5
Noise Source: Freeway Traffic - SR99 Turlock
Room Perimeter, ft: 64
Room Area, ft: 240
Room Height, ft: 9
Transmitting Panel Length, ft: 20
Window Area, ft: 24

Ceiling Finish: Gyp Board
Ceiling, sf: 240
Wall Finish 1: Gyp Board
Wall Finish 1, sf: 552
Wall Finish 2: Glass
Wall Finish 2, sf: 24
Floor: Vinyl Plank
Floor, sf: 240
Misc. Finish: Soft Furnishings
Misc. Finish, sf: 25

Transmitting Element 1: Wall - 0.5" OSB, One Coat Stucco, RC
Element 1, sf: 156
Transmitting Element 2: Window - Millgard 7520 Casement STC 40
Element 2, sf: 24
Transmitting Element 3:
Element 3, sf:
Transmitting Element 4:
Element 4, sf:

Predicted Interior Noise Level, dBA: 43

Noise Reduction, dBA: -37





Appendix D: Traffic Noise Barrier Calculations



Appendix D-1

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)

Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 220114
 Description Cannery Park
 Roadway Name: Highway 99
 Location(s): 1

Noise Level Data:

Year: 2043
 Auto L_{dn} , dB: 74
 Medium Truck L_{dn} , dB: 68
 Heavy Truck L_{dn} , dB: 74

Site Geometry:

Receiver Description: Cannery Park
 Centerline to Barrier Distance (C_1): 140
 Barrier to Receiver Distance (C_2): 10
 Automobile Elevation: 0
 Medium Truck Elevation: 2
 Heavy Truck Elevation: 8
 Pad/Ground Elevation at Receiver: 0
 Receiver Elevation¹: 5
 Base of Barrier Elevation: 0
 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height ² (ft)	----- L_{dn} , dB -----				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
6	6	68	62	69	72	Yes	Yes	Yes
7	7	67	61	68	71	Yes	Yes	Yes
8	8	65	59	66	69	Yes	Yes	Yes
9	9	64	58	65	68	Yes	Yes	Yes
10	10	63	57	64	67	Yes	Yes	Yes
11	11	62	56	63	66	Yes	Yes	Yes
12	12	61	55	62	65	Yes	Yes	Yes
13	13	60	54	61	64	Yes	Yes	Yes
14	14	60	53	60	63	Yes	Yes	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix C: Transportation Impact Analysis Report

Memorandum

Date: March 31, 2022

To: Matt Arnaiz, Eight Mile Road Investors, LLC
Steve McMurtry, DeNovo Planning

From: Ellen Poling and Shangyou Zhou, Fehr & Peers

Subject: VMT Impact Assessment for the Cannery Park Revised Development Plan

WC21-3863.00

I. Introduction

This memorandum presents the vehicle miles traveled (VMT) impact assessment for the 2021 Cannery Park Project (2021 Project). The 2021 Project proposes a General Plan Amendment to change the planned land uses on four assessor's parcels within the 2004 Cannery Park Project (2004 Project). The CEQA analysis for the 2004 Project is documented in *Final Environmental Impact Report for Cannery Park Mixed Use Development* (August 4, 2004). VMT was not a transportation impact criterion in 2004. Therefore, the CEQA analysis of the 2021 Project includes an analysis with respect to VMT impacts, consistent with the current CEQA Guidelines. As directed by the City of Stockton, this impact assessment compares the VMT impacts of the 2021 Project to those that would result from the 2004 Project.

The Project is located in the northeast corner of the City of Stockton southeast of the intersection of East Eight Mile Road and Holman Road. The Project site is generally bound by East Eight Mile Road to the north, the 99 Frontage Road/State Route 99 to the east, Holman Road to the west, and single-family residential uses to the south.

The project description section of the Initial Study provides a complete description of the 2021 Project. The land use changes proposed in the 2021 Project are described in Section III of this memorandum.

II. Regulatory Setting

This section provides the regulatory setting relevant to the VMT impact analysis. The remainder of the transportation impact analysis, including the physical setting, is being prepared by others.



Federal

No federal plans, policies, regulations, or laws related to transportation and circulation are applicable to the project.

State

Senate Bill 375

Senate Bill (SB) 375 provides guidance regarding curbing emissions from cars and light trucks. There are four major components to SB 375. First, SB 375 requires regional greenhouse gas emission targets. These targets must be updated every 8 years in conjunction with the revision schedule of the housing and transportation elements of local general plans. Second, Metropolitan Planning Organizations are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. Third, SB 375 requires housing elements and transportation plans to be synchronized on 8-year schedules. Finally, Metropolitan Planning Organizations must use transportation and air emissions modeling techniques that are consistent with the guidelines prepared by the California Transportation Commission.

Senate Bill 743

Passed in 2013, California Senate Bill (SB) 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change is being made by replacing Level of Service (LOS) as a performance metric with a vehicle miles traveled (VMT) approach. This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through development of multimodal transportation networks. LOS or other delay metrics may still be used to evaluate the effect of projects on drivers as part of land use entitlement review and impact fee programs.

In December 2018, the Natural Resources Agency finalized updates to Section 15064.3 of the CEQA Guidelines, including the incorporation of SB 743 modifications. The Guidelines' changes were approved by the Office of Administrative Law and as of July 1, 2020 are now in effect statewide.

To help aid lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR) produced the *Technical Advisory on Evaluating Transportation Impacts in CEQA* that provides guidance about the variety of implementation questions they face with respect to shifting to a VMT metric. Key guidance from this document includes:

- VMT is the most appropriate metric to evaluate a project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.



- OPR recommends measuring VMT for residential and office projects on a "per rate" basis.
- OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold. In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. OPR notes that this threshold is supported by evidence that connects this level of reduction to the State's emissions goals.
- OPR recommends that where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.
- Lead agencies have the discretion to set or apply their own significance thresholds.

Caltrans

Caltrans issued the VMT-Focused Transportation Impact Study Guide (TISG) in May 2020, providing the process by which Caltrans will review and assess VMT impacts of land development projects. The TISG generally aligns with the guidance in the OPR *Technical Advisory*.

Caltrans also issued the Transportation Analysis Framework (TAF) in September 2020, which details methodology for calculating induced travel demand for capacity increasing transportation projects on the State Highway System. Caltrans also issued the Transportation Analysis Under CEQA (TAC) guidance in September 2020 which describes significance determinations for capacity increasing projects on the State Highway System. It is noted that the Housing Element Update does not propose any changes to the Caltrans owned and operated network.

Caltrans also issued Traffic Safety Bulletin 20-02-R1: Interim Local Development Intergovernmental Review Safety Review Practitioner Guidance in December 2020, describing the methods with which Caltrans will assess the safety impacts of projects on the Caltrans owned and operated network. This guidance states that Caltrans will provide its safety assessment to lead agencies for inclusion in environmental documents.

Finally, Caltrans has adopted procedures to oversee construction activities on and around its facilities. The Caltrans Construction Manual (Caltrans, 2020b) describes best practices for construction activities, including personnel and equipment safety requirements, temporary traffic control, signage, and other requirements aimed at reducing construction-related hazards and constructing projects safely and efficiently. Any work proposed on Caltrans facilities would be required to abide by these requirements.



Local

City of Stockton General Plan 2040

Stockton General Plan 2040, adopted in 2018, contains policies and actions related to analysis and mitigation of VMT impacts of new development. These are listed below.

Policy TR-4.2: Replace LOS with: (1) vehicle-miles traveled (VMT) per capita; and (2) impacts to non-automobile travel modes, as the metrics to analyze impacts related to land use proposals under the California Environmental Quality Act, in accordance with SB 743.

Action TR-4.2A: To evaluate the effects of new development and determine mitigation measures and impact fees, require projects to evaluate per capita VMT and impacts to transit, bicycle, and pedestrian modes.

Action TR-4.2B: Amend the City's Transportation Impact Analysis Guidelines to include alternative travel metrics and screening criteria.

Policy TR-4.3: Use the threshold recommended by the California Office of Planning and Research for determining whether VMT impacts associated with land uses are considered significant under State environmental analysis requirements.

Action TR-4.3A: Amend the City's Transportation Impact Analysis Guidelines to:

- Establish a threshold of 15 percent below baseline VMT per capita to determine a significant transportation impact under the California Environmental Quality Act.
- Identify screening criteria that will streamline certain types of development and/or development in certain areas by not requiring a VMT analysis.

City of Stockton Transportation Impact Analysis Guidelines (Interim)

The *City of Stockton Transportation Impact Analysis Guidelines (Interim)* were completed in December 2021 and are effective for the calendar year January 1, 2021 through December 31, 2022. The guidelines were prepared as an update to the prior guidelines, in part to address the requirements of SB 743 and to implement the General Plan 2040 policies and actions listed above. The guidelines lay out requirements for both CEQA and non-CEQA analysis. For the VMT portion of the CEQA analysis, the guidelines include sections related to initial screening, the types of VMT to be calculated, descriptions of the baseline and cumulative scenarios, and the VMT impact significance criteria. **Table 1** shows the VMT impact criteria contained in the guidelines.



Table 1: VMT Impact Criteria for Land Use Projects under Baseline Conditions

Project Type	Significance Criteria	Baseline Level ¹	Impact Threshold
Residential	A project exceeds existing citywide home-based VMT per resident minus 15%	17.46 Home-based VMT per resident (citywide average)	15% below baseline (14.84 Home-based VMT per resident)
Office	A project exceeds citywide home-based work VMT per employee minus 15%	18.56 Home-based work VMT per Employee (citywide average)	15% below baseline (15.78 Home-based work VMT per Employee)
Retail	A net increase in total VMT	Can be measured for a project's influence area or citywide	Can be measured for a project's influence area or citywide
Mixed-Use	For screening, evaluate each component of a mixed-use development independently, taking credit for internal capture, and apply the significance criteria for each project type.		
Other Land Use Types	The City's TIA Guidelines explicitly addresses residential, office, and retail projects because those are very common land use types. In general, work-related land uses may be treated like the office land use subject to city approval. Likewise, land uses that generate a high proportion of their vehicle trips from visitors or customers may be treated like the retail land use subject to city approval. Applicants must coordinate with the City to affirm the appropriate, project-based VMT thresholds for other land uses.		

1. Values subject to change based on changes to the baseline year or the City's travel demand model.
 Source: City of Stockton Transportation Impact Analysis Guidelines (Interim), December 2021.

The guidelines also discuss the need for analysis of a project's effect on total VMT within a region under cumulative conditions:

Some projects may also be required to evaluate the project effect on VMT under Year 2040 Cumulative Conditions. Cumulative without Project VMT estimates should be based on the horizon year of the Stockton model, ensuring the model does not already contain the land uses or transportation improvements associated with the Project. Any transportation network modifications for the cumulative year must be limited to those that are fully funded and will be open to traffic by 2040. The environmental analysis also must evaluate a project's effect on VMT (CEQA Guidelines Section 21100(b)(5)). The project-generated VMT analysis considers all trips as new trips and does not consider how Cumulative Conditions considers the project's influence on the VMT generation of surrounding land uses. The cumulative project effect on VMT shall be estimated using the City limit boundary and extracting the total link-level VMT for both the no project and with project conditions.

III. VMT Impact Assessment

Significance Thresholds

As directed by the City of Stockton, this impact assessment compares the impacts of the 2021 Project to those of the 2004 Project. Both projects include a mix of uses, including residential,



office/industrial/employment uses, and retail uses. Therefore, the following thresholds from the Stockton Transportation Impact Analysis Guidelines (Interim) are used in this assessment:

The project would have a significant impact if:

- a. The Project's residential uses exceed baseline citywide home-based VMT per resident minus 15% and the Project's residential uses have a home-based VMT per resident that is higher than the 2004 Cannery Park Project; or
- b. The Project's office/employment uses exceed baseline citywide home-based work VMT per employee minus 15% and the Project's office/employment uses have a home-based work VMT per employee that is higher than the 2004 Cannery Park Project; or
- c. The Project would increase total citywide VMT relative to the VMT generated by the 2004 Project

Project Land Uses

While the 2021 Project proposes changes only to Planning Areas D and E within the 2004 Cannery Park Project site, because VMT is affected by the totality of land uses within a project site and a region, this analysis provides a comparison of the complete 2004 Project and the complete 2021 Project (i.e., including the uses in Planning Areas A, B and C which are not changed with the Project). This approach captures the full effect of the change in uses with the 2021 Project. However, Fehr & Peers also analyzed the VMT impacts when considering just the change in uses in Planning Areas D and E, to provide additional information on the VMT effects of the 2021 Project.

Table 2 shows the land uses in Planning Areas A, B and C, including the residential uses that have already been developed (for the No Project case). As noted above, the remaining development in these planning areas is the same under the 2004 Project and the 2021 Project.

Table 2: Land Use Summary: Plan Area A/B/C

Land Use	KSF or Dwelling Units			Employees		
	No Project	2004 Project	2021 Project	No Project	2004 Project	2021 Project
Single Family Housing	743	1,077	1,077	-	-	-
Industrial	-	1452.508 KSF	1452.508 KSF	-	1,060	1,060

1. Employees estimated Stockton Travel Demand Model employee/KSF conversion rates.

Source: DeNovo Planning, October 2021; Fehr & Peers, March 2022.



Table 3 shows the land uses in Planning Areas D and E under the 2004 Project and the 2021 Project.

Table 3: Land Use Summary: Plan Area D/E

Land Use	KSF or Dwelling Units			Employees ¹		
	No Project	2004 Project	2021 Project	No Project	2004 Project	2021 Project
Area D - North of Bear Creek						
Multi Family Housing	-	-	296	-	-	296
Restaurant	-	-	29.8 KSF	-	-	29
Medical Office	-	-	9.8 KSF	-	-	22
Office	-	134.295 KSF	15.6 KSF	-	305	35
Retail	-	-	24.6 KSF and 111 Hotel Rooms	-	-	123
Area E - South of Bear Creek						
Single Family Housing	-	-	321	-	-	321
Multi Family Housing	-	210	-	-	210	-
Retail	-	944.468 KSF	-	-	851	-

1. Employees estimated using Stockton Travel Demand Model employee/KSF conversion rates.
 Source: DeNovo Planning, October 2021; Fehr & Peers, March 2022.

VMT Analysis and Results

The Baseline Stockton Travel Demand Model was adjusted to reflect the No Project, With 2004 Project, and With 2021 Project land uses to allow an assessment of VMT impacts relative to significance criteria (a) and (b). In addition, the 2040 model was adjusted to reflect the 2004 Project and the 2021 Project to allow an assessment under significance criterion (c).

Table 4 presents the Baseline With Project VMT results comparing the 2021 Project as a whole (i.e. the full Cannery Park site) to the 2004 Project and the citywide average. While neither the 2004 Project nor the 2021 Project produces VMT per capita that is 15 percent below the citywide average, the home-based VMT per resident is lower with the 2021 Project than with the 2004 Project (21.59 versus 21.63). However, the home-based work VMT per worker is slightly higher with the 2021 Project than with the 2004 Project (21.86 versus 21.77).



Table 4: VMT Summary: Baseline with Project (Full Cannery Park Project)

VMT Area	Home-Based VMT per Resident		Home-Based Work VMT per Worker	
	2004 Project	2021 Project	2004 Project	2021 Project
Citywide Average	17.49	17.49	18.62	18.62
85 percent of City Average	14.87	14.87	15.83	15.83
Project Only	21.63	21.59	21.77	21.86
Project < 85 percent of City Average?	No	No	No	No
2021 Project < 2004 Project?	-	Yes	-	No

Source: Fehr & Peers, March 2022.

Table 5 presents the Baseline With Project VMT results comparing just the changed areas (Planning Areas D and E) between the 2021 Project and the 2004 Project, alongside the citywide average. Focusing just on the changed areas, neither the 2004 Project nor the 2021 Project produces VMT per capita that is 15 percent below the citywide average. However, both the home-based VMT per resident and the home-based work VMT per worker are lower with the 2021 Project than with the 2004 Project (21.91 versus 23.56 for the residential VMT, and 20.91 versus 21.84 for the worker VMT).

Table 5: VMT Summary: Baseline with Project (Planning Areas D and E Only)

VMT Area	Home-Based VMT per Resident		Home-Based Work VMT per Worker	
	2004 Project	2021 Project	2004 Project	2021 Project
Citywide Average	17.49	17.49	18.62	18.62
85 percent of City Average	14.87	14.87	15.83	15.83
Project Only (Planning Areas D and E)	23.56	21.91	21.84	20.91
Project < 85 percent of City Average?	No	No	No	No
2021 Project < 2004 Project?	-	Yes	-	Yes

Source: Fehr & Peers, March 2022.

Table 6 shows the total citywide VMT under Baseline With Project and Cumulative (2040) With Project conditions, for the 2021 Project and the 2004 Project. The 2021 Project results in lower VMT than the 2004 Project in both scenarios.



Table 6: VMT Summary: Citywide Total VMT

Scenario	With 2004 Project	With 2021 Project	2021 Project < 2004 Project?
Baseline	5,009,069	4,977,057	Yes
Cumulative (2040)	6,277,222	6,253,041	Yes

Source: Fehr & Peers, March 2022.

Based on the above findings, and City direction to conduct this assessment as a comparison of the 2021 Project impacts to the 2004 Project's impacts, the VMT impact can be considered less than significant. The only metric by which the 2021 Project results in higher VMT than the 2004 Project is the Baseline With Project home-based work VMT per worker. Since this metric is lower with the 2021 Project than the 2004 Project under Cumulative conditions, and the metric is lower with the 2021 Project than the 2004 Project when considering just the two Change Areas, and the 2021 Project results in lower citywide VMT than the 2004 Project under both Baseline and Cumulative conditions, the impact with respect to VMT can be considered less than significant.

Please call Ellen Poling at (925) 930-7100 if you have any questions about this memorandum.

Appendix D: Water Supply Assessment

Cannery Park Project Water Supply Assessment

PREPARED FOR

City of Stockton



Cannery Park Project Water Supply Assessment

Prepared for

City of Stockton

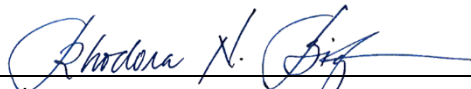
Project No. 129-60-22-53



Project Manager: Elizabeth T. Drayer, PE

December 29, 2022

Date


QA/QC Review: Rhodora Biagtan, PE

December 29, 2022

Date

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LIST OF ACRONYMS AND ABBREVIATIONS

AF	Acre-Feet
AFY	Acre-Feet Per Year
Cal Water	California Water Service
City	City of Stockton
COSMUD	City of Stockton Municipal Utilities Department
County	San Joaquin County
Delta	Sacramento-San Joaquin Delta
DJWWTP	Dr. Joe Waidhofer Water Treatment Plant
DU	Dwelling Unit
DWR	California Department of Water Resources
DWTP	Delta Water Treatment Plant
EIR	Environmental Impact Report
ETo	Evapotranspiration
°F	Fahrenheit
Gpd	Gallons Per Day
GPU	General Plan Update
GSP	Groundwater Sustainability Plan
GWA	Eastern San Joaquin Groundwater Authority
Mgd	Million Gallons Per Day
Proposed Project	Proposed Cannery Park Project
SB	Senate Bill
SEWD	Stockton East Water District
Sf	Square Feet
SGMA	Sustainable Groundwater Management Act
SOI	Sphere of Influence
SOI/MSR	City of Stockton Sphere of Influence Plan/Municipal Service Review
State Water Board	State Water Resources Control Board

USBR	United States Bureau of Reclamation
UWMP	Urban Water Management Plan
Water Code	California Water Code
WID	Woodbridge Irrigation District
WSA	Water Supply Assessment
WSCP	Water Shortage Contingency Plan

EXECUTIVE SUMMARY

Purpose of Water Supply Assessment

The purpose of this Water Supply Assessment (WSA) is to perform the evaluation required by California Water Code Sections 10910 through 10915, as established by Senate Bill (SB) 610, and verification of sufficient water supply, as established by SB 221, in connection with the proposed Cannery Park Project (Proposed Project) located in the northeast portion of the City of Stockton (City). The Proposed Project is anticipated to receive potable water supply from the City of Stockton Municipal Utilities Department (COSMUD).

This WSA evaluates the adequacy and sufficiency of the COSMUD total projected water supplies, including existing water supplies and future planned water supplies, to meet the existing and projected future water demands, including those future water demands associated with the Proposed Project, under all hydrologic conditions (Normal Years, Single Dry Years, and Multiple Dry Years).

Proposed Project Overview

The Proposed Project is bounded by Eight Mile Road immediately to the north and is just west of Highway 99. The Proposed Project site contains approximately 100 gross acres¹ and is proposed to be developed primarily as a mix of 321 single family residential units and 296 high-density residential units, with approximately 20 acres of commercial uses. The Proposed Project would be in COSMUD's North Stockton service area and would be served by COSMUD's North Stockton water system.

The Proposed Project meets the definition of a "Project" per California Water Code Sections 10910 through 10915, as established by SB 610 in 2001, thus requiring the preparation of this WSA.

Potable and Recycled Water Demands and Supply Availability

Projected potable demands for buildout of the Proposed Project total approximately 192 acre-feet per year (AFY). No recycled water demand is expected for the Proposed Project.

It is anticipated that potable water demands for the Proposed Project, if approved by the City, would be served by the COSMUD. The inclusion of existing and planned future water supplies is specifically allowed by the California Water Code:

California Water Code Section 10631(b): Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).

Pursuant to California Water Code Section 10910(4) and based on the technical analyses described in this WSA, this WSA demonstrates that the COSMUD existing and additional planned future water supplies are sufficient to meet the COSMUD existing water demands, including those future water demands associated with the Proposed Project.

¹ Project area based on San Joaquin County parcel data.

Determination of Water Supply Sufficiency

As described in Section 7, this WSA demonstrates water supply sufficiency per the requirements of SB 610. Water demand within the COSMUD water service area is not expected to exceed the COSMUD water supplies at buildout under any hydrologic condition through 2045. To remain conservative in planning, the City's 2020 Urban Water Management Plan (UWMP) assumes no reduction in water demand during dry years. However, water conservation and demand reduction methods detailed in the adopted Water Shortage Contingency Plan, included in Appendix I of the City's 2020 UWMP, are able to reduce demands by up to and greater than 50 percent under water supply shortage conditions and other emergencies.

Section 8 of this WSA also provides written verification of supply sufficiency per the requirements of SB 221 by demonstrating that water supplies available during Normal, Single Dry and Multiple Dry years within a 20-year projection will meet the projected demand associated with the Proposed Project, in addition to existing and planned future uses, including, but not limited to, agriculture and industrial uses.

1.0 INTRODUCTION

1.1 Legal Requirement for Water Supply Assessment

California Senate Bill (SB) 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 sought to promote more collaborative planning between local water suppliers and cities and counties. It requires detailed information regarding water supply availability to be provided to the city and county decision-makers prior to approval of specified large development projects. The purpose of this coordination is to ensure that prudent water supply planning has been conducted, and that planned water supplies are adequate to meet existing demands, anticipated demands from approved projects and tentative maps, and the demands of proposed projects.

SB 610 amended California Water Code (Water Code) Sections 10910 through 10915 (inclusive) to require land use lead agencies to:

- Identify any public water purveyor that may supply water for a proposed development project
- Request a Water Supply Assessment (WSA) from the identified water purveyor

The purpose of the WSA is to demonstrate the sufficiency of the purveyor's water supplies to satisfy the water demands of the proposed project, while still meeting the water purveyor's existing and planned future uses. Water Code Sections 10910 through 10915 delineate the specific information that must be included in the WSA.

1.2 Need for and Purpose of Water Supply Assessment

The purpose of this WSA is to perform the evaluation required by Water Code Sections 10910 through 10915 in connection with the Cannery Park Project (Proposed Project). It is not to reserve water, or to function as a "will serve" letter or any other form of commitment to supply water (see Water Code Section 10914). The provision of water service will continue to be undertaken in a manner consistent with applicable policies and procedures, consistent with existing law.

1.3 Water Supply Assessment Preparation, Format and Organization

The format of this WSA is intended to follow Water Code Sections 10910 through 10915 to clearly delineate compliance with the specific requirements for a WSA. The WSA includes the following sections:

- Section 1: Introduction
- Section 2: Description of Proposed Project
- Section 3: Required Determinations
- Section 4: City of Stockton Municipal Utilities Department Water Service Area
- Section 5: City of Stockton Municipal Utilities Department Water Demands
- Section 6: City of Stockton Municipal Utilities Department Water Supplies
- Section 7: Determination of Water Supply Sufficiency Based on the Requirements of SB 610
- Section 8: Verification of Sufficient Water Supply Based on the Requirements of SB 221
- Section 9: Water Supply Assessment Approval Process
- Section 10: References

Relevant citations of Water Code Sections 10910 through 10915 are included throughout this WSA in *italics* to demonstrate compliance with the specific requirements of SB 610.

2.0 DESCRIPTION OF PROPOSED PROJECT

The Proposed Project location, description, and projected water demands are discussed below.

2.1 Proposed Project Location

The Proposed Project is located in the northeast area of the City, within existing City limits as shown on Figure 2-1, labelled as Cannery Park Large Lots 4, 5 & 6. A close-up view of the sites to be developed are shown on Figure 2-2. The Proposed Project would be served by the COSMUD.

The Envision Stockton 2040 General Plan land use designations for the Proposed Project are “Low Density Residential,” “High Density Residential,” and “Commercial.”² The Proposed Project is located just south of Eight Mile Road and just west of Highway 99 and is currently surrounded by agricultural land uses to the north, and residential and rural residential land to the south, west, and east.

2.2 Proposed Land Uses and Projected Water Demand

The Proposed Project site contains approximately 100 gross acres of land³ and 617 total residential units. In addition to the residential units, the Proposed Project would include approximately 19.8 acres of commercial development. Updated water use factors based on recent water consumption trends within the COSMUD service area, as presented in the City’s 2021 Water Master Plan Update, were used to determine the projected water demand for the Proposed Project. The total projected water demand is 192 acre-feet/year (AFY) as shown in Table 2-1. All of the water demands from the Proposed Project are anticipated to be served by the COSMUD North Stockton water system.

Table 2-1. Total Projected Water Demand					
Land Use Type	Dwelling Units, DU	Gross Area, acres	Water Use Factor ^(a)	Non-Revenue Water ^(a) , percent	Projected Water Demand, AFY
Single Family Residential	321	-	242 gpd/DU 0.27 AFY/DU	8	95
High Density Residential	296	-	175 gpd/DU 0.20 AFY/DU	8	63
Commercial	-	19.76	1.62 AFY/acre	8	35
Totals	617				192
(a) Based on the City of Stockton 2021 Water Master Plan Update.					

2.3 Projected Water Supply

Water demands for the Proposed Project will be served using the COSMUD existing and future portfolio of water supplies discussed in Section 6. The inclusion of existing and planned future water supplies is specifically allowed by the Water Code:

Water Code Section 10631(b): Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).

² City of Stockton. December 2018. *Envision Stockton 2040 General Plan*.

³ Project area based on San Joaquin County parcel data, July 2022.

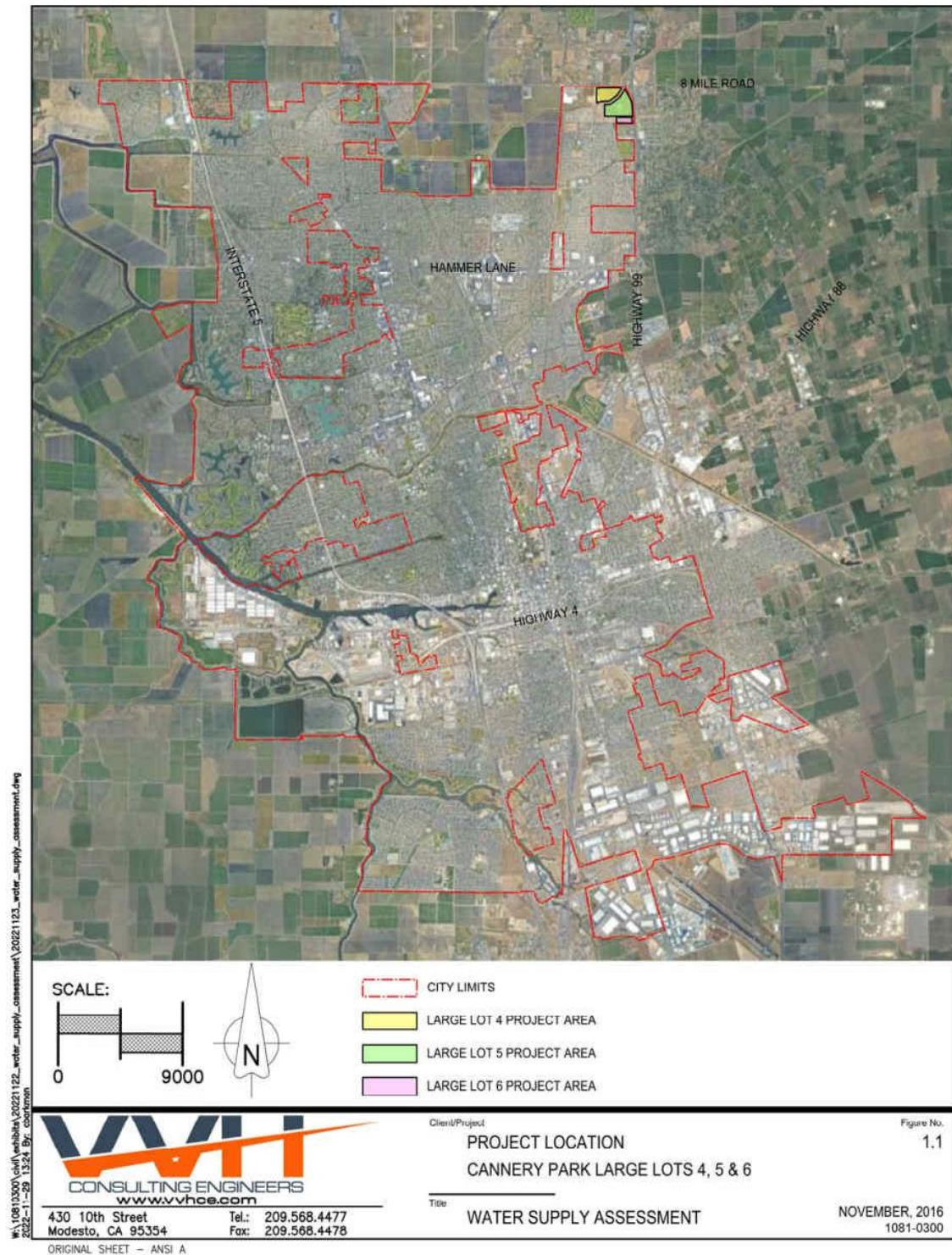


Figure 2-1. Project Location



Figure 2-2. Project Site

3.0 REQUIRED DETERMINATIONS

3.1 Does SB 610 apply to the Proposed Project?

Water Code Section 10910 (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

Water Code Section 10912 (a) "Project" means any of the following:

- (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.*

Based on the following facts, SB 610 does apply to the Proposed Project.

- The City has determined that the Proposed Project is subject to the California Environmental Quality Act and that an Environmental Impact Report (EIR) is required
- The Proposed Project, with 617 dwelling units, meets the definition of a "project" as specified in Water Code Section 10912(a) paragraph (1) as defined for a residential development

The Proposed Project has not been the subject of a previously adopted WSA and has not been included in an adopted WSA for a larger project. Therefore, according to Water Code Section 10910(a), a WSA is required for the Proposed Project.

3.2 Does SB 221 apply to the Proposed Project?

In 2001, SB 221 amended State law to require that approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. Per California Government Code Section 66473.7(a)(1), a subdivision means a proposed residential development of more than 500 dwelling units. The Proposed Project, with its proposed 617 residential DUs, is therefore subject to the requirements of SB 221. Section 8 of this WSA provides the required written verification of sufficient water supply.

3.3 Who is the Identified Public Water System?

Water Code Section 10910(b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined by Section 10912, that may supply water for the project.

Water Code Section 10912 (c) "Public water system" means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections...

The Proposed Project is located within the City Limits and the Proposed Project will be served by the COSMUD. Therefore, the COSMUD is the identified public water system for the Proposed Project.

3.4 Does the City have an adopted Urban Water Management Plan (UWMP) and does the UWMP include the projected water demand for the Proposed Project?

Water Code Section 10910(c)(1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

The most recent COSMUD UWMP (2020 UWMP) was adopted by City Council in June 2021 and is incorporated by reference into this WSA.⁴ The 2020 UWMP included water demand projections for current water demands within the COSMUD water service area (baseline demand) and anticipated water demands associated with future development projects and planning areas within the COSMUD water service area through 2045, including projected water demand for the Proposed Project.

The ability of the COSMUD to meet the projected water demands for the Proposed Project is described in Section 7 of this WSA.

⁴ West Yost. June 2021. City of Stockton 2020 Urban Water Management Plan.

4.0 CITY OF STOCKTON MUNICIPAL UTILITIES DEPARTMENT WATER SERVICE AREA

4.1 Water Service Area

The City is located in north-central California, approximately 70 miles east of the San Francisco Bay Area and 50 miles south of Sacramento. California State Highway 99 and Interstate 5 run north and south through the City on the east and west boundaries, respectively, and California State Highway 4 (the Crosstown Freeway) connects the two. The San Joaquin River flows from the south and terminates at the Delta area of Central Stockton.

The COSMUD provides water service to North and South Stockton while the central portion of the City is served by California Water Service (Cal Water). North Stockton is primarily residential, and South Stockton is largely comprised of residential (on the west side), industrial and agricultural land uses. The COSMUD water service area extends beyond the City Limits into unincorporated San Joaquin County, in conjunction with the City's General Plan. The COSMUD provides water service as new developments are approved within its water service area and/or annexed into the City.

4.2 Population

The existing (2020) population for the COSMUD water service area was estimated in the 2020 UWMP to be 184,402 people. Population projections for 2025 through 2040 presented in the 2020 UWMP were estimated in the City's 2021 Water Master Plan Update⁵. These projections through 2040 were based on future land uses as defined in the City's 2040 General Plan Update (GPU) and the April 2020 *City of Stockton Sphere of Influence Plan/Municipal Service Review* (SOI/MSR). Finally, as 2045 is outside of the SOI/MSR Report and 2021 Water Master Plan Update planning horizon, an annualized growth rate of 1.44 percent was used to estimate the 2045 projected population for the 2020 UWMP.

Table 4-1 shows the COSMUD historical and projected population in five-year increments from 1995 to 2045.

Table 4-1. Historical and Projected Population for the COSMUD Water Service Area		
Time Frame	Year	Population
Historical ^(a)	1995	117,303
	2000	135,716
	2005	177,127
	2010	178,387
	2015	170,417
Projected ^(b)	2020	184,402
	2025	188,601
	2030	192,800
	2035	239,380
	2040	285,960
	2045	307,150
(a) City of Stockton 2015 UWMP, Table 2-2, July 2016.		
(b) City of Stockton 2020 UWMP, Table 3-2, June 2021.		

⁵ West Yost. January 2021. City of Stockton 2021 Water Master Plan Update Chapter 3.

4.3 Climate

The COSMUD water service area is located in the Central Valley of California and generally experiences hot, dry summers with daytime temperatures well over 100 degrees Fahrenheit (°F). Winter temperatures can drop to 30°F but are generally mild. A majority of the annual average 10.4 inches of rainfall generally falls from November through March. The average reference evapotranspiration (ET_o) is 52.6 inches.

Table 4-2 summarizes the average temperature and rainfall data for the COSMUD water service area.

Table 3-1. Monthly Average Climate Data Summary				
Month ^(a)	Standard Monthly Average ET, inches	Average Total Rainfall, inches	Average Temperature, degrees Fahrenheit	
			Maximum	Minimum
Manteca (CIMIS Station No. 70, WRCC Station No. 045303) ^(a)				
January	1.11	1.65	53.7	36.3
February	1.96	1.35	61.1	39.3
March	3.54	1.52	66.3	42.1
April	5.09	0.95	72.4	45.2
May	6.77	0.21	80.9	50.5
June	7.73	0.09	88.6	55.9
July	8.01	0.12	93.2	59.2
August	7.04	0.23	91.5	58.5
September	5.16	0.24	87.7	55.9
October	3.41	0.97	77.7	49.2
November	1.70	1.58	61.1	40.4
December	1.05	1.51	53.8	35.4
Totals	52.57	10.41	-	-

Source: City of Stockton 2020 UWMP, Table 3-1, June 2021.

(a) Period of record is 1971 to 2000.

5.0 CITY OF STOCKTON MUNICIPAL UTILITIES DEPARTMENT WATER DEMANDS

Water Code Section 10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).

The descriptions provided below for the COSMUD water demands have been taken, for the most part, from the 2020 UWMP, which was adopted in June 2021.

5.1 Historical and Existing Water Demand

The COSMUD water demand decreased significantly from 2012 to 2015 due to drought conditions and associated conservation measures. However, water demands have rebounded somewhat in recent years with the end of drought conditions.

Table 5-1 shows the COSMUD historical water demand from 2012 to 2020.

Table 5-1. Historical Potable Water Demand (includes Non-Revenue Water), AFY									
Condition	2012	2013	2014	2015	2016	2017	2018	2019	2020 ^(b)
Total Water Demand	37,100	36,692	31,603	26,312	27,845	29,241	30,103	30,684	34,404
(a) 2012 through 2019 source: City of Stockton 2021 Water Master Plan Update, Table 3-1, January 2021.									
(b) 2020 source: City of Stockton 2020 UWMP, Table 4-2, June 2021.									

5.2 Future Water Demand

Projected future water demands presented in the City's 2020 UWMP used land-use based water demand projections developed for the City's 2021 Water Master Plan Update. Water demand projections were based on the anticipated growth within the COSMUD water service area as defined by City's 2040 GPU and confirmed with the City's Community Development Department; the Proposed Project is included in these projections. Projected water demands for 2045 are assumed to be the same as projected water demands in 2040 since the development of future planned developments beyond 2040 is not defined in the City's 2040 GPU.

Projected water demands for the COSMUD water service area are summarized in Table 5-2 and indicate a 39 percent increase in water demand from 2020 to 2045.

Table 5-2. Summary of Future Water Demand (includes Non-Revenue Water), AFY					
Demand Projection Source	2025	2030	2035	2040	2045
2020 UWMP	34,789	37,878	43,161	48,444	48,444
Source: City of Stockton 2020 UWMP, Table 4-3, June 2021.					

5.3 Dry Year Water Demand

For planning purposes and to be conservative, the COSMUD assumes no reduction in water demand during dry years. The adopted Water Shortage Contingency Plan, outlined in Appendix I of the 2020 UWMP, includes a six-stage plan describing specific actions to reduce water demand by up to and greater than 50 percent in the event of a water supply shortage or other emergency.

6.0 CITY OF STOCKTON MUNICIPAL UTILITIES DEPARTMENT WATER SUPPLIES

Water Code Section 10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f) and (g).

Water Code Section 10910(d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.

Water Code Section 10910(d)(2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:

- (A) Written contracts or other proof of entitlement to an identified water supply.*
- (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.*
- (C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.*
- (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.*

Water Code Section 10910(e) If no water has been received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts, the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall also include in its water supply assessment pursuant to subdivision (c), an identification of the other public water systems or water service contract-holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has identified as a source of water supply within its water supply assessments.

The Proposed Project, if approved by the City, is anticipated to be served from the COSMUD existing and future portfolio of water supplies. The inclusion of existing and planned future water supplies is specifically allowed by the Water Code:

Water Code Section 10631(b): Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).

The water supply for the Proposed Project will have the same water supply reliability and water quality as the water supply available to the other COSMUD existing and future water customers. Proponents of the Proposed Project will provide their proportionate share of required funding to the COSMUD for the acquisition and delivery of treated potable water supplies to the Proposed Project area.

The water supplies needed to serve the Proposed Project (together with existing water demands and planned future uses) are predominantly described in the City's 2020 UWMP. When relevant, the descriptions provided below have been updated with information provided by COSMUD staff.

6.1 Existing Potable Water Supplies

The COSMUD currently receives water supply from the following sources:

- Surface water from the San Joaquin River that is diverted at the Intake Pump Station on Empire Tract located in the Sacramento-San Joaquin Delta (Delta) and treated at the City's Delta Water Treatment Plant (DWTP), supplemented by surface water from the Mokelumne River diverted and conveyed by Woodbridge Irrigation District (WID), and treated at the City's DWTP, when the City's San Joaquin River supplies are curtailed;
- Surface water from the Mokelumne River diverted and conveyed by WID, and treated at the City's DWTP;
- Potable water purchased from Stockton East Water District (SEWD); and
- Groundwater pumped from City owned and operated wells from the underlying Eastern San Joaquin Groundwater Subbasin.

Water from SEWD can be conveyed to both the North and South Stockton distribution systems. SEWD also supplies the COSMUD Walnut Plant service area that is surrounded by the Cal Water system through two interconnects. Cal Water conveys SEWD supply to the Walnut Plant service area via a wheeling agreement with COSMUD. Water supplies from local groundwater wells are used to supply both the COSMUD North and South Stockton water service areas. The Proposed Project will be served by the North Stockton water system.

To improve water supply resiliency and enhance water supply availability, the City plans to explore the potential of surface water/stormwater capture for the Groundwater Recharge Improvement Project. The COSMUD may pursue additional water resource exchanges or transfers. The COSMUD has no sources of ocean water, brackish water, or groundwater that provide a viable opportunity for development of desalinated water as a long-term supply.

Each of the COSMUD existing water supplies is described in more detail below. Table 6-1 shows the COSMUD source of its existing water supplies and actual volume used in 2020.

Table 6-1. Existing (2020) Water Supplies		
Supply Source	Additional Detail on Water Supply	Actual Volume, AFY
Purchased Water (treated surface water)	SEWD	6,939
Purchased Water (untreated surface water)	WID	8,657
Surface Water (untreated)	San Joaquin River	9,970
Groundwater	Eastern San Joaquin Subbasin	8,662
Total		34,228
<i>Source: City of Stockton 2020 UWMP, Table 6-13, June 2021.</i>		

6.1.1 Purchased Water

The City purchases treated potable water from SEWD and untreated surface water from WID as described below.

6.1.1.1 Stockton East Water District

SEWD is a wholesale water supplier that provides treated potable water to the urban water retailers within the Stockton Metropolitan Area, including COSMUD, Cal Water, and two small maintenance districts in the County (Urban Contractors). SEWD receives and treats surface water from New Melones Reservoir and New Hogan Reservoir through agreements with the United States Bureau of Reclamation (USBR). SEWD has filed several water right applications to divert excess wet weather flow from Calaveras River, Littlejohns Creek, and other tributaries. The applications are currently undergoing the permitting process with the State Water Resources Control Board (State Water Board).

To alleviate severe groundwater overdraft in the region, SEWD constructed the Dr. Joe Waidhofer Water Treatment Plant (DJWWTP) with a capacity of 30 million gallons per day (mgd) in the mid-1970s. Since then, the DJWWTP has been expanded to a current capacity of 62 mgd.

6.1.1.2 Woodbridge Irrigation District

WID provides agricultural water supply north of the City boundaries. When the DWTP is curtailed from diverting water from the San Joaquin River, the COSMUD obtains untreated surface water from WID to supplement its water supply. WID's water supply is from the Mokelumne River.

In 2008, COSMUD executed a 40-year purchase agreement with WID for 6,500 AFY for municipal and industrial water use. This water augments supply to the DWTP when supply from the San Joaquin River is not available due to environmental restrictions. The water is conveyed to the DWTP through WID's Wilkerson Canal system and Pixley lateral pipeline for treatment and conveyance to the COSMUD water service area.

The COSMUD 2008 contract with WID includes a provision for increase in water supply as WID-served agricultural lands in the northern part of the City are annexed to the City for municipal and industrial use. Under this contract, an additional 6,500 AFY of WID supply will become available to the City at a rate of 3.0 AFY per acre annexed. WID supply may potentially increase from 6,500 AFY to 13,000 AFY by 2030.

6.1.2 Surface Water

Water supply from the San Joaquin River is a recent addition to the COSMUD water supply portfolio since the completion of the DWTP in 2012 and currently provides a significant portion of existing water supplies. The City has a water right to Delta water because portions of the COSMUD water service area fall within the legally defined Delta and area of origin. Water supply from the San Joaquin River and substantially all of the groundwater that the COSMUD pumps are delivered primarily to the North Stockton water system.

6.1.2.1 Water Right Permit

The City's 1996 water right application with the State Water Board requested an ultimate diversion of 125,900 AFY to address the projected long-term demands through 2050. The State Water Board bifurcated the water right application into two separate applications, Applications 30531A and 30531B.

Application 30531A proposed diversions of up to 33,600 AFY from the Delta and the Place of Use is confined to the City's 1990 General Plan boundary. Through this application, the City was granted a water right permit under Water Code Section 1485. The City's water right permit from the State Water Board was issued on March 8, 2006, under Water Right Permit 21176. Application 30531B, which proposed

diversions of up to 92,300 AFY, is currently unpermitted. The City plans to continue the application process for this application to help meet the City's future water demands.

Under Water Code Section 1485, Water Right Permit 21176 allows the City to divert from the San Joaquin River as much water as the City's wastewater treatment plant discharges into the San Joaquin River under an indirect potable reuse strategy. The quantity is permitted up to 33,600 AFY from the San Joaquin River under Water Right Permit 21176. However, Section 1485 water is subject to pumping restriction in some months due to environmental restrictions.

The City's supply from the San Joaquin River is curtailed annually from February 15th to June 15th due to U.S. Department of Fish and Wildlife Service, California Department of Fish and Wildlife, and National Marine Fisheries Service restrictions. When water diversion is curtailed, COSMUD obtains supplemental water supply from WID.

If the current pumping restrictions for Water Right Permit 21176 remain in place, the City may need the additional water supply it has applied for under Part B of the City's Water Right (Application 30531B) between 2055 and 2060. The City estimates that planning and environmental analysis efforts related to Application 30531B would start between 2025 and 2035. The City will continue to evaluate these dates approximately every five years when it prepares future Urban Water Management Plan updates.

6.1.2.2 Delta Water Treatment Plant

Subsequent to the State Water Board water right permit issuance for Application 30531A, the COSMUD proceeded with Phase 1 of its Delta Water Supply Project with an initial treatment plant capacity of 30 mgd. The DWTP and associated water supply facilities were completed and commenced operation in 2012. Since completion of the DWTP, the City has exercised its water right to divert water through its intake facility on the San Joaquin River.

Surface water curtailments are possible in dry years and can be offset with additional groundwater use and/or demand reduction through implementation of the City's Water Shortage Contingency Plan.

6.1.3 Groundwater

Water Code Section 10910(f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment.

Water Code Section 10910(f)(1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.

Water Code Section 10910(f)(2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.

Water Code Section 10910(f)(3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.

A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.

Water Code Section 10910(f)(4) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project.

A water assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.

6.1.3.1 Groundwater Overview

The COSMUD has groundwater wells located in the North Stockton and South Stockton water systems. These wells are used conjunctively to meet peak summer demands or during dry years when available surface water supplies may be limited. The City has partnered with other users through the Eastern San Joaquin Groundwater Authority (GWA) to manage the groundwater basin.

The City has determined that the sustainable groundwater yield is 0.75 AFY/acre, or approximately 50,000 AFY for the overall City area. To establish the projected groundwater supply that is reasonably available within the COSMUD service area, COSMUD assumes that the reasonably available groundwater supply for the current water service area (approximately 38,500 acres) is pumped at 0.6 AFY/acre, equivalent to an annual groundwater supply of 23,100 AFY.

6.1.3.2 Groundwater Basin Management

The groundwater basin underlying the City is the San Joaquin Valley Basin, Eastern San Joaquin Subbasin (5-22.01, Subbasin). The Subbasin is defined by the areal extent of unconsolidated to semi consolidated sedimentary deposits that are bounded by the Mokelumne River on the north and northwest; San Joaquin River on the west; Stanislaus River on the south; and consolidated bedrock on the east.

In 2014, the California legislature enacted the Sustainable Groundwater Management Act (SGMA) in response to continued overdraft of California's groundwater resources. The Subbasin is one of 21 basins and subbasins identified by the California Department of Water Resources (DWR) as being in a state of critical overdraft. SGMA requires preparation of a groundwater sustainability plan to address measures necessary to attain sustainable conditions in the Subbasin. Sustainability is generally defined as long-term reliability of the groundwater supply and the absence of undesirable results from over pumping.

The City, along with fifteen other groundwater users and groundwater sustainability agencies, formed a GWA in 2017 in response to SGMA. In 2019, the GWA completed the Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan (GSP) to help achieve groundwater sustainability in the Subbasin by 2040. In general, the GSP shows that groundwater elevations have declined since the 1950s. Water quality issues were detected on the west side of the Subbasin, some of which are from wells underlying the City. The GSP outlined the need to reduce overdraft conditions and identified 23 projects for potential development, along with management actions, that either replace groundwater use or supplement groundwater supplies to meet current and future water demands. The list of 23 potential projects included in the GSP represent a variety of project types including direct and in-lieu recharge, intra-basin water transfers, demand conservation, water recycling, and stormwater reuse to be undertaken by the member agencies. The GSP determined an estimated pumping offset and/or recharge need of 78,000 AFY Subbasin-wide to achieve sustainability. This amount may be reevaluated after additional data are collected and analyzed.⁶

From 2020 to 2045, members of the GWA, including the City, will be monitoring and reporting their progress on implementing projects and studies and the impacts of their outreach. Evaluation will be conducted every five years.

6.1.3.3 Groundwater Use

The COSMUD uses groundwater conjunctively with its surface water supply sources, with groundwater generally used to meet increased water demands primarily in the summer months or during dry years when available surface water supplies may be limited. Wells are also depended on for emergency supply in the event of surface water supply interruptions.

⁶ Eastern San Joaquin Groundwater Authority, Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan, November 2019, Section 6.

Historically, the local groundwater basin provided 100 percent of the COSMUD water supply. However, with SEWD surface water deliveries beginning in the 1980s and the completion and dedication of the DWTP and associated water supply infrastructure in 2012, the reliance on groundwater has significantly reduced. The annual volume of groundwater pumped by the COSMUD is shown in Table 6-2. Groundwater supply provided an average of 4,320 AFY, approximately 14 percent of the total COSMUD water supply between 2016 and 2020.

Table 6-2. Historical Groundwater Volume Pumped by the COSMUD, AFY									
Supply Source	2012	2013	2014	2015	2016	2017	2018	2019	2020
Groundwater	3,394	4,085	7,228	6,619	3,748	2,965	3,236	3,778	8,662
<i>Source: City of Stockton 2020 UWMP, Table 6-3, June 2021.</i>									

6.1.3.4 Groundwater as a Future Water Supply

In the future, the COSMUD plans to use less groundwater in wet and average years. It plans to continue groundwater use to meet peak demand and in dry years to make up for reductions in surface water deliveries.

6.2 Additional Planned Future Potable Water Supplies

In addition to the existing potable water supplies described above, the COSMUD has additional planned future potable water supplies to meet existing and projected future water demands, including those associated with the Proposed Project. The inclusion of planned future water supplies in this WSA is specifically allowed by the Water Code:

Water Code Section 10631(b): Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).

As discussed above, the City's application for an additional water right from the San Joaquin River for up to 92,300 AFY, is currently unpermitted. The City plans to pursue this application in the future to meet the COSMUD ultimate water demand. Pursuant to the grant of this additional water right by the State Water Board, several expansion projects are planned for the DWTP, as needed, from the current capacity of 30 mgd, up to 160 mgd.

As discussed in Section 6.1.1.2, the City expects an additional 6,500 AFY of WID supply will become available to the City at a rate of 3.0 AFY per acre annexed, per the City's 2008 contract with WID. This WID supply may potentially increase from 6,500 AFY to 13,000 AFY by 2030.

6.3 Summary of Existing and Additional Planned Future Water Supplies

Table 6-3 provides a summary of the COSMUD projected water supply entitlements. A discussion of the future anticipated availability of these existing and additional planned future water supplies during dry years is provided in the next section.

Table 6-3. Projected Water Supplies						
Supply Source	Additional Detail on Water Supply	Reasonably Available Volume, AFY				
		2025	2030	2035	2040	2045
Purchased Water (treated surface water)	SEWD	24,300	24,300	24,300	24,300	24,300
Purchased Water (untreated surface water)	WID	6,500	13,000	13,000	13,000	13,000
Surface Water (untreated)	San Joaquin River	23,400	24,800	25,000	25,000	25,000
Groundwater	Eastern San Joaquin Subbasin	23,100	23,100	23,100	23,100	23,100
Total		77,300	85,200	85,400	85,400	85,400
<i>Note: A normal year is assumed.</i>						
<i>Source: City of Stockton 2020 UWMP, Table 6-14, June 2021.</i>						

6.4 Water Supply Availability and Reliability

Water Code Section 10910 (c)(4) requires that a WSA include a discussion with regard to “whether total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.” Accordingly, this WSA addresses these three hydrologic conditions through the year 2045. The reliability discussion presented in this section reflects Chapter 7 of the City’s 2020 UWMP.

Factors contributing to potential reductions in the COSMUD water supplies include legal limitations due to water rights and contracts that may limit the quantity of water available, environmental constraints, and reductions in availability due to climatic factors. The surface water supplies delivered to the COSMUD is subject to reductions during single and multiple dry years (seasonal and climatic shortages) as discussed below.

Also, in response to drought conditions and the State of Emergency proclaimed by Governor Brown, first in January 2014 and again in April 2015, this WSA provides a discussion of the availability and reliability of the COSMUD available water supplies to meet water demands in the event that the COSMUD surface water supplies are limited under emergency water supply conditions.

6.4.1 Reliability by Water Source

6.4.1.1 SEWD Supply

Review of SEWD's water deliveries from Fiscal Years 2012 through 2018 show that COSMUD received approximately one-third of the total SEWD water supply to the Urban Contractors.⁷ SEWD estimated that approximately 72,800 AF will be available to the Urban Contractors. Thus, the normal year volume entered for the COSMUD water service area is estimated to be 24,300 AF, approximately one-third of 72,800 AF.

Per the Second Amended Contract, SEWD is required to deliver a minimum of 20,000 AF to the Urban Contractors. Thus, the water supply availability for the City during the single dry year is assumed to be approximately one-third of the SEWD contractual minimum volume of 20,000 AF.

The water supply availability for the five-consecutive-dry years reflects the City's deliveries from SEWD during the most recent Statewide drought. Available water supplies for the first and fifth years of the five-consecutive-year drought are estimated to be normal year supplies. Available SEWD supplies are reduced in the second year, and then further reduced to minimum deliveries (one-third on the contractual minimum volume) in the third and fourth years.

6.4.1.2 San Joaquin River Supply

Under Water Code Section 1485, Water Right Permit 21176 allows the City to divert from the San Joaquin River as much water as the City's wastewater treatment plant discharges into the San Joaquin River. The quantity is permitted up to 33,600 AFY from the San Joaquin River under Water Right Permit 21176. However, Section 1485 water is subject to pumping restrictions in some months due to environmental restrictions.

The City's Water Right Permit summarizes San Joaquin River water available for diversion based on the City's wastewater treatment plant discharge and pumping restrictions due to the environmental restrictions for 2012 through 2040. If the current pumping restrictions for Permit 21176 remain in place, the City may need the additional water supply it has applied for under Part B of the City's Water Right (Application 30531B) between 2055 and 2060. The City estimates that planning and environmental analysis efforts related to Application 30531B would start between 2040 and 2045. The City will continue to evaluate these dates approximately every five years when it prepares future Urban Water Management Plan updates.

⁷ Stockton East Water District. Fiscal Years 2012/2013 to 2018/2019. Schedule D.

Since the Petition for Extension of Time was completed prior to 2020, the volumes for 2020 through 2040 are projections of the anticipated volume available for diversion from the San Joaquin River and are based on the historical volumes available under similar hydrologic years, as shown in Table 6-4.

Table 6-4. Anticipated San Joaquin River Water Supplies			
Year Type	Base Year	Volume Available, AFY	Percent of Average Supply
Normal Year	2018	20,500	100
Single-Dry Year	2015	19,100	93
Consecutive Dry Year 1st Year	2013	18,300	89
Consecutive Dry Year 2nd Year	2014	19,000	93
Consecutive Dry Year 3rd Year	2015	19,100	93
Consecutive Dry Year 4th Year	2016	18,100	88
Consecutive Dry Year 5th Year	2017	21,400	104
<i>Source: City of Stockton 2020 UWMP, Table 7-3, June 2021.</i>			

6.4.1.3 WID Supply

Raw water from WID augments supply to the DWTP if the San Joaquin River water is not available due to environmental restrictions. Consistent with the 2020 UWMP, a slight supply reduction from 6,500 AF to 4,500 AF is assumed during a single dry year and the third and fourth years of the five-consecutive-year drought.

6.4.1.4 Groundwater Supply

COSMUD plans to use its groundwater supply conjunctively with the available treated surface water supplies and purchased water supplies. Available groundwater supply is based on the projected groundwater supply that is reasonably available. COSMUD assumes that the reasonably available groundwater for the current water service area (approximately 38,500 acres) is pumped at 0.6 AFY/ac, equivalent to an annual groundwater supply of 23,100 AFY. This volume is assumed to be available under all year types.

6.4.2 Summary of Available Water Supplies Under Normal, Single Dry, and Multiple Dry Years

The reliability of each of the COSMUD existing and additional planned water supplies and their projected availability during normal, single dry, and multiple dry years, as described in Chapter 7 of the 2020 UWMP, is summarized in Tables 6-5, 6-6, and 6-7, respectively.

Table 6-5. Normal Year Water Supply, AFY					
Supply Source	2025	2030	2035	2040	2045
SEWD	24,300	24,300	24,300	24,300	24,300
WID	6,500	13,000	13,000	13,000	13,000
San Joaquin River	23,400	24,800	25,000	25,000	25,000
Groundwater	23,100	23,100	23,100	23,100	23,100
Total	77,300	85,200	85,400	85,400	85,400
<i>Source: City of Stockton 2020 UWMP, Table 7-6, June 2021.</i>					

Table 6-6. Single Dry Year Water Supply, AFY					
Supply Source	2020	2025	2030	2035	2040
SEWD	6,700	6,700	6,700	6,700	6,700
WID	4,500	9,000	9,000	9,000	9,000
San Joaquin River	21,800	23,100	23,300	23,300	23,300
Groundwater	23,100	23,100	23,100	23,100	23,100
Total	56,100	61,900	62,100	62,100	62,100
<i>Source: City of Stockton 2020 UWMP, Table 7-7, June 2021.</i>					

Table 6-7. Multiple Dry Years Water Supply, AFY					
Supply	2025	2030	2035	2040	2045
First Year					
SEWD	24,300	24,300	24,300	24,300	24,300
WID	6,500	13,000	13,000	13,000	13,000
San Joaquin River	20,900	22,100	22,300	22,300	22,300
Groundwater	23,100	23,100	23,100	23,100	23,100
Supply Total	74,800	82,500	82,700	82,700	82,700
Second Year					
SEWD	15,500	15,500	15,500	15,500	15,500
WID	6,500	13,000	13,000	13,000	13,000
San Joaquin River	21,700	23,000	23,200	23,200	23,200
Groundwater	23,100	23,100	23,100	23,100	23,100
Supply Total	66,800	74,600	74,800	74,800	74,800
Third Year					
SEWD	6,700	6,700	6,700	6,700	6,700
WID	4,500	9,000	9,000	9,000	9,000
San Joaquin River	21,800	23,100	23,300	23,300	23,300
Groundwater	23,100	23,100	23,100	23,100	23,100
Supply Total	56,100	61,900	62,100	62,100	62,100
Fourth Year					
SEWD	6,700	6,700	6,700	6,700	6,700
WID	4,500	9,000	9,000	9,000	9,000
San Joaquin River	20,700	21,900	22,100	22,100	22,100
Groundwater	23,100	23,100	23,100	23,100	23,100
Supply Total	55,000	60,700	60,900	60,900	60,900
Fifth Year					
SEWD	24,300	24,300	24,300	24,300	24,300
WID	6,500	13,000	13,000	13,000	13,000
San Joaquin River	24,400	25,900	26,100	26,100	26,100
Groundwater	23,100	23,100	23,100	23,100	23,100
Supply Total	78,300	86,300	86,500	86,500	86,500
Source: City of Stockton 2020 UWMP, Table 7-9, June 2021.					

7.0 DETERMINATION OF WATER SUPPLY SUFFICIENCY BASED ON REQUIREMENTS OF SB 610

Water Code Section 10910 states:

10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

Pursuant to Water Code Section 10910(c)(4), and based on the technical analyses described in this WSA, the total projected water supplies determined to be available for the Proposed Project during normal, single dry, and multiple dry years during a 20-year projection will meet the projected water demand associated with the Proposed Project, in addition to existing and planned future uses.

Table 7-1 summarizes the projected availability of the COSMUD existing and planned future potable water supplies compared with projected water demands in normal, single dry and multiple dry years through buildout. As stated in Section 3.4, the Proposed Project's water demands were included in future water demand projections presented in the 2020 UWMP and in this table.

Table 7-1. Summary of Water Demand Versus Water Supply During Various Hydrologic Conditions

Hydrologic Condition		Normal, Single Dry, and Multiple Dry Years, AFY				
		2025	2030	2035	2040	2045
Normal Year						
Available Water Supply ^(a)		77,300	85,200	85,400	85,400	85,400
Total Water Demand ^(b)		34,789	37,878	43,161	48,444	48,444
Potential Surplus (Deficit)		42,511	47,322	42,239	36,956	36,956
Percent Shortfall of Demand		--	--	--	--	--
Single Dry Year						
Available Water Supply ^(c)		56,100	61,900	62,100	62,100	62,100
Total Water Demand ^(b)		34,789	37,878	43,161	48,444	48,444
Potential Surplus (Deficit)		21,311	24,022	18,939	13,656	13,656
Percent Shortfall of Demand		--	--	--	--	--
Multiple Dry Years						
Multiple Dry Year 1	Available Water Supply ^(d)	74,800	82,500	82,700	82,700	82,700
	Total Water Demand ^(b)	34,789	37,878	43,161	48,444	48,444
	Potential Surplus (Deficit)	40,011	44,622	39,539	34,256	34,256
	Percent Shortfall of Demand	--	--	--	--	--
Multiple Dry Year 2	Available Water Supply ^(d)	66,800	74,600	74,800	74,800	74,800
	Total Water Demand ^(b)	35,407	38,935	44,218	48,444	48,444
	Potential Surplus (Deficit)	31,393	35,665	30,582	26,356	26,356
	Percent Shortfall of Demand	--	--	--	--	--
Multiple Dry Year 3	Available Water Supply ^(d)	56,100	61,900	62,100	62,100	62,100
	Total Water Demand ^(b)	36,025	39,991	45,274	48,444	48,444
	Potential Surplus (Deficit)	20,075	21,909	16,826	13,656	13,656
	Percent Shortfall of Demand	--	--	--	--	--
Multiple Dry Year 4	Available Water Supply ^(d)	55,000	60,700	60,900	60,900	60,900
	Total Water Demand ^(b)	36,642	41,048	46,331	48,444	48,444
	Potential Surplus (Deficit)	18,358	19,652	14,569	12,456	12,456
	Percent Shortfall of Demand	--	--	--	--	--
Multiple Dry Year 5	Available Water Supply ^(d)	78,300	86,300	86,500	86,500	86,500
	Total Water Demand ^(b)	37,260	42,104	47,387	48,444	48,444
	Potential Surplus (Deficit)	41,040	44,196	39,113	38,056	38,056
	Percent Shortfall of Demand	--	--	--	--	--

(a) Refer to Table 6-5.

(b) Refer to Table 5-2.

(c) Refer to Table 6-6.

(d) Refer to Table 6-7.

8.0 VERIFICATION OF SUFFICIENT WATER SUPPLY BASED ON THE REQUIREMENTS OF SB 221

The Proposed Project, with up to 617 residential dwelling units, is also subject to the requirements of SB 221 (Government Code section 66473.7). SB 221 applies to projects with residential subdivisions with more than 500 dwelling units (such as the Proposed Project) and requires that the water supplier (COSMUD) provide a written verification that the water supply for the Proposed Project is sufficient.

Verification must demonstrate supply sufficiency by showing that water supplies available during Normal, Single Dry and Multiple Dry years within a 20-year projection will meet the projected demand associated with the Proposed Project, in addition to existing and planned future uses, including, but not limited to, agriculture and industrial uses.

Per the requirements of SB 221, the following must be considered:

- Historical Water Deliveries
- Urban Water Shortage Contingency Analysis Prepared for the UWMP
- Supply Reduction for Specific Water Use Sectors
- Amount of Water Expected from Specified Supply Projects

The 2020 UWMP and this WSA for the Proposed Project provide the documentation required to comply with SB 221 and demonstrate that COSMUD's supplies are sufficient to meet the projected demand associated with the Proposed Project, in addition to existing and planned future uses. The specific considerations to be evaluated for the SB 221 verification are described below and reference applicable sections of the 2020 UWMP and this WSA.

8.1 Historical Water Deliveries

COSMUD's historical and current water supplies are summarized in Section 6 of this WSA and described in detail in Chapter 6 of the 2020 UWMP. The use of these supplies will continue into the future as described in Section 6 of this WSA and as shown in Table 6-3 of this WSA.

Water supply availability and reliability during Normal, Single Dry and Multiple Dry years is summarized in Section 6 of this WSA and described in detail in Chapter 7 of the 2020 UWMP.

8.2 Projected Water Demand by Customer Sector

Projected potable water demands in COSMUD's water service area are described in Section 5 of this WSA based on information provided in Chapter 4 of the 2020 UWMP. Projected water demand by customer sector within COSMUD's water service area is documented in the 2020 UWMP and is summarized in Table 8-1.

Table 8-1. Actual and Projected Water Demands by Customer Sector						
Water Source	2020 (actual) ^(a)	2025 ^(b)	2030 ^(b)	2035 ^(b)	2040 ^(b)	2045 ^(b)
Potable Water, af/yr						
Single Family Residential	15,758	15,782	16,066	19,259	22,451	22,451
Multi-Family Residential	3,030	2,927	2,976	3,494	4,012	4,012
Commercial	4,700	4,793	4,856	5,149	5,442	5,442
Industrial	709	3,397	5,797	6,076	6,355	6,355
Landscape	3,255	3,162	3,208	3,786	4,363	4,363
Sales to Other Agencies	1,830	1,830	1,830	1,830	1,830	1,830
Other	132	0	0	0	0	0
Losses	4,991	2,898	3,145	3,568	3,991	3,991
Potable Water Demand Total	34,404	34,789	37,878	43,161	48,444	48,444
(a) From Table 4-2 in the City of Stockton 2020 UWMP.						
(b) From Table 4-3 in the City of Stockton 2020 UWMP.						

8.3 Water Shortage Contingency Analysis

The City's Water Shortage Contingency Plan (WSCP), included as an appendix to the City's 2020 UWMP, describes the City's strategic plan in preparation for and responses to water shortages. It includes water shortage stages and associated actions that will be implemented in the event of a water supply shortage, including situations when catastrophic water supply interruptions occur due to regional power outage, earthquake, or other disasters; and when drought occurs. As part of the WSCP, the City's legal authorities, communication protocols, compliance and enforcement, and monitoring and reporting are included. Stockton Municipal Code (SMC) Chapter 13.28 Water Conservation and SMC Chapter 13.32 Water Shortage Emergencies supports the City's WSCP actions.

The six Stages of Action outlined in the City's WSCP are intended to promote the proper management and distribution of water supplies during a drought or emergency situation. Each of the six stages describes specific actions to be taken by individual water customer sectors to achieve the water conservation requirement of that particular stage. All of the stages allow for adequate water supply to protect public health and safety and satisfy the fire protection needs of the City. Each of the six stages corresponds to a specific water demand reduction goal. These potable water demand reduction goals are based on the potential supply cutbacks during times of drought, with up to and greater than a 50 percent supply reduction as mandated by the UWMP Act.

If an emergency were to occur, or if drought conditions occurred, requiring the City to implement its WSCP, all of COSMUD's water customers, including those within the Proposed Project, would be subject to the same water conservation measures and water use restrictions as included in City's WSCP.

8.4 Future Water Supplies to Serve Water Demands Associated with Buildout of the Proposed Project

As described in this WSA, the following water supplies will be used to serve the projected COSMUD water demands, including the projected water demands associated with buildout of the Proposed Project:

- Surface water from the San Joaquin River that is diverted at the Intake Pump Station on Empire Tract located in the Sacramento-San Joaquin Delta (Delta) and treated at the City's Delta Water Treatment Plant (DWTP), supplemented by surface water from the Mokelumne River diverted and conveyed by Woodbridge Irrigation District (WID), and treated at the City's DWTP, when the City's San Joaquin River supplies are curtailed;
- Surface water from the Mokelumne River diverted and conveyed by WID, and treated at the City's DWTP;
- Potable water purchased from Stockton East Water District (SEWD); and
- Groundwater pumped from City owned and operated wells from the underlying Eastern San Joaquin Groundwater Subbasin.

The availability and reliability of these supplies are described in Section 6 of this WSA.

8.5 Verification of Sufficient Water Supply

As described in Section 7 of this WSA, the total projected water supplies determined to be available for the Proposed Project during normal, single dry, and multiple dry years during a 20-year projection will meet the projected water demand associated with the Proposed Project, in addition to existing and planned future uses, including, but not limited to, agriculture and industrial uses.

9.0 WATER SUPPLY ASSESSMENT APPROVAL PROCESS

Water Code Section 10910 (g)(1) Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.

Water Code Section 10911 (b) The city or county shall include the water supply assessment provided pursuant to Section 10910, and any information provided pursuant to subdivision (a), in any environmental document prepared for the project pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.

As the approving agency for the Proposed Project, the City must adopt this WSA at a regular or special meeting. Furthermore, the City must include this WSA in the EIR that is being prepared for the Proposed Project.

10.0 REFERENCES

City of Stockton. December 2018. *Envision Stockton 2040 General Plan*.

Stockton East Water District. Fiscal Years 2012/2013 to 2018/2019. Schedule D.

Eastern San Joaquin Groundwater Basin Authority. November 2019. *Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan*.

West Yost. January 2021. *City of Stockton Water Master Plan Update*.

West Yost. June 2021. *City of Stockton 2020 Urban Water Management Plan*.