1 Preston Street Project

Initial Study – Mitigated Negative Declaration

prepared by

City of Salinas
Community Development Department
65 West Alisal Street, 2nd Floor
Salinas, California 93901
Contact: Oscar Resendiz, Associate Planner

prepared with the assistance of

Rincon Consultants, Inc.
2511 Garden Road, Suite C-250
Monterey, California 93940

January 2023

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Initial Study

1. Project Title

1 Preston Street Project

2. Lead Agency Name and Project Sponsor

Community Development Department
City of Salinas
65 W. Alisal Street, 2nd Floor
Salinas, California 93901

3. Contact Person and Phone Number

Oscar Resendiz, Associate Planner
831-775-4259

4. Introduction

The 1 Preston Street Project, herein referred to as project or proposed project, would involve a General Plan Amendment (GPA) and Rezone (RZ) to modify the existing land use and zoning designations of the vacant 2.6-acre lot at 1 Preston Street. The proposed GPA would change the General Plan land use designation of Residential Medium Density (8-15 units/acre) to Residential High Density (15-20 units/acre). The RZ would change the zoning from Residential Medium Density (R-M-3.6) to Residential High Density (R-H-2.1). The purpose of the proposed GPA and RZ is to facilitate the production of high-density housing, consistent with the City's General Plan. The GPA and RZ would affect 2.6 acres and would facilitate the development of up to approximately 76 housing units (anticipating a density bonus) across approximately 129,202 square feet (sf).

The project is intended to encourage the development of higher density development that would provide new housing that would be consistent with the Salinas General Plan. This project is being partially funded by Senate Bill (SB) 2 grant funding for the purpose of increasing housing production in the city.

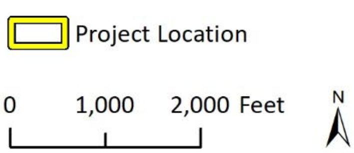
5. Project Location

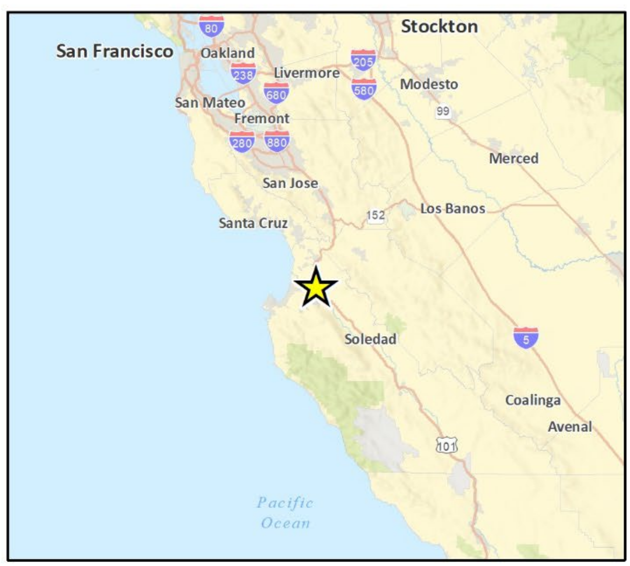
The proposed project is located at 1 Preston Street in Salinas, California. The project site is comprised of a single parcel, Assessor's Parcel Number (APN) 003-161-008-000.

Figure 1 shows the project's regional location, and Figure 2 shows the project site. The site is currently undeveloped and contains natural vegetation, bare soil, and soil stockpiles, located to the west of the termination of Preston Street. Topographically, the site and surrounding areas are relatively flat. The site is bounded by existing residential and commercial development on its eastern border, and to the other three sides by an open space reclamation ditch adjacent to a creek fed by Main Canal.

Figure 1 Regional Location

Basemap provided by National Geographic Society, Esri and its licensors © 2021. Salinas Quadrangle. T14S R03E S29. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may havechanged since the original topographic map was assembled.





CRFig 1 Proj Locn Map

Figure 2 Project Location

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6. General Plan Designation

The project site is designated Residential Medium Density (8-15 units/acre).

7. Zoning

The project site is currently zoned Residential Medium Density (R-M-3.6) with Focused Growth (FG-2: North Main Street/Soledad Street) and Flood District (F) overlays. Surrounding sites are zoned Mixed Arterial Frontage (MAF), Residential High Density (R-H-2.1), Residential Low Density (R-L-5.5) Open Space (OS) and Parks (P). Regulations relating to the current and proposed zones are summarized in Table 1. Figure 4 shows the existing zoning districts on the site, and Figure 5 shows the proposed land use and zoning designations.

Table 1 R-M-3.6, R-H-2.1, FG, and F Zone Regulations

Zone	Comparison
Purpose	
Residential Medium Density (R-M-3.6)	▪ Provide appropriately located areas for single-family and medium density multifamily dwellings consistent with the general plan and with standards of public health and safety established by the Municipal Code ▪ Provide adequate light, air, privacy, and open space for each dwelling unit and protect residents from the harmful effects of excessive noise, inappropriate population density, traffic congestion, and other adverse environmental impacts ▪ Promote development of affordable housing, housing for qualifying residents, and day care facilities by providing a density bonus for projects that meet state and/or city density bonus requirements ▪ Achieve design compatibility through the use of site development regulations and design standards; ▪ Protect adjoining lower density residential districts from excessive noise or loss of sun, light, quiet, and privacy resulting from proximity to higher density and multifamily dwellings ▪ Provide sites for public and semipublic land uses needed to complement residential development or requiring a residential environment ▪ Ensure the provision of public services and facilities needed to accommodate planned population densities ▪ Encourage attractive and interesting residential streetscapes, dwelling units, and developments that are pedestrian-oriented and reflect traditional neighborhood design principles ▪ Promote safe residential neighborhoods through the use of crime prevention through environmental design (CPTED) features in dwelling and site design ▪ Provide for detached and attached single-family dwelling units on small lots where the minimum density is more than eight dwelling units per net acre and the maximum density is not more than twelve dwelling units per net acre without density bonus
Residential High Density (R-H-2.1)	▪ Provide appropriately located areas for high density and multifamily dwellings consistent with the general plan and with standards of public health and safety established by the Municipal Code ▪ Provide adequate light, air, privacy, and open space for each dwelling unit and protect residents from the harmful effects of excessive noise, inappropriate population density, traffic congestion, and other adverse environmental impacts ▪ Promote development of affordable housing, housing for qualifying residents, and day care facilities by providing a density bonus for projects, which meet state and/or city density bonus requirements ▪ Achieve design compatibility through the use of site development regulations and design standards

<table>
<tr><th>Zone</th><th>Comparison</th></tr>
<tr><td></td><td>
▪ Protect adjoining low and medium density residential districts from excessive noise or loss of sun, light, quiet, and privacy resulting from proximity to multifamily dwellings
▪ Provide sites for public and semipublic land uses needed to complement residential development or requiring a residential environment
▪ Ensure the provision of public services and facilities needed to accommodate planned population densities;
▪ Encourage attractive and interesting residential streetscapes and high-density developments that are pedestrian-oriented and reflect traditional residential design principles;
▪ Promote safe residential neighborhoods through the incorporation of crime prevention through environmental design (CPTED) features in dwelling and site design
▪ Provide for high density multifamily dwelling units where the minimum density is more than fifteen dwelling units per net acre and the maximum density is not more than twenty dwelling units per net acre without density bonus
</td></tr>
<tr><td>Focused Growth Overlay Area 2 (FG-2)</td><td>
▪ Create healthy neighborhood centers where residents of all economic and cultural backgrounds can live, work, walk, shop, exercise, and spend quality time outdoors
▪ Increase pedestrian activity by creating neighborhood centers that are conveniently accessed by public transit
▪ Provide a mixture of uses to keep the neighborhoods active at all times of the day, not just morning and evening (as in the case of residential zones) or business hours (for commercial zones)
▪ Reduce vehicle trips and traffic by encouraging a mixture of uses and activities in one location
▪ Encourage creative architecture and public design that communicate a neighborhood's locale, purpose, priorities, and personality to those who use the space
▪ Create revitalized neighborhoods through infill development and redevelopment activities.
</td></tr>
<tr><td>Flood Overlay (F)</td><td>
▪ Protect development from flood-related hazards
▪ Protect public health, safety, and general welfare by regulation of development within flood-prone areas
▪ Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters
▪ Control filling, grading, dredging, and other development which may alter drainage patterns and/or increase flood damage
▪ Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas
▪ Control the cumulative effect of development in flood-prone areas that can increase flood heights and velocity, erosion, downstream impacts, and otherwise contribute to flood loss
▪ Enhance water quality and groundwater recharge by identifying areas where resources can be placed for this purpose, such as floodplains or other areas, in accordance with the requirements of the latest adopted edition of the city's National Pollutant Discharge Elimination System (NPDES) permit requirements.
</td></tr>
<tr><td colspan="2">Residential Use Classifications</td></tr>
<tr><td>R-M-3.6</td><td>Accessory dwelling units, day care homes, small employee housing projects, home occupations, manufactured housing, small residential care facilities, detached single family dwellings</td></tr>
<tr><td>R-H-2.1</td><td>Accessory dwelling units, day care homes, home occupations, small residential care facilities, domestic animals, and minor utilities</td></tr>
<tr><td colspan="2">Residential Allowable Density</td></tr>
<tr><td>R-M-3.6</td><td>Minimum density: more than 8 dwelling units per net acre
Maximum density: not more than 12 dwelling units per net acre without density bonus</td></tr>
<tr><td>R-H-2.1</td><td>Minimum density: more than 15 dwelling units per net acre
Maximum density: not more than 20 dwelling units per net acre without density bonus</td></tr>
</table>

Notes: Salinas Zoning Code text and information is summarized in the table; for full text and regulations refer to the Salinas Zoning Code
Source: Salinas Zoning Code

8. Setting and Surrounding Land Uses

The project site is vacant but surrounded primarily by urban land uses. As shown in Figure 3, land uses surrounding the project site consist of Medium and Low-Density residential neighborhoods to the west and north of the site, as well as commercial uses to the east along North Main Street. The site is also bound to the north and west by an open space reclamation ditch owned by the Monterey County Water Resource Agency. The reclamation ditch adjacent to the site is fed by water from Alisal Creek, Gabilan Creek, and Natividad Creek. A small passive use park owned by the City of Salinas is located between existing residential developments, roughly 245 feet from the project site on the other side of the reclamation ditch. Additionally, there are several undeveloped lots to the east of Highway 183 located approximately 0.2 and 0.4 mile from the project site. Agriculture uses are located approximately 0.4 mile east of the project site.

9. Description of Project

The project consists of a GPA and RZ to modify the existing vacant 2.6-acre lot at 1 Preston Street from Residential Medium Density (R-M-3.6) to Residential High Density (R-H-2.1). The project does not involve construction or other physical changes. Because there are currently no development proposals, this Initial Study analyzes the maximum potential buildout of the site, using reasonable assumptions for construction, building height, and other design features. Depending on the final design of proposed development facilitated by the rezoning project, additional project-specific CEQA review may be required, as determined by the City upon receipt of a complete project-specific application. With full buildout and anticipating a density bonus, future development on the site may include the construction of up to 76 residential units over roughly 129,202 sf. Based on the existing maximum height allowable in the R-H-2.1 zone, future development would not exceed 45 feet and would be up to approximately four to five stories tall. Development would likely consist of buildings that are either row houses, condominiums, apartments, or other units, ranging in size from 400 square feet to 2,210 square feet, all which would be consistent with the Salinas General Plan description of the High Density Residential land use designation.

Development Regulations

Rezoning of the site would be subject to development regulations of the R-H-2.1 zoning district, as specified in Division 2 of the Salinas Zoning Code. The site is also within the Focused Growth FG-2 North Main Street/Soledad Street and Flood (F) overlay districts. Properties within overlay districts are subject to development regulations of the underlying zoning district except as specified in supplemental regulations (Salinas Municipal Code [SMC] Chapter 27, Article V).

Figure 3 Surrounding Land Uses

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Additional sources provided by City of Salinas, 2014.

Figure 4 Existing Zoning Districts

Imagery provided by Microsoft Bing and its licensors © 2021.
Additional sources provided by City of Salinas, 2014.

Figure 5 Proposed General Plan Land Use and Zoning Code Designations

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Additional sources provided by City of Salinas, 2014.

Development of the site would be required to comply with all applicable development regulations, including the following key standards for the R-H-2.1 and overlay districts:

- Maximum building height of 45 feet without a Conditional Use Permit Minimum floor area ratio of 4.0
- Minimum usable open space of 500 square feet per DU
- Minimum one parking space per DU (includes studios) and two parking space per DU (includes two- and three-bedroom units); parking requirements may be reduced through approval of a site plan review or conditional use permit.

Utilities and Services

Police and Fire Services

The site is served by the City of Salinas Police Department and City of Salinas Fire Department. Utility service for development on the site would be provided as described below.

Wastewater

Wastewater treatment service in the City of Salinas is provided by Monterey One Water (M1W), formerly the Monterey Water Pollution Control Agency. Wastewater from the City is transmitted to the M1W Regional Treatment Plant located in Marina, approximately five miles northwest of the City.

Water

Water supply for the site would be provided by California Water Service. Water supply serving the City is groundwater obtained from groundwater.

Storm Drainage

The site is not currently connected to the City's stormwater drainage system. Development of the site would be required to comply with all applicable City and State regulations for stormwater control and mitigation.

Gas/Electricity

Electricity and natural gas service would be provided to the project by Central Coast Community Energy (3CE) through Pacific Gas & Electric (PG&E) infrastructure.

Circulation and Parking

Vehicle access would be provided by a single driveway on Preston Street. The driveway would provide entry and exit to vehicular traffic. Future development would require the provision of approximately 152 parking spaces, which would be surface level and likely dispersed across the site.[1]

[1] Parking estimates are based on the Salinas Municipal Code, Article V Division 2, Section 37-50.360, Table 37-50.100, which list parking requirements for different unit types, ranging from one parking space per studio to three parking spaces for a four-bedroom unit. For the purposes of analysis, this document assumes a mix of unit types averaging to two parking spaces per dwelling units.

10. Other Public Agencies Whose Approval is Required

The project includes a GPA and RZ, which requires approval by the Salinas City Council. No other public agencies would be required to approve the project, though approvals may be required for future applications on the site, including from the following agencies:

- Central Coast Regional Water Quality Control Board (RWQCB)
- Monterey Bay Air Resources District (MBARD)
- California Department of Transportation (Caltrans)
- Federal Emergency Management Agency (FEMA)

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On May 20 and June 2, 2021, the City of Salinas mailed local tribes a Senate Bill (SB) 18 and Assembly Bill (AB) 52 notification letter via certified mail. Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. Under SB 18, tribes have 90 days to respond. The City did not receive a request for formal consultation under AB 52. Copies of AB 52 correspondence for this project are included in Appendix C.

12. Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

13. Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	1/23/2023 Date
Oscar Resendiz Oscar Resendiz	Associate Planner Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	□	□	□	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	□	□	□	■
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	□	□	■	□
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	□	□	■	□

Background

As addressed in CEQA analysis, aesthetics refers to visual environmental concerns as perceived from publicly accessible spaces, such as roadways, parks, and designated open spaces. Aesthetics or visual resources analysis is a process to assess the visible change and anticipated viewer response to that change. The Federal Highway Administration (FHWA), Bureau of Land Management (BLM), and U.S. Forest Service (USFS) have developed methodologies for conducting visual analysis that are used across the industry (FHWA 2015; BLM 1984; USFS 1996). These methods have been synthesized and used for this analysis.

While the conclusions of these assessments may seem entirely subjective, value is measured based on generally accepted measures of quality, viewer sensitivity, and viewer response, supported by consistent levels of agreement in research on visual quality evaluation (BLM 1984; FHWA 2015). Modifications in a landscape that repeat basic elements found in that landscape are said to be in harmony with their surroundings; changes that do not harmonize often look out of place and can be found to form an unpleasant contrast when their effects are not evaluated adequately.

Visual quality is a term that indicates the uniqueness or desirability of a visual resource, within a frame of reference that accounts for the uniqueness and “apparent concern for appearance” by concerned viewers (e.g., residents, visitors, jurisdictions) (USFS 1996). A well-established approach to visual analysis is used to evaluate visual quality, using the concepts of vividness, intactness, and unity (FHWA 2015).

- Vividness describes the memorability of landscape components as they combine in striking patterns.
- Intactness refers to the visual integrity of the natural and human-built.
- Unity indicates the visual coherence and compositional harmony of the landscape as a whole.

Setting

The project site is currently vacant and contains minimal ground cover and vegetation primarily along the perimeter of the lot. Various existing trees are visible from the site including a row of mature trees visible from the eastern boundary which blocks views of the abutting commercial lot. Additionally, in front of the trees, an existing concrete wall runs along the eastern boundary. Views in every direction include residential uses consisting of primarily single-family homes and a multi-family development to the north. On the eastern side of the site, opposite the reclamation ditch, an existing retaining wall runs along existing single-family homes. To both the north and south, power transmission poles and lines are visible from and run overhead of the site. A reclamation ditch bounds the site to the west and north. Photos of the site are shown in Figure 6.

Figure 6 Project Site Photos

Photograph 1: View from the project site facing the residences to the east.

Photograph 2: View from project site facing north.

Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

Scenic vistas are places from which expansive views of a highly valued landscape can be observed by the public. They can be enjoyed from elevated places in the landscape or from roadways or other public places where the views stretch far into the distance. Scenic vistas may be informally recognized, or officially designated by a public agency.

The Salinas General Plan notes that public views are available from US 101, and that these views are often the first impression of Salinas for visitors. The General Plan Program EIR notes that view corridors of the community from US 101 include "agricultural views in the northern portion of the planning area, views of the [Northridge and Westridge shopping centers and the Auto Center], long vistas into Carr Lake [to the east of the highway], and potential office and commercial development in the central portion of the city" (City of Salinas 2002a). The project site is approximately 0.2 mile southwest of US 101, but is not visible from the highway due to intervening structures. The project site is not proximate to shopping centers or Carr Lake.

Surrounding views around the site include existing residential developments, a reclamation ditch, and telephone lines. Scenic vistas are not available from any part of the site or nearby major roadways, such as State Route (SR) 183 or North Davis Road. The project would facilitate future new development on the site that would include 76 residential units. Based on the existing maximum height allowable in the R-M-3.6 zone, future development would not exceed 45 feet. Development would likely consist of buildings that are either row houses, condominiums, or apartments, consistent with the Salinas General Plan description of the High Density Residential land use designation. The site is distant enough from US 101 and SR 183 that future development would not obstruct views and would not have a substantial effect on a scenic vista. There would be no impact to scenic vistas.

NO IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no roadways in the City of Salinas that are officially designated for the state scenic highway system. However, SR 68 has been identified as potentially eligible for this designation between the Salinas River and US 101 in the City of Salinas. No other road segments in the City are listed as eligible for designation (Caltrans 2019). The site is more than 0.9 mile from SR 68. There is intervening topography, vegetation, and structures that prevent views of the site from this roadway. Future development on the site would not exceed five stories in height; while this is generally taller than the two to three story homes and apartment buildings near the project site, development at the project site would not be visible from SR 68. In addition, there are no scenic resources such as trees, rock outcroppings, or historic buildings on or visible from the project site. Therefore, substantial damage to scenic resources within a state scenic highway would not occur and there would be no impact.

NO IMPACT

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

The project site is in an urbanized area where existing, surrounding uses are primarily residential and commercial. Buildout of the site as a 76-unit residential development, pursuant to the proposed RZ, would be consistent with existing surrounding residential uses. The City has established design guidelines in the Zoning Code (Section 37-30.140) intended to ensure buildings and dwellings are visually compatible with one another and with adjacent neighborhoods. Design guidelines include, but are not limited to, minimum sizes for lot depth, frontages, and setbacks on all sides; maximum building height and minimum distances between structures; and usable open space and landscaping. Design guidelines for these site features would be applicable to development that occurs under the proposed project, and future development of the site would not conflict with the City's Zoning Code. Further, General Plan Policy CD-2.3, which requires infill development to be consistent with the scale and character of existing neighborhoods, would apply to future development of the project site. Therefore, the project would not conflict with the City's Zoning Code or regulations governing scenic quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

Light can be categorized as either a stationary source or a moving source. Stationary sources of light include exterior parking lot and building security lighting, and moving sources of light include the headlights of vehicles driving on roadways near the site. Streetlights and other security lighting also serve as sources of light in the evening hours. Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces area associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars.

The surrounding area is largely developed with residential and commercial uses. Existing sources of glare include parked cars and from east/west facing windows that reflect the sun as it transitions. In areas where mature street trees exist, glare from parked cars is reduced somewhat. The project site is currently vacant and does not produce substantial sources of light. However, the project would facilitate new development that would introduce new sources of light at the site. Future residential uses on the site would result in higher levels of light and glare as existing surrounding residential uses due to the project's proposed increased height and density. However, future development would be required to comply with SMC Section 37-50.480, which requires building and parking lot lighting be designed to generate the lowest possible amount of light while still providing for safety and security. Specifically, SMC Section 37-50.480 requires the following:

- Outdoor lighting shall employ cutoff optics that allows no light emitted above a horizontal plane running through the bottom of the fixture.
- Parking lots shall be illuminated to no more than an average maintained two and four-tenths footcandle at ground level with uniform lighting levels.
- All building-mounted and freestanding parking lot lights (including the fixture, base, and pole) shall not exceed a maximum of 25 feet in height in all districts.

- Lighting adjacent to other property or public rights-of-way shall be shielded to reduce light trespass.
- No portion of the lamp (including the lens and reflectors) shall extend below the bottom edge of the lighting fixture nor be visible from an adjacent property or public right-of-way.
- A point to point lighting plan showing horizontal illuminance in footcandles and demonstrating compliance with this section shall be submitted for review and approval prior to issuance of a building permit.

New sources of glare would include windows and glass components associated with future development. Large expanses of light-colored walls could also generate glare if they are positioned so the sun shines on them for extended periods. SMC Section 37-30.280 details design standards to reduce glare from new residential development. Relative to glare, this includes the following:

- Restrictions on roof materials, including prohibiting highly reflective surfaces that create glare
- Use of intermittent awnings and canopies to shield windows from direct sun that would create glare
- Prohibiting windows that have reflective glass
- Use of exterior color palettes that are compatible with adjacent structures and that are not highly reflective (e.g., bright white)

Finally, building windows would be required to comply with Title 24 Energy Standards by providing UV protection with polarization to reduce light and glare onto adjacent uses.

Conformance to the City's outdoor lighting standards, design guidelines and ordinances, and Title 24 would keep development facilitated by the proposed RZ from creating a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

a. Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The project site is within a primarily developed urban area in the City of Salinas. There is no existing important farmland on or adjacent to the site; the site, as well as all surrounding properties, are designated as "Urban and Built-Up Land" under the Farmland Mapping and Monitoring Program (DOC 2016a). The site is not zoned or designated for agriculture, used for agricultural production, or under a Williamson Act contract (DOC 2016a; Monterey County 2010). Residential developments bound the site to the north, south, and west. Commercial uses are located approximately 0.1 mile from the site along North Main Street. The nearest agricultural operations occur approximately 0.4 mile northeast of the site. As a result, future development pursuant to the proposed project would not convert farmland, conflict with agricultural zoning, or have the potential to result in the loss or conversion of farmland to non-agricultural use. There would be no impact.

NO IMPACT

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?

The project site is within a developed and urbanized area and there is no forest land on or adjacent to the site. The site, as well as neighboring properties, are not designated or zoned for forest preservation or timber harvesting. Therefore, future development pursuant to the proposed project would not conflict with zoning or cause rezoning of forest land or timberland, or result in conversion of forest land. There would be no impact.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic gases (ROG),[2] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

[2] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this IS-MND.

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards and Attainment

The project site is located in the North Central Coast Air Basin (NCCAB), which is under the jurisdiction of the Monterey Bay Air Resource District (MBARD). As the local air quality management agency, the MBARD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the NCCAB is classified as being in “attainment” or “nonattainment.” In areas designated as nonattainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 2, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The NCCAB is designated a nonattainment area for the ozone and PM_{10} CAAQS (CARB 2021).

Table 2 Health Effects Associated with Nonattainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[1]

Source: United States Environmental Protection Agency 2018

Air Quality Management

Because the NCCAB currently exceeds the state ozone and PM_{10} standards, MBARD is required to implement strategies to reduce pollutant levels to achieve attainment of the CAAQS. In March 2017, MBARD adopted its most recent Air Quality Management Plan (AQMP) to demonstrate a pathway for the region to make progress toward meeting the ozone CAAQS.

Given that NO_x emissions are a precursor to ozone formation, the AQMP includes measures to reduce NO_x emissions that focus on on-road and off-road vehicles (MBARD 2017).

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.

Air Pollutant Emission Thresholds

MBARD has adopted guidelines for quantifying and determining the significance of air quality emissions in its *CEQA Air Quality Guidelines* (MBARD 2008).

Air Quality Management Plan Consistency

The proposed project would be inconsistent with the AQMP, and would therefore have a cumulatively considerable (significant) contribution to significant cumulative air quality impacts, if it would result in either of the following (MBARD 2008; Duymich 2018):

- Population growth generated by the project would cause the population of Monterey County to exceed the population forecast for the appropriate five-year increment utilized in the AQMP; or[3]
- Construction and operational emissions of ozone precursors would exceed the significance thresholds established by MBARD, which are intended to set the allowable limit that a project can emit without impeding or conflicting with the AQMP's goal of attainment ambient air quality standards.

Regional Criteria Pollutant Significance Thresholds

Table 3 presents MBARD's project-level significance thresholds for construction and operational criteria air pollutant and precursor emissions. These represent levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the NCCAB's existing air quality conditions. For the purposes of this analysis, the project would result in a significant impact if combined construction and operational emissions from development facilitated by the project would exceed the thresholds shown in Table 3.

The CO thresholds provided by MBARD as presented in Table 3 are designed to screen out from further analysis projects that would have a less than significant impact from CO emissions; projects that exceed these thresholds would not necessarily result in a CO hotspot.

Stringent vehicle emission standards in California have reduced the level of CO emissions generated by vehicles over time such that CO hotspots are rarely a concern, except for roadways with very high traffic volumes. The adjacent Bay Area Air Quality Management District (BAAQMD) has established a volume of 44,000 vehicles per hour as the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017). The NCCAB and the San Francisco Bay Area Air Basin (the jurisdiction of the BAAQMD, which is the air district immediately adjacent to MBARD to the north) are both in attainment for the federal and state standards for CO and have not reported exceedances of the CO standard at local monitoring stations for the last two decades (U.S. EPA

[3] In Monterey County, consistency with population forecasts is based on comparing a project's population with countywide forecasts to avoid confusion related to declining population forecasts for cities on the Monterey Peninsula (MBARD 2008).

2020a; BAAQMD 2017). Therefore, given the similar ambient air quality conditions for CO in both air basins, it is appropriate to use the BAAQMD threshold in this analysis. In the absence of an MBARD threshold that establishes a specific vehicle volume, the BAAQMD bright-line threshold for vehicle volume is applied in the following impact analysis. If the project exceeds the screening thresholds then the project would result in an exceedance of CO standards.

Table 3 Air Quality Thresholds of Significance

Pollutant	Source	Threshold of Significance
Construction Impacts		
PM_{10}	Direct	82 lbs/day[1]
Operational Impacts		
VOC	Direct and Indirect	137 lbs/day
NO_X	Direct and Indirect	137 lbs/day
PM_{10}	On-site	82 lbs/day[2]
CO	N/A	LOS at intersection/road segment degrades from D or better to E or F or V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more
	Direct	550 lbs/day[3]
SO_X, as SO_2	Direct	150 lbs/day

lbs/day = pounds per day; PM_{10} = particulate matter with a diameter of 10 microns or less; VOC = volatile organic compounds (also referred to as ROG, or reactive organic gases); NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; SO_2 = sulfur dioxide

[1] This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM_{10} emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD CEQA Guidelines.

[2] The District's operational PM_{10} threshold of significance applies only to on-site emissions, such as project-related exceedances along on-site unpaved roads. These impacts are generally less than significant. For large development projects, almost all travel is on paved roads, and entrained road dust from vehicular travel can exceed the significance threshold.

[3] Modeling should be undertaken to determine if the project would cause or substantially contribute (550 lbs/day) to exceedance of CO ambient air quality standards. If not, the project would not have a significant impact.

Source: MBARD 2008

Odors

The MBARD guidelines state that odor impacts would be significant if the project would result in the emission of substantial concentrations of pollutants that produce objectionable odors, causing injury, nuisance, or annoyance to a considerable number of persons, or endangering the comfort, health, or safety of the public. If construction or operation of the project would emit pollutants associated with odors in substantial amounts, the analysis should assess the impact on existing or reasonably foreseeable sensitive receptors (MBARD 2008).

Toxic Air Contaminants

According to MBARD Guidelines, a project would have a significant impact if it would site a sensitive receptor near an unregulated source of toxic air contaminant (TAC) emissions (e.g., diesel-fuel internal combustion engines, parking areas for diesel fueled heavy duty trucks and buses, gasoline stations, and dry cleaners) that would result in an exceedance of health risk public notification thresholds adopted by MBARD in Rule 1000. The Guidelines also set forth the following thresholds, which are the same as the public notification thresholds (MBARD 2008):

- The hazard index is greater than 1 for acute or chronic impacts
- The cancer risk is greater than 10 in one million for long-term operational emissions or 1 per 100,000 population for temporary construction-related emissions

Cumulative Impacts

MBARD requires an evaluation of cumulative ozone, CO, and PM_{10} impacts. Cumulative ozone impacts are evaluated based on the project's consistency with the AQMP, while cumulative CO and PM_{10} impacts are evaluated the same as for project impacts, since air quality impacts are cumulative in nature. The cumulative CO hotspot analysis should account for cumulative traffic volumes to assess cumulative CO impacts.

Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., mid-rise apartments and a parking lot), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the default construction schedule and construction equipment list for a project of this type and size. Construction would occur over approximately 12 months, and site grading was assumed to be balanced the site (i.e., no net soil import or export). It is assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with MBARD Rules 426 for architectural coatings (50 grams per liter for flat or non-flat coatings; and 100 grams per liter for traffic marking coatings).

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. The default trip generation rates were used, which are based on the Institute of Transportation Engineers (ITE) 10^{th} edition trip generation rates. Emissions attributed to energy use include natural gas consumption by appliances as well as for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project could be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. MBARD uses growth forecasts provided by the Association of Monterey Bay Area Governments (AMBAG) to project population-related emissions, which are used in developing the AQMP for the NCCAB. AMBAG is the regional planning agency for Monterey, San Benito, and Santa Cruz counties, and addresses regional issues relating to transportation, economy, community development, and environment. The AQMP utilizes the 2014 Regional Growth Forecasts adopted by the AMBAG Board in June 2014 as the basis for emissions forecasting and the land use and transportation control portions of the AQMP (MBARD 2017).[4]

The AQMP population forecast for Monterey County is a population of 479,487 persons in 2030, an increase of 64,430 persons from a population of 415,057 persons in 2010. In 2020, the population of Monterey County was 432,325. (U.S. Census Bureau 2021). The project would involve the development of up to 76 dwelling units. The project is anticipated to provide housing units for 293 new residents in the city (refer to Environmental Checklist Section 14, *Population and Housing*, for details on this calculation). This increase of 293 residents to the 432,325 people living in the County in 2021 would be within the AQMP's projected 2030 population 479,487 persons for Monterey County. Therefore, the project would be within the population forecasts used in the AQMP. Additionally, as described under checklist question (b) below, the project would not exceed MBARD's construction or operational ozone precursor thresholds, as operational VOC and NO_X emissions would be less than 137 pounds per day. For these reasons, the project would not generate air pollutant emissions that would impede or conflict with the AQMP's goal of achieving attainment of the State ozone standards. As a result, the project would not conflict with the implementation of the AQMP. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

The NCCAB is designated nonattainment for the ozone and PM_{10} CAAQS. The following subsections discuss emissions associated with construction and operation of the proposed project.

Construction Emissions

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction equipment and construction vehicles in addition to VOC emissions that would be released during the drying phase of architectural coating. Table 4 summarizes the estimated maximum daily emissions of pollutants during project construction. As shown therein, construction-related emissions would not exceed MBARD thresholds. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

[4] On June 13, 2018, AMBAG's Board of Directors adopted the 2018 Regional Growth Forecast. However, the most recent AQMP was adopted prior to this date and relies on the demographic and growth forecasts of the 2014 Regional Growth Forecast; therefore, the 2014 forecasts are utilized in the analysis of the project's consistency with the AQMP. The 2022 Regional Growth Forecast was adopted in June 2022.

Table 4 Estimated Maximum Daily Construction Emissions (lbs/day)

	Maximum Daily Emissions (lbs/day)					
Construction Year	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Maximum Emissions (lbs/day) - 2022*	107	15	17	<1	8	4
MBARD Thresholds	N/A	N/A	NA	N/A	82[1]	NA
Threshold Exceeded?	N/A	N/A	NA	N/A	No	N/A

lbs/day = pounds per day; PM_{10} = particulate matter with a diameter of 10 microns or less; VOC = volatile organic compounds (also referred to as ROG, or reactive organic gases); NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; SO_2 = sulfur dioxide

Notes: All numbers have been rounded to the nearest tenth. Emissions presented are the highest of the winter and summer modeled emissions. Emission data is pulled from "mitigated" results, which account for compliance with regulations and project design features.

*Construction timeline is a conservative assumption based upon CalEEMod calculations.

See Appendix A for CalEEMod calculations and assumptions.

[1] This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM_{10} emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD CEQA Guidelines.

Operational Emissions

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., fireplaces, architectural coatings, consumer products, and landscaping equipment), energy sources (i.e., use of natural gas for space and water heating and cooking), and mobile sources (i.e., vehicle trips to and from the project site). Table 5 summarizes the project's maximum daily operational emissions by emission source. As shown therein, operational emissions would not exceed MBARD regional thresholds for criteria pollutants. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment, and impacts would be less than significant.

Table 5 Estimated Maximum Daily Operational Emissions (lbs/day)

Emissions Source	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	4	<1	6	<1	<1	<1
Energy	<1	<2	<1	<1	<1	<1
Mobile	1	2	13	<1	3	1
Total	**6**	**2**	**20**	**<1**	**<3**	**<1**
MBARD Thresholds	137	137	550	150	82	n/a
Threshold Exceeded?	No	No	No	No	No	No

lbs/day = pounds per day; PM_{10} = particulate matter with a diameter of 10 microns or less; VOC = volatile organic compounds (also referred to as ROG, or reactive organic gases); NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; SO_2 = sulfur dioxide

Notes: All numbers have been rounded to the nearest tenth. Emissions presented are the highest of the winter and summer modeled emissions. Emission data is pulled from "mitigated" results, which account for compliance with regulations and project design features. See Appendix A for CalEEMod calculations and assumptions.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Therefore, most sensitive receptor locations are schools, hospitals, and residences (CARB 2005). Sensitive receptors in the project vicinity include single-family residences, the nearest of which is adjacent to the project site's southeastern boundary. The project also includes the siting of new sensitive receptors. Localized air quality impacts to sensitive receptors typically result from CO hotspots and TACs, which are discussed in the following subsections.

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

As discussed under *Air Pollutant Emission Thresholds* above, a significant CO impact would occur if project-generated traffic would increase the traffic volume to 44,000 vehicles per hour or greater. The project would generate 413 daily vehicle trips (Appendix A, Table 4.2). The most traveled intersection in or near the project site is the intersection of North Main Street and West Rossi Street. The intersection is approximately 965 feet south of the project site the existing intersection volume is approximately 33,426 average daily vehicles (City of Salinas 2020). Conservatively assuming that all project trips would travel through this intersection, the intersection volume would still not approach the threshold of 44,000 vehicle per hour (BAAQMD 2017). Therefore, the project would not expose sensitive receptors to substantial CO concentrations, and impacts would be less than significant.

Toxic Air Contaminants

The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

Construction

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2020) and is therefore the focus of this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 12 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period. According to the California Office of Environmental Health Hazard

Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 12 months) is approximately three percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2017).

The maximum PM_{10} and $PM_{2.5}$ emissions would occur during site preparation and grading activities. These activities would last for approximately nine days. PM emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less intensive construction equipment. While the maximum DPM emissions associated with demolition, site preparation, and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than one percent of the total 30-year exposure period for health risk calculation. Given the aforementioned, DPM generated by project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

Operation

Common sources of TACs and $PM_{2.5}$ include gasoline stations, dry cleaners, diesel backup generators, truck distribution centers, freeways, and other major roadways (BAAQMD 2017). The project does not propose construction of gas stations, dry cleaners, highways, or roadways or other permitted or non-permitted sources of TAC or $PM_{2.5}$. The project would not include any stationary sources of TACs or $PM_{2.5}$that would expose both on-site and nearby off-site receptors to substantial TAC or $PM_{2.5}$ emissions. Impacts from project operation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion, and odors disperse with distance. In addition, MBARD Rule 402 prohibits the discharge of air contaminants or other materials which would cause a nuisance or detriment to a considerable number of persons or to the public, except for odors from agricultural activities. Overall, project construction would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (MBARD 2008). The project would not facilitate the development of any uses associated with objectionable odors. Operational odor emissions from the project would be limited to odors associated with vehicle and engine exhaust and trash receptacles and would be comparable with those generated by existing residential uses. Therefore, the proposed project would not result in other emissions (including odors) that would adversely affect a substantial number of people. Operational impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

Special-status species are those plants and animals: 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service under the Federal Endangered Species Act; 2) listed or proposed for listing as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act; 3) recognized as Species of Special Concern by the CDFW; 4) afforded protection under Migratory Bird Treaty Act and/or California Fish and Game Code (CFGC); and 5) occurring on lists 1 and 2 of the CDFW California Rare Plant Rank system.

Rincon Consultants, Inc. (Rincon) biologists reviewed agency databases and relevant literature for baseline information on special-status species and other sensitive biological resources occurring or potentially occurring at the site and in the immediate surrounding area. The following sources were reviewed for background information:

- CDFW California Natural Diversity Database (CNDDB) (CDFW 2021a)
- Biogeographic Information and Observation System (BIOS) (CDFW 2021b)
- USFWS Information for Planning and Consultation (IPaC) (USFWS 2021a)
- USFWS Critical Habitat Portal (USFWS 2021b)
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2021)
- CDFW Special Animals List (CDFW 2021c)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2021d)

Rincon biologists conducted a review of applicable sources listed above for recorded occurrences of special-status plant and wildlife taxa in the region. For this review, the search included all occurrences within the U.S. Geological Survey 7.5-minute topographic quadrangle encompassing the site (*Salinas*), and the eight surrounding quadrangles. Aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined. Rincon biologists additionally conducted a reconnaissance-level site visit to assess the habitat suitability for potential special-status species; map existing vegetation communities and any evident sensitive biological resources currently on site; note the presence of potential jurisdictional waters or wetlands; document any wildlife connectivity/movement features; and record all observations of plant and wildlife species within the project site.

Rincon biologists observed no special status plant and animal species during the reconnaissance survey. Of the 32 special status wildlife species evaluated, 3 species were determined to have a moderate potential to occur; Coast range newt (*Taricha torosa*), western pond turtle (*Emys marmorata*), and western burrowing owl (*Athene cunicularia*). Of the 45 special-status plant species evaluated, no species had a moderate or greater potential to occur. For further information, please refer to Appendix B.

a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Special-Status Plants

Construction activities could result in direct impacts to special-status plant species due to removal of individuals or crushing by heavy equipment. No special-status plants were incidentally observed during the reconnaissance-level field survey, which was conducted in May 2021, within the spring blooming period when many species are identifiable. A total of 45 special-status plant species are known to occur in the region, but no special-status plants are expected to occur within the project site (Appendix B). The project would have no impact to special-status plants.

Special-Status Wildlife

No federal or State-listed or other special-status wildlife species were observed during the field survey. Of the 32 species evaluated, two species had a low potential to occur and three species had a moderate potential to occur. California red-legged frog (*Rana draytonii*) and Monterey shrew (*Sorex ornatus salarius*) had a low potential to occur. Coast range newt (*Taricha torosa*), western pond turtle (*Emys marmorata*), and western burrowing owl (*Athene cunicularia*) had a moderate potential to occur in the study area. For the purposes of this analysis, special-status species with low potential to occur will not be addressed further. No other special-status species are expected to occur in the project site. This is due to a lack of species-specific habitat requirements on site and the overall lack of suitable habitat such as natural vegetation communities or natural wetland habitats (e.g., marshes or seeps). The project site is relatively small and isolated by development from any natural habitats. As such, it does not support a prey base for larger predators/raptors and lacks connectivity to regional populations of special-status species.

Nesting Birds

The site contains nesting bird habitat (Appendix B). If nesting birds protected by the CFGC or MBTA are present on site during construction, direct effects could include injury or mortality from construction activity, or nest abandonment from construction noise, dust, and other project activities. The loss of an active nest would be a violation of the MBTA and CFGC Sections 3503 and 3513 and Mitigation Measure BIO-1 is required for the protection of all nesting avian species that have the potential to occur on or adjacent to the project site.

Coast Range Newt

Suitable aquatic breeding habitat for coast range newt is present adjacent to the project site within the unnamed reclamation ditch, and there is moderate potential for this species to occur within the project site (Appendix B). If coast range newts are present on site during construction, direct effects could include injury or mortality from construction activity. Loss of coast range newt individuals would be a violation of the California Fish and Game Code, and Mitigation Measure BIO-2 is required. With Mitigation Measure BIO-2, impacts would be reduced to a less than significant level.

Western Pond Turtle

Western pond turtle has potential to occur along the adjacent ditch and within the nonnative grassland habitat (Appendix B). If western pond turtles are present on site during construction, direct effects could include injury or mortality from construction activity. Loss of western pond turtles would be a violation of the California Fish and Game Code, and Mitigation Measure BIO-3 is required for the protection of western pond turtles. With Mitigation Measure BIO-3, impacts would be reduced to a less than significant level.

Western Burrowing Owl

Suitable western burrowing owl habitat is present in annual grassland, and ruderal habitat throughout the project site, within the nearby park, and along the adjacent reclamation ditch. Even though there is a lack of burrows and a high degree of disturbance on site, nearby suitable habitat provided by adjacent open space and reclamation ditch increases the likelihood of western burrowing owl occupying the project site. Therefore, the species is determined to have a moderate potential to occur within the project site (Appendix B). Impacts to western burrowing owls would be limited to construction activities that would directly affect an occupied burrow, such as (temporarily or permanently damaging or destroying the burrow), or construction activities that would disrupt active breeding or wintering owls within 500 feet of the site. Because of the lack of suitable burrows within the project site, direct impacts to active burrows are unlikely; however, burrows could still be on-site and owls could then be disturbed by construction noise and human activity and might abandon active burrows, including during breeding. Loss of western burrowing owls would be a violation of the California Fish and Game Code, and Mitigation Measure BIO-4 is required for the protection of western burrowing owls. With Mitigation Measure BIO-4, impacts would be reduced to a less than significant level.

Mitigation Measure

BIO-1 Nesting Bird Surveys and Avoidance

To avoid disturbance of nesting and special-status birds or migratory species protected by the MBTA and Sections 3503, 3503.5, and 3513 of the CFGC, activities related to the project site development, including, but not limited to, vegetation removal, shall occur outside of the bird breeding season (February 1 through August 30). If ground disturbance, vegetation removal or heavy equipment work must begin within the nesting season, then the project applicant shall submit evidence to the City that a qualified biologist conducted a pre-construction nesting bird survey within 14 days of the start of construction. The nesting bird pre-construction survey shall be conducted within the disturbance footprint and a 300-foot buffer.

If nests are found, an avoidance buffer shall be established by a qualified biologist. The buffer shall be established to ensure nesting activity is not disturbed by construction activity, and shall be determined by the qualified biologist based on the species' known tolerances, the proposed work activity, and existing disturbances associated with land uses outside of the site. The buffer shall be demarcated by the biologist with bright construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting has completed, and the young have fledged the nest, or the nest has become otherwise inactive. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

BIO-2 Coast Range Newt Survey and Avoidance

Pre-construction clearance surveys for coast range newt shall be conducted within 14 days prior to the start of construction (including staging and mobilization), the surveys shall cover the entire disturbance footprint. A wildlife exclusion fence shall be placed along the top of bank of the adjacent ditch and maintained regularly to deter wildlife from entering the project area during construction. The project applicant shall submit evidence to the City that a qualified biologist conducted pre-construction clearance surveys for coast range newt no more than 14 days prior to the start of construction.

BIO-3 Western Pond Turtle Clearance Surveys and Avoidance

Pre-construction clearance surveys for western pond turtle shall be conducted, the surveys shall cover the entire disturbance footprint. A wildlife exclusion fence shall be placed along the top of bank of the adjacent ditch and maintained regularly to deter wildlife from entering the project area during construction. The project applicant shall submit evidence to the City that a qualified biologist conducted pre-construction clearance surveys for western pond turtle no more than 14 days prior to the start of construction.

BIO-4 Western Burrowing Owl Surveys and Avoidance

The project applicant shall submit evidence to the City that a qualified biologist conducted pre-construction clearance surveys prior to ground disturbance activities within suitable natural habitats and ruderal areas throughout the project site, to confirm the presence/absence of active western burrowing owl burrows. The surveys shall be consistent with the recommended survey methodology provided by CDFW (2012). Clearance surveys shall be conducted within 30 days prior to construction and ground disturbance activities. If no western burrowing owls are observed, no further actions are required. If western burrowing owls are detected during the pre-construction clearance surveys, the following measures shall apply:

- Avoidance buffers during the breeding and non-breeding season shall be implemented in accordance with the CDFW (2012) and Burrowing Owl Consortium (1993) minimization mitigation measures.
- If avoidance of western burrowing owls is not feasible, then additional measures such as passive relocation during the nonbreeding season and construction buffers of 200 feet during the breeding season shall be implemented, in consultation with CDFW. In addition, a Western Burrowing Owl Exclusion Plan and Mitigation and Monitoring Plan shall be developed by a qualified biologist in accordance with the CDFW (2012) and Burrowing Owl Consortium (1993).

Significance After Mitigation

These measures would reduce impacts to nesting birds, coast range newt, western pond turtle, and western burrowing owls to less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

No CDFW listed sensitive natural communities or riparian habitats are present within the project site. Any riparian habitat correlating with the adjacent reclamation ditch is outside the project limits. Therefore, no impacts to sensitive natural communities are expected. Scattered trees on the site do not constitute woodland. Ruderal vegetation cover, such as that found at the site, is not considered a sensitive natural community. Therefore, the project would have no impact on riparian habitat or other sensitive natural communities.

NO IMPACT

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

No jurisdictional waters or wetlands exist within the project site and no direct impacts are anticipated. However, potentially jurisdictional nearby waterways. Future project activities could include grading, excavation, and removal of soil. However, pursuant to the City of Salinas Zoning Code Section 37-50,180(h), a 100-foot setback area would be required from the top of the bank of the reclamation ditch in which no building or development could occur. Furthermore, the project would be required to comply with the City of Salinas General Plan Policies COS-17 and COS-18 which require developments to protect wetland and riparian areas through a 100-foot setback and implement a riparian/wetland habitat mitigation and management plan. Development activities may be considered within the setback area if a City Planner determines the encroachment to be minor and a Biotic Resources Study has determined that the proposed encroachment would not result in significant adverse impacts to the applicable creek or wetland because the implementation of alternative mitigation measures would achieve a comparable or better level of mitigation than the strict application of the 100-foot setback. As stated in the Biological Resources Assessment prepared for the project (Appendix B), a 30-foot reduced setback would be appropriate for this site, as implementation of the SWPPP and erosion control measures (outlined below) would be equally as protective as a 100-foot setback.

Development of the project site would disturb more than one acre of land, which would mandate implementation of a National Pollutant Discharge Elimination System (NPDES)-compliant Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would include Best Management Practices (BMP) to prevent and retain stormwater runoff and to prevent soil erosion. Such BMPs could include checking vehicles daily for leaks, maintaining vehicles in good working order, providing spill kits, preparing a spill response plan, and sediment and erosion control measures (e.g., straw wattles, silt fending, check dams).

With mandatory implementation of the SWPPP and erosion control measures, a 30-foot reduced setback would be appropriate for the site and impacts to the potentially jurisdictional reclamation ditch would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Wildlife movement corridors are generally linear and consist of things such as coastlines, riverways and riparian zones. Additionally, some wildlife species may move through certain corridors in response to topography, such as a canyon through rugged mountains, or in response to its prey. The adjacent reclamation ditch is a potential wildlife movement corridor, as it passes through the urban landscape. It is not located within the boundaries of the project site. The additional development from the project would not affect wildlife utilizing the reclamation ditch as a movement corridor. Additionally, as described under criterion (c) above, impacts to the off-site reclamation ditch would be less than significant. Therefore, no impacts to wildlife movement corridors would occur.

NO IMPACT

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

The Salinas General Plan Conservation and Open Space Element includes Policy COS-5.1, which aims to "protect and enhance creek, corridors, river corridors, the reclamation ditch, sloughs, wetlands, hillsides, and other potentially significant biological resources for their value in providing visual amenity, flood protection, habitat for wildlife and recreational opportunities" (City of Salinas 2002b). The project would be consistent with Policy COS-5.1 as the project would adhere to applicable regulations and implement mitigation measures to reduce potential impacts to a less than significant level, as described under criteria (a) through (d), above.

SMC Chapter 35 sets forth regulations and provisions pertaining to the planting, maintenance, and removal of trees and shrubs in Salinas. According to SMC Section 35.1, the City defines a heritage and/or landmark tree as 1) an oak tree that is at least 24 inches in diameter at two feet above the ground surface; or 2) an oak tree that is visually significant, historically significant, or exemplary in its species. SMC Section 35.18 prohibits the removal of heritage or landmark trees from City property unless approved by the City's Public Works Director. Heritage and landmark trees do not occur within the project site, and development facilitated by the project would not result in the removal of heritage or landmark trees.

Pursuant to SMC Section 35.9, no person shall root-trim, trim, prune, plant, injure, remove, or interfere with any tree, shrub or plant upon any street, parkway or alley in the City without written permission from the City's Public Works Director. No trees protected by this policy exist within the project site, therefore the proposed project would not conflict with the SMC, as applicable. In addition, Mitigation Measures BIO-1, through BIO-4 would be implemented to reduce potential impacts. Therefore, impacts would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

The project site is not located within a Habitat Conservation Plan or Natural Community Conservation Plan area. Therefore, the proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	□	□	□	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	□	■	□	□
c. Disturb any human remains, including those interred outside of formal cemeteries?	□	□	■	□

A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (*CEQA Guidelines* Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code [PRC] Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

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

In August 2021, Rincon Consultants, Inc. prepared a cultural resources study (Appendix C) for the project, which included: a cultural resources records search at the California Historical Resources Information System Northwest Information Center (NWIC) located at Sonoma State University; a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; a pedestrian field survey; and historical topographic map and aerial imagery review.

The NWIC records search was performed to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed were the National Register of Historic Places (NRHP), the CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historical maps.

The NWIC records search identified 39 cultural resources studies conducted within a 0.5-mile radius of the project site, one of which evaluated portions of the project site. The NWIC search identified 16 previously recorded cultural resources within a 0.5-mile radius of the project site, none of which occur within the project site.

Rincon contacted NAHC on May 17, 2021, to request an SLF search of the project site. The NAHC emailed a response to the City on June 1, 2021, stating the SLF search was positive, meaning tribal heritage resources are noted in the project site vicinity. However, SLF searches are conducted by USGS quadrangle map, each of which covers an approximately 50- to 70-square-mile area, and the NAHC does not provide the specific location of tribal heritage resources. Therefore, a positive SLF search alone does not necessarily indicate the presence of tribal heritage resources within the immediate vicinity of the project site, as discussed further within Environmental Checklist Section 18, *Tribal Cultural Resources*.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. Historical topographic maps from 1910 to 1964 depict the project site as undeveloped surrounded by a channelized creek to the west, south, and north (USGS 2021; NETR Online 2021). Historical topographic maps from 1970 to 1984 depict a structure added within the southeastern portion of the project site (NETR Online 2021). Aerial imagery from 1956 to 2005 depicts the project site as graded with a structure identified in the topographic maps, with housing development growing to the east and the water source as depicted on the topographic maps (NETR Online 2021). By 2009, the aerial imagery shows that the structure is no longer present, and vegetation has developed throughout the project site. Aerial imagery from 2012 depicts the project site in its current state, as graded with residential housing to the east and a channelized canal to the west, south, and north.

The background research and pedestrian field survey did not identify any historical resources within the project site. No built environment resources are present that may be impacted by the project; therefore, the project would not cause a substantial adverse change in the significance of a historical resource. There would be no impact

NO IMPACT

b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The site has been disturbed by the previous development and demolition of a structure from 1970 to 2009. Additionally, the project site was previously used as a staging area, and the City stated that the owner grants access to the project site which has led to further disturbance (City of Salinas 2021a).

Rincon conducted a pedestrian survey of the project site in August 2021. The pedestrian survey consisted of a series of transects oriented generally north-south and east-west, spaced no more than 15 meters apart across the project site. Areas of exposed ground were inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features that indicate the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances, such as burrows, and drainages were also visually inspected. Ground visibility within the project site ranged from poor along the perimeter (less than five percent) to excellent (greater than 95 percent) within the center. No archaeological resources were identified during the pedestrian survey.

Although the SLF search was returned with positive results, no archaeological resources were identified within the project site through the NWIC records search or Rincon's pedestrian survey. Given the negative results of Appendix C, the project site is considered to have low archaeological sensitivity. However, it is possible that unanticipated archaeological deposits could be encountered and damaged during the ground-disturbing activities associated with future construction (such as grading and excavation), especially if those activities occur in less-disturbed buried sediments. Consequently, mitigation is necessary to ensure that potential impacts to archaeological resources are reduced to a less than significant level.

Mitigation Measure

CUL-1 Unanticipated Discovery of Cultural Resources

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

If data recovery is required, a Phase III data recovery program plan shall be prepared in accordance with California Office of Historic Preservation's (1990) Archaeological Resource Management Reports (ARMR): Recommended Contents and Format, PRC Section 21083.2, and *CEQA Guidelines* Section 15126.4(b). The plan shall include a discussion of relevant research questions that can be addressed by the resource; methods used to gather data, including data from previous studies;

laboratory methods to analyze the data; an assessment of artifacts recovered and any corresponding field notes, graphics, and lab analyses; and results of investigations.

Cultural materials collected from the site shall be processed and analyzed in a laboratory according to standard archaeological procedures. The age of archaeological resources shall be determined using radiocarbon dating or other appropriate procedures. Lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated an appropriate curation facility to be determined on a case-by-case basis in consultation with the City and interested tribal organizations. As applicable, the final Phase I Inventory, Phase II Testing and Evaluation, and/or Phase III Data Recovery reports shall be submitted to the City prior to ground-disturbing activities.

Significance After Mitigation

Mitigation Measure CUL-1 would ensure that impacts to unanticipated cultural resources would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The cultural resources records search did not identify cemeteries or archaeological resources containing human remains within the site. However, the discovery of human remains is always a possibility during ground disturbances, as would be required for future development within the site. Human burials outside of formal cemeteries often occur in prehistoric archaeological contexts. In addition to being potential archaeological resources, human burials have specific provisions for treatment in PRC Section 5097. Additionally, the California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protects them from disturbance, vandalism, or destruction. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and establishes the NAHC as the entity to resolve any related disputes.

If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with PRC Section 5097.98 and State of California Health and Safety Code Section 7050.5 would ensure impacts to human remains are less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

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

Environmental Setting

As a state, California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Most of California's electricity is generated in state with approximately 28 percent imported from the northwest and southwest in 2019; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a and 2021b). In addition, approximately 32 percent of California's electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill 100 accelerated the state's Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 60 percent by 2030 and 100 percent by 2045. Electricity and natural gas service would be provided to the project by Central Coast Community Energy (3CE) through Pacific Gas & Electric (PG&E) infrastructure. Table 6 summarizes the electricity and natural gas consumption for Monterey County, in which the project site would be located, and for PG&E, as compared to statewide consumption.

Table 6 2020 Electricity and Natural Gas Consumption

Energy Type	Monterey County	PG&E	California	Proportion of PG&E Consumption	Proportion of Statewide Consumption[1]
Electricity (GWh)	2,434	78,519	279,510	3%	1%
Natural Gas (millions of therms)	110	4,509	12,332	2%	1%

GWh = gigawatt-hours
[1] For reference, the population of Monterey County (437,318 persons) is approximately 1.1 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).
Source: CEC 2021c

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2021d). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2021e). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.7 billion gallons sold in 2021e (CEC 2021e). Table 7 summarizes the petroleum fuel consumption for Monterey County in which the project site would be located, as compared to statewide consumption.

Table 7 2020 Annual Gasoline and Diesel Consumption

Fuel Type	Monterey County (gallons)	California (gallons)	Proportion of Statewide Consumption[1]
Gasoline	141	12,572	1%
Diesel	22	1,744	1%

[1] For reference, the population of Monterey County (437,318 persons) is approximately 1.1 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).
Source: CEC 2021e

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 8, *Greenhouse Gas Emissions*, respectively.

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project would use nonrenewable and renewable resources for construction and operation of the project. The anticipated use of these resources is detailed in the following subsections. The CalEEMod outputs for the air pollutant and GHG emissions modeling and default trip generation information from the CalEEMod outputs (Appendix A) were used to estimate energy consumption associated with the project.

Construction Energy Demand

The project would require site preparation and grading, including hauling material off-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. As shown in Table 8, project construction would require approximately 7,967 gallons of gasoline and approximately 31,830 gallons of diesel fuel. These construction energy estimates are conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 8 Estimated Fuel Consumption during Construction

	Fuel Consumption (gallons)	
Source	**Gasoline**	**Diesel**
Construction Equipment & Hauling Trips	N/A	31,830
Construction Worker Vehicle Trips	7,967	N/A

N/A = not applicable

See Appendix A for energy calculation sheets.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the U.S. EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as the California Green Building Standards Code (CALGreen), the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and construction impacts related to energy consumption would be less than significant.

Operational Energy Demand

Operation of the project would contribute to regional energy demand by consuming electricity, natural gas, and gasoline and diesel fuels. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, and water and wastewater conveyance, among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by customers and employees. Table 9 summarizes estimated operational energy consumption for the project. As shown therein, project operation would require approximately 48,355 gallons of gasoline and 9,371 gallons of diesel for transportation fuels, 0.32 GWh of electricity, and 11,637 U.S. therms of natural gas. Vehicle trips associated with future residents would represent the greatest operational use of energy associated with the project.

Table 9 Estimated Project Annual Operational Energy Consumption

Source	Energy Consumption[1]	
Transportation Fuels		
Gasoline	48,355 gallons	5,309 MMBtu
Diesel	9,371 gallons	1,194 MMBtu
Electricity	0.32 GWh	1,082 MMBtu
Natural Gas Usage	11,637 U.S. therms	637 MMBtu

MMBtu = million metric British thermal units; GWh = gigawatt-hours

[1] Energy consumption is converted to MMBtu for each source

See Appendix A for energy calculation sheets and Appendix A for CalEEMod output results for electricity and natural gas usage.

The project would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations Title 24), which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. In addition, the 2019 Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. Also, per CALGreen, all plumbing fixtures used for the project would be high-efficiency fixtures, which would minimize the potential the inefficient or wasteful consumption of energy related to water and wastewater.

Furthermore, the project would increase housing density near to existing commercial uses and the Salinas Transit Center, which is less than one mile south of the project site. The Salinas Transit Center has Amtrak train services, Greyhound bus services, and Monterey-Salinas Transit (MST) bus services. Both Amtrak and Greyhound have routes that travel across the California and the United States. The MST system has bus routes from Watsonville to King City. Several MST bus stops are also along North Main Street and West Rossi Street, which are within walking distance of the project site. The bus stops are for routes 23, 29, 44, 49, and 95. These routes all have stops at the Salinas Transit Center. These factors would minimize the potential of the project to result in the wasteful, inefficient, or unnecessary consumption of vehicle fuels.

Based on the estimated operational energy consumption, the energy efficiency requirements under Title 24, and the project site's proximity to public transit, project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The City of Salinas has not adopted any renewable energy or energy efficiency plan. However, the City's Conservation/Open Space Element in the General Plan contains policies which seek to encourage energy conservation (City of Salinas 2002b). As demonstrated in Table 10 the project would not conflict with the energy-related policies of the City's General Plan. The project would be required to comply with the nonresidential mandatory measures in the 2019 CALGreen, which would reduce energy consumption compared to standard building practices. The project would also be required to comply with the energy standards in the California Building Energy Efficiency Standards. Project design features that would help meet these energy standards include low-flow plumbing fixtures, water-efficient irrigation systems, rooftop photovoltaic solar panels, and energy-efficient lighting. Compliance with these regulations would avoid potential conflicts with adopted energy conservation plans. Therefore, the project would result in no impact.

Table 10 Project Consistency with Applicable General Plan Policies

Policy	Consistency
Policy COS-8.1: Enforce State Title 24 building construction requirements	**Consistent.** Future development facilitated by the project would be required to comply with the latest iteration of Title 24 standards.
Policy COS-8.2: Apply standards that promote energy conservation in new and existing development	**Consistent.** Future development facilitated by the project would be required to comply with the California Building Energy Efficiency Standards and the California Green Building Standards code, which include energy conservation measures.
Policy COS-8.6: Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.	**Consistent.** The project would facilitate the construction of up to 76 residential units on vacant parcels. The demolition of neighborhood services would not occur as part of the project. Neighborhood-level services in the vicinity of the sites include Chin Brothers Grocery & Liquor (on North Main Street), and the Salvation Army Thrift Store and Donation Center (on North Main Street). The project's proximity to existing neighborhood-level services would reduce reliance on automobile energy consumption, in addition to nearby commercial services walkable from the project site.

Source: City of Salinas 2002b

NO IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

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

The site is not located within an identified earthquake fault zone as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map (California Department of Conservation [DOC] 2016b). No known fault lines are located on the site. The closest active fault is the San Andreas Fault, which is located approximately 14.6 miles northeast of the site. Thus, the likelihood of surface rupture occurring from active faulting at the site is remote.

While no faults have been mapped within the City of Salinas itself, the city and surrounding areas could still experience damage from strong seismic shaking and the site is in a zone of very high seismic hazards (City of Salinas 2002b). The City's General Plan (2002) includes goals and policies meant to address earthquake risk in the city, including the following:

Goal S-4: Reduce the risk to the community from seismic activity, geologic conditions, flooding, and other natural hazards.

Policy S-4.1: During the review of development proposals, investigate and mitigate geologic and seismic hazards, or require that development be located away from such hazards, in order to preserve life and protect property.

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

Despite the potential for ground shaking, future development at the site would be required to meet the current CBC seismic-resistance standards that ensure new structures are engineered to withstand the expected ground acceleration at any given location. Additionally, adherence to the General Plan policies described above would require new development to investigate and mitigate potential seismic hazards or to locate development away from these hazards. Compliance with all applicable provisions of state and local construction and designs standards, and implementation of the recommendations of the preliminary geotechnical investigation prepared for the a given development project would reduce the risk of loss, injury, or death due to strong seismic ground shaking. Impacts would be less than significant.

Liquefaction is a condition that occurs when unconsolidated, saturated soils change to a near-liquid state during ground shaking. The City primarily experiences earthquake hazards in the form of liquefaction, due to recently deposited sands and silts in areas of high groundwater levels (City of

Salinas 2002b). The liquefaction susceptibility is mapped as high for the site and mapped as low for surrounding areas (County of Monterey 2020). However, as required by Policy S-4.1, the future project applicant would investigate geologic and seismic hazards, including those related to liquefaction, and would be required to comply with recommendations included in the seismic report. Identification of geologic and seismic hazards would be confirmed by the City during review of development proposals. Additionally, the CBC includes specific requirements to address liquefaction hazards, including but not limited to over excavation, recompaction, and/or replacement of fill to minimize liquefaction potential. Required geotechnical investigations performed for future proposed development at the project site would also make site-specific design recommendations to minimize impacts related to liquefaction. Future development at the site would be required to conform to the CBC (as amended at the time of permit approval) as required by law. Compliance with the CBC would result in less than significant impacts related to seismic-related ground failure and liquefaction.

The site is relatively flat and is not located within a mapped landslide area; therefore, there is a very low potential for landslides on the site (County of Monterey 2020). Additionally, with modern construction and adherence to the geology and soil provisions of the CBC, which sets forth seismic design standards (Chapters 16, 18) and geohazard study requirements (Chapter 18), impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The site is currently undeveloped and generally flat, which limits the potential for substantial soil erosion. However, the project would facilitate future higher-density housing development at the site. Construction activities associated with future development could result in erosion or loss of topsoil.

The grading and excavation phase, when soils are exposed, has the highest potential for erosion. However, new development would be required to comply with Salinas Zoning Code Section 29-15(d), Best Management Practices for Construction Sites, which requires all construction to comply with the City’s Standards to Control Excavations, Cuts, Fills, Clearing, Grading, Erosion and Sediments. All projects requiring a grading permit are required to submit to the City a SWPPP for control of erosion and stormwater runoff quality during construction. These standards provide direction concerning erosion control, including keeping debris and dirt out of the city’s storm drain system, including the reclamation ditch, during construction, requiring submittal of a SWPPP, and requiring low impact development strategies or structural treatment control BMPs.

Additionally, future development would be required to obtain coverage under the statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ (Construction General Permit), administered by the State Water Resources Control Board (SWRCB). Environmental Checklist Section 10, *Hydrology and Water Quality* describes how coverage under the NPDES Permit would require implementation of a SWPPP and various BMPs to reduce erosion and loss of topsoil during site construction. Compliance with the NPDES permit and identified BMPs and with appropriate sections of the Salinas Grading Code of Ordinances would ensure impacts related to erosion and loss of topsoil would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils have the potential to cause damage to structures through soil movement as the soil changes volume in response to changes in the water content. The site is primarily underlain by Clear Lake clay, Xerorthents loamy which range from moderate to very high expansive soils, as it has a moderate to very high shrink-swell potential (NRCS 2020). The City of Salinas Code of Ordinances requires a soils report for all development projects that investigates soil expansion potential and proposes mitigation for critically expansive soils (Section 31-402.5[b]). Potential mitigation for expansive soils could include but is not limited to over excavation, recompaction, and/or replacement of fill to minimize liquefaction potential. Future soil investigations performed for development at the project site would also make-site specific design recommendations to minimize impacts related to expansive soils. Project construction would be required comply with the CBC and City of Salinas Code of Ordinances, as applicable, which would ensure construction on potentially expansive soils is designed to withstand potential soil movement. Therefore, the project would not create substantial direct or indirect risks to life or property due to expansive soil, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Future development facilitated by the proposed rezoning would be connected to the local wastewater treatment systems and would not require the installation of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The paleontological sensitivities of the geologic units underlying the project site were evaluated to determine if development facilitated project could result in significant impacts to paleontological resources. The analysis was based on the results of an online paleontological locality search and review of existing information in the scientific literature concerning known fossils within geologic units mapped within the project sites. Fossil collections records from the Paleobiology Database and University of California Museum of Paleontology (UCMP) online database were reviewed for known fossil localities in Monterey County (Paleobiology Database 2021; UCMP 2021). Based on the available information contained within existing scientific literature and the UCMP database, paleontological sensitivities were assigned to the geologic units underlying the site. The potential for impacts to scientifically important paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology (SVP) has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources (SVP 2010). This system is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

The project site is situated within the Salinas Valley in the Coast Ranges Geomorphic Province, one of eleven major provinces in the California (California Geological Survey 2002). The Salinas Valley is bounded by the Gabilan and Santa Lucia mountain ranges to the east and west, respectively (California Geological Survey 2002; Norris and Webb 1990). The project site is entirely mapped at the surface by a single geologic unit: Quaternary young (middle to late Holocene) alluvium (Qa), which generally consists of unconsolidated to moderately consolidated alluvial gravel, sand, silt, and clay of valley areas and floodplains (Dibblee and Minch 2007).

Although not mapped within the project boundary, exposures of Quaternary old (early Holocene to Pleistocene) alluvium (Qoa) are prevalent throughout the Salinas Valley and underlie younger alluvial sediments at unknown depths within the project site (Dibblee and Minch 2007). The nearest exposure of Quaternary old alluvium is mapped approximately 100 feet northeast of the project site. Quaternary old (early Holocene to Pleistocene) alluvium consists of dissected, weakly to moderately indurated alluvial gravel, sand, and clay (Dibblee and Minch 2007).

Middle to late Holocene sedimentary deposits within the project site (e.g., Qa) are typically too young (i.e., less than 5,000 years old) to preserve paleontological resources and are determined to have a low paleontological sensitivity at the surface. However, older alluvial deposits are mapped at the surface not far from the project site, and the stratigraphic setting in the vicinity is indicative that Pleistocene (i.e., Qoa) units underlie the middle to late Holocene unit mapped at the surface at potentially shallow depths (Dibblee and Minch 2007).

Quaternary old deposits have a well-documented record of abundant and diverse vertebrate fauna throughout California, including Monterey County (Jefferson 2010; Paleobiology Database 2021; UCMP 2021). A search of the paleontological locality records at the UCMP resulted in 17 fossil localities, which yielded specimens of horse (*Equus*), ground sloth (*Glossotherium*), bison (*Bison*), and camel (*Camelops*), from Pleistocene-aged sediments in Monterey County (Paleobiology Database 2020; UCMP 2020). Therefore, in accordance with SVP guidelines, Quaternary old (early Holocene to Pleistocene) alluvium (Qoa) is assigned a high paleontological sensitivity.

Accurately assessing the boundaries between middle to late Holocene (i.e., Qa) and Pleistocene (i.e., Qoa) units is generally not possible without site-specific stratigraphic data, some form of radiometric dating, or fossil analysis. The depths at which these units become old enough to yield fossils is highly variable, but generally does not occur at depths of less than five feet based on the proximity of geologic units with high paleontological sensitivity (i.e., Qoa) mapped near the project site (Dibblee and Minch 2007).

Because the topography of the project site is generally flat, and no underground structures are envisioned, minimal grading and subsurface excavation would be required. The project site is in an urbanized area and has been previously developed. Given the nature of the proposed improvements and existing site conditions, project-related ground disturbance (i.e., excavations) is not anticipated to include ground disturbance greater than five feet in previously undisturbed areas and is thus unlikely to impact fossiliferous deposits. Although project implementation is not expected to uncover paleontological resources, there is still a possibility for such resources to be uncovered exists, and therefore there is potential the project could destroy a unique paleontological resource which would be potentially significant cannot be excluded.

Mitigation Measure GEO-1 is required to reduce impacts to paleontological resources in the case of unanticipated fossil discoveries. This measure would apply to all phases of project construction and would reduce the potential for impacts to unanticipated fossils present on site by providing for the recovery, identification, and curation of paleontological resources.

Mitigation Measure

GEO-1 Paleontological Resources Monitoring and Mitigation

For grading or excavation exceeding five feet in depth, the City of Salinas shall require the following:

1. **Qualified Paleontologist.** The project applicant shall retain a Qualified Paleontologist prior to excavations that will exceed five feet in depth. The Qualified Paleontologist shall direct all mitigation measures related to paleontological resources. A qualified professional paleontologist is defined by the Society of Vertebrate Paleontology (SVP) standards (SVP 2010) as an individual preferably with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least two years (SVP 2010).
2. **Paleontological Worker Environmental Awareness Program.** Prior to the start of construction, the Qualified Paleontologist or his or her designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.
3. **Paleontological Monitoring.** Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) of depths greater than five feet within native (previously undisturbed) sediments. Ground-disturbing activities that impact artificial fill (previously disturbed) sediments only do not require paleontological monitoring. Paleontological monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources and meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor. The duration and timing of the monitoring will be determined by the Qualified Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City of Salinas. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.

   In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources:

   a. **Salvage of Fossils.** If fossils are discovered, the paleontological monitor shall have the authority to halt or temporarily divert construction equipment within 50 feet of the find until the monitor and/or lead paleontologist evaluate the discovery and determine if the fossil may be considered significant. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically-sensitive Quaternary old alluvial deposits.

b. **Preparation and Curation of Recovered Fossils**. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the UCMP), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Paleontologist.

4. **Final Paleontological Mitigation Report**. Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City of Salinas Community Development Department. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Significance After Mitigation

Mitigation Measure GEO-1 would ensure that impacts to unanticipated paleontological resources would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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8 Greenhouse Gas Emissions

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

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. Most radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change 2014).[5]

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent,

[5] The Intergovernmental Panel on Climate Change's (2014) *Fifth Assessment Report* determined that methane has a GWP of 28. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

respectively, primarily due to human activity (U.S. EPA 2020b). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of 6 metric tons (MT) of CO_2e by 2030 and 2 MT CO_2e by 2050 (CARB 2017).

Other relevant state laws and regulations include:

- **SB 375**: The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Association of Monterey Bay Area Governments (AMBAG) was assigned targets of a 3 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2020 and a 6 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2035. AMBAG adopted the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (AMBAG MTP/SCS) in June 2022, which meets the requirements of SB 375.
- **SB 100**: Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.
- **California Building Standards Code (California Code of Regulations Title 24)**: The California Building Standards Code consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy

efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. Part 6 is the Building Energy Efficiency Standards, which establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. Part 12 is the CALGreen, which includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures.

Methodology

GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2020.4.0, with the assumptions described under Environmental Checklist Section 3, *Air Quality*, in addition to the following:

- **Amortization of Construction Emissions.** In lieu of guidance from MBARD to address construction GHG emissions, guidance from South Coast Air Quality Management District's (SCAQMD) is used for this analysis. Per SCAQMD recommendation, GHG emissions from construction of the proposed project were amortized over a 30-year period and added to annual operational emissions to determine the project's total annual GHG emissions (SCAQMD 2008).
- **Service Population.** The project's per person GHG emissions were calculated by dividing total GHG emissions by the project's service population (residents). Average household size varies throughout California; therefore, the service population attributed to this project is based on average household size data specific to Salinas. The average household size in the City of Salinas is 3.85 persons per household (California Department of Finance [DOF] 2021). As such, the project would potentially add an estimated 293 residents (76 units x 3.85 persons per unit) to the City.

Significance Thresholds

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines* Section 15064[h][1]).

According to *CEQA Guidelines* Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP; 2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. While the City has begun the process of preparing a Climate Action Plan, the City has not yet adopted a Climate Action Plan that can be used to evaluate the significance of project-level emissions. Additionally, MBARD has not provided quantitative thresholds that a lead agency within the NCCAB may use to evaluate GHG impacts associated with land use projects.

In the absence of local guidance, MBARD encourages lead agencies to consider a variety of metrics for evaluating GHG emissions and related mitigation measures as they best apply to the specific project (MBARD 2017). Starting in 2012, MBARD recommended potentially using the GHG thresholds for land use projects adopted by the adjacent San Luis Obispo Air Pollution Control District (SLOAPCD).

The SLOAPCD CEQA Air Quality Handbook includes a bright-line threshold and an efficiency threshold. However, per a 2021 memorandum published by SLOAPCD to address interim CEQA GHG guidance, the Air District designed its thresholds to achieve consistency with the statewide 2020 GHG reduction target set by AB 32 and has not yet updated the thresholds to achieve consistency with the statewide 2030 GHG reduction target set by SB 32 (SLOAPCD 2021). Thus, the bright-line threshold and efficiency threshold developed by SLOAPCD are not recommended for projects operational beyond 2020. Instead, the interim guidance from SLOAPCD recommends the following approaches:

1. Consistency with a Qualified Climate Action Plan pursuant to *CEQA Guidelines* 15183 and 15183.5.
2. No-net increase in GHG emissions relative to baseline conditions.
3. The Lead Agency adopts a defensible CEQA GHG threshold that meets local GHG emission targets with best management practices (e.g., the GHG threshold for Sacramento Metropolitan Air Quality Management District) or develop a SB 32 GHG bright-line threshold.

The first and second interim guidance approaches would not be applicable since the City of Salinas has not adopted a qualified CAP and the project would result in an increase in GHG emissions. Thus, this analysis evaluates the project's impact and consistency with statewide emissions targets using a locally appropriate, 2030 project-specific efficiency threshold as described below.

Project-Specific Efficiency Threshold

Efficiency thresholds are quantitative thresholds based on a measurement of GHG efficiency for a given project, regardless of the amount of mass emissions. Efficiency thresholds identify the emission level below which new development would not interfere with attainment of statewide GHG reduction targets. A project that attains such an efficiency target, with or without mitigation, would result in less than significant GHG emissions (AEP 2016). A locally appropriate 2030 project-specific threshold is derived from CARB's recommendations in the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan).

The State has codified a target of reducing emissions to 40 percent below 1990 emissions levels by 2030 (SB 32) and has developed the 2017 Scoping Plan to demonstrate how the State will achieve the 2030 target and make substantial progress toward the 2050 goal of an 80 percent reduction in 1990 GHG emission levels set by EO S-3-05. In EO B-55-18, which identifies a new goal of carbon neutrality by 2045 and supersedes the goal established by EO S-3-05, CARB has been tasked with including a pathway toward the EO B-55-18 carbon neutrality goal in the next Scoping Plan update.

With the release of the 2017 Scoping Plan, CARB recognized the need to balance population growth with emissions reductions and in doing so, provided a new local plan level methodology for target setting that provides consistency with state GHG reduction goals using per capita efficiency thresholds. A project-specific efficiency threshold can be calculated by dividing statewide GHG emissions by the sum of statewide jobs and residents. However, not all statewide emission sources would be impacted by the proposed land use (the project would facilitate residential development and no other land use types such as agriculture or industrial). Accordingly, consistent with the concerns raised in the *Golden Door Properties v. County of San Diego* (2018) and *Center for Biological Diversity v. California Department of Fish and Wildlife* ("Newhall Ranch" case, 2015) decisions regarding the correlation between state and local conditions, the 2030 statewide inventory target was modified with substantial evidence provided to establish a locally appropriate, evidence-based, mixed-use project-specific threshold consistent with the SB 32 target.

To develop the project-specific efficiency threshold, land use areas identified in the City of Salinas General Plan were first evaluated to determine emissions sectors that are present and would be directly affected by potential land-use changes. A description of major sources of emissions that are included in the 2017 Scoping Plan emissions sectors and representative sources in Salinas are shown in Table 11.

According to the City's General Plan Land Use Map, agricultural lands exist within the City; however, Agricultural Sector source emissions would not be directly impacted by the proposed land uses. Similarly, industrial lands exist within the City; however, the Industrial Sector source emissions as specified in the 2017 Scoping Plan (i.e., oil, gas, and hydrogen production; refineries; general fuel use; and mining operations) do not occur substantially on industrial lands and would not be directly impacted by the proposed land uses.[6] Therefore, the agricultural and industrial emissions sectors were removed from the State 2030 emissions forecast to retain a more conservative locally appropriate target.

After removing Agricultural and Industrial emissions, the remaining emissions sectors with sources within the City of Salinas planning area were then summed to create a locally appropriate emissions total for a mixed-use project in Salinas, as shown in Table 11. This locally appropriate emissions total was divided by the statewide 2030 service person population to determine a locally appropriate, project-level threshold of 2.4 MT CO_2e per service population that is consistent with SB 32 targets, as shown in Table 12.

While State and regional regulators of energy and transportation systems, along with the State's Cap-and-Trade program, are designed to be set at limits to achieve most of the reductions needed to hit the State's long-term targets, local governments can do their fair share toward meeting the State's targets by siting and approving projects that accommodate planned population growth and projects that are GHG-efficient. The AEP Climate Change Committee recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory of state climate change legislation and assess their "substantial progress" toward achieving long-term reduction targets identified in available plans, legislation, or Eos (AEP 2016). Consistent with AEP Climate Change Committee recommendations, GHG impacts are analyzed in terms of whether the anticipated development would impede "substantial progress" toward meeting the reduction goal identified in SB 32 and EO B-55-18. As SB 32 is considered an interim target toward meeting the 2045 State goal, consistency with SB 32 would be considered contributing substantial progress toward meeting the State's long-term 2045 goals. Avoiding interference with, and making substantial progress toward, these long-term State targets is important because these targets have been set at levels that achieve California's fair share of international emissions reduction targets intended to stabilize global climate change effects and avoid the adverse environmental consequences, as noted in the 2017 Scoping Plan (CARB 2017).

[6] Light and general industrial land uses are present in Salinas; however, these land uses are mostly dedicated to agricultural product processing.

Table 11 SB 32 Scoping Plan Emissions Sector Targets

GHG Emissions Sector[1]	2030 State Emissions Target (MMT)[1]	Locally Appropriate[2]	Project Specific	Major Sources[3]
Residential and Commercial	38	Yes	Yes	Natural gas end uses, including space and water heating of buildings
Electric Power	53	Yes	Yes	Electricity uses, including lighting, appliances, machinery and heating
High Global Warming Potential	11	Yes	Yes	Sulfur hexafluoride (SF_6) from power stations, HFCs from refrigerants and air conditioning[4]
Recycling and Waste	8	Yes	Yes	Waste generated by residential, commercial, and other facilities
Transportation	103	Yes	Yes	Passenger, heavy duty, and other vehicle emissions
Industrial	83	No	No	Oil, gas, and hydrogen production, refineries, general fuel use, and mining operations do not occur substantially within the County
Agriculture	24	No	No	Enteric fermentation, crop residue burning, and manure management do not occur substantially within the County
Cap and Trade Reductions	-60	No	No	Reductions from facilities emitting more than 10,000 MT CO_2e per year[6]
Scoping Plan Target (All Sectors)	**260**	**No**	**No**	**All emissions sectors**
Locally Inapplicable Sector (Industrial)	-83	No	No	Oil, gas, and hydrogen production, refineries, general fuel use, and mining operations[5]
Locally Inapplicable Sector (Agriculture)	-24	No	No	Enteric fermentation, crop residue burning, and manure management[5]
2030 Locally Applicable Emissions Sectors	**153**	**Yes**	**Yes**	**Emissions applicable to the local planning area**

MMT = million metric tons

[1] All State targets in MMT CO_2e. See the 2017 Scoping Plan, page 31 for sector details (CARB 2017).

[2] Locally appropriate is defined as having significant emissions in Scoping Plan Categorization categories within the City of Salinas General Plan land use areas.

[3] See CARB GHG Emissions Inventory Scoping Plan Categorization for details, available at: **https://www.arb.ca.gov/cc/inventory/data/data.htm**

[4] SF_6 is used primarily as an insulator in electrical substations while HFCs can be found in many residential and commercial refrigeration and air conditioning units. HFCs are in the process of being phased out through 2036 in most developed countries.

[5] The majority of this sector is not applicable to the local planning area, and any potential applicable subsectors cannot be disaggregated due to CARB accounting methods. Therefore, the entire sector has been removed to ensure a more conservative target.

[6] Cap-and-Trade is excluded as reductions will occur independent of local project land use decisions and are therefore not locally appropriate.

Table 12 SB 32 Locally Appropriate Project-Specific Threshold

Threshold Source	Threshold Determination Variable	
2017 Scoping Plan	California 2030 Population (persons)[1]	41,028,749
	California 2030 Employment Projection (persons)[2]	23,459,500
	Service Population (Residents + Employees) (persons)[3]	**64,488,249**
Locally Appropriate Project Threshold	2030 Locally Appropriate Emissions Sectors (MT CO_2e)	153,000,000[4]
	2030 California Service Population (persons)	64,488,249
	2030 Service Person Target (MT CO_2e per Service Person)	**2.4**

[1] California Department of Finance 2020. Report P-1A: Total Population Projections, 2010-2060

[2] Average of employment range projections under implementation scenario. See CARB's 2017 Scoping Plan, page 55 (CARB 2017).

[3] This calculation double-counts residents of California who are employed in California; however, this results in a conservative calculation of the service person target as it results in a lower calculated target.

[4] See Table 11

Furthermore, as discussed below, this report also contains an analysis of how the project complies with other regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. For this project, the most directly applicable adopted regulatory plans to reduce GHG emissions are AMBAG's 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/ SCS), Assembly Bill (AB) 32, SB 32, EO B-55-18, the 2017 Scoping Plan, and the City's General Plan.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO_2, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects.

Construction of the proposed project would generate temporary GHG emissions primarily from the use of heavy construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. Total construction emissions would be 354 MT CO_2e. Amortized over a 30-year period per industry standard, construction-related GHG emissions would be equivalent to 12 MT CO_2e per year.

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., fireplaces, landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 13, annual operational emissions generated by the proposed project combined with amortized construction emissions would total approximately 447 MT CO_2e per year in 2030, or approximately 1.5 MT CO_2e per service person per year, which would not exceed the locally applicable, project-specific threshold of 2.4 MT CO_2e per year. Therefore, impacts would be less than significant.

Table 13 Combined Annual GHG Emissions

Emission Source	Annual Emissions (MT CO_2e per year)
Construction	12
Operational	
Area	1
Energy	55
Mobile	354
Solid Waste	18
Water	7
Total Emissions	**447**
Service Population (Residents)	**293**
Emissions per Service Person	**1.5**
Threshold (MT CO_2e per service population per year)	**2.4**
Threshold Exceeded?	**No**

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Several plans and policies have been adopted to reduce GHG emissions in the southern California region, including the State's 2017 Scoping Plan, AMBAG 2045 MTP/SCS, and local policies contained in the City's General Plan. The proposed project's consistency with these plans is discussed in the following subsections.

2017 Scoping Plan

The 2017 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation.

The project would be consistent with these goals through project design, which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards. The project would be served by 3CE for electricity and this utility provider is required to increase its renewable energy procurement in accordance with SB 100 targets. The project would be located in an area served by the Monterey-Salinas Transit (MST) bus service, which provides stops from Watsonville to King City. There are bus stops along North Main Street and West Rossi Street, which are within walking distance of the project site. The bus stops are for routes 23, 29, 44, 49, and 95. These routes all have stops at the Salinas Transit Center, which provides Amtrak train services, and Greyhound bus services. The proximity to these public transit services would encourage future residents to reduce their VMT and associated fossil fuel usage. Furthermore, the project would be required to comply with the Senate Bill 1383, which requires that all residents and business compost organic waste (e.g., food, landscape material, and paper products) into organic waste collection services to divert organic waste from being disposed of in landfills. For these reasons, the project would be consistent with the 2017 Scoping Plan.

Consistency with the AMBAG 2045 MTP/SCS

AMBAG adopted an updated MTP/SCS, *Moving Forward Monterey Bay 2045*, in June 2022. AMBAG prepares a long-range transportation plan every four years consistent with state and federal laws. The MTP/SCS is reflective of legislation SB 375 described in the *Regulatory Setting* above, to focus land use development around high-quality transit corridors as a means to reduce passenger vehicle GHG emissions.

AMBAG's 2045 MTP/SCS contains three goals that would apply to the proposed project:

- **Access and Mobility**. Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region
- **Economic Vitality.** Raise the region's standard of living by enhancing the performance of the transportation system.
- **Environment.** Promote environmental sustainability and protect the natural environment.
- **Healthy Communities**. Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices and encourage active transportation.
- **Social Equity.** Provide an equitable level of transportation services to all segments of the population.
- **System Preservation and Safety**. Preserve and ensure a sustainable and safe regional transportation system.

The project would facilitate future residential development of up to 76 dwelling units near existing residences, commercial uses, and public transit. The Salinas Transit Center is one mile south of the site, within walking or biking distance. Along North Main Street and West Rossi Street (which are within 0.2 to 0.4 mile of the site, respectively) are the MST bus stops for routes 23, 29, 44, 49, and 95. Placing the project within proximity to the transit center would provide residents reliable travel options and encourage the use of public transit. The project is also less than one mile north of the Central City District and downtown Salinas. Thus, the site is close to existing employment/office buildings, and commercial development. As a result, public transit and alternative transportation modes such as bicycling and walking would be viable means of transportation, which would also reduce VMT. Therefore, the project would encourage new housing and an efficient use of land near alternate modes of transportation and would therefore be consistent with AMBAG's 2045 MTP/SCS.

Consistency with the City of Salinas General Plan

As noted in the discussion of *Regulatory Framework* above, while the City of Salinas General Plan does not contain specific GHG reduction policies, it does contain policies that encourage higher density development, energy efficiency, and multimodal transportation, that would reduce GHG emissions from new development. Table 14 summarizes the project's consistency with the City of Salinas General Plan goals and policies indirectly related to GHG emissions.

Table 14 Project Consistency with the City of Salinas General Plan

Policy	Consistency
Policy H-1.8: Encourage the development of higher density apartments, townhouses and condominiums served by major transit corridors or other non-automotive transport.	**Consistent.** The project would allow for the construction of higher-density housing on the project site of up to 76 units on the 2.6-acre site, in proximity to the Salinas Transit Center, which is less than one mile south of the project site. The Salinas Transit Center has Amtrak train services, Greyhound bus services, and the MST bus services. Both Amtrak and Greyhound have routes that travel across the California and the United States. The MST system has bus routes from Watsonville to King City.
Policy CD-3.8: Promote the use of alternative modes of transportation, including bus, rail, bicycling and walking. **Policy COS-8.5**: Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.	**Consistent.** The project would encourage the use of existing nearby public transit and would promote the use of alternative modes of transportation, due to the proximity to the Salinas Transit Center and MST bus stops. Therefore, the project would be consistent with these policies.
Policy COS-8.1: Enforce State Title 24 building construction requirements. **Policy COS-8.2**: Apply standards that promote energy conservation in new and existing development.	**Consistent.** Future development facilitated by the project would be required to comply with Title 24 standards, which promote energy conservation in new buildings. Therefore, the project would comply with these policies.

Source: City of Salinas 2002

In summary, the plan consistency analysis provided above demonstrates that the project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the 2017 Scoping Plan, AMBAG’s 2045 MTP/SCS, and the City of Salinas General Plan. Consistency with the above plans, policies, regulations and GHG reduction actions/strategies would reduce the project’s incremental contribution of GHG emissions. Therefore, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHG emissions. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☐	■
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	■

As a department of the California Environmental Protection Agency (CalEPA), the Department of Toxic Substances Control (DTSC) is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of Resource Conservation and Recovery Act (RCRA) and the California Health and Safety Code. DTSC also administers the California Hazardous Waste Control Law to regulate hazardous wastes.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and the California Department of Resources, Recycling, and Recovery (CalRecycle) to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection with CalEPA consolidates the information submitted by these agencies into a master list, referred to as the Cortese List. The Cortese List is distributed to each city and county where sites on the lists are located. The Cortese List is used by the State, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by DTSC, SWRCB, and CalRecycle.

If any soil is excavated from a site containing hazardous materials, it is considered a hazardous waste if it exceeds specific criteria in Title 22 of the CCR. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The proposed project would rezone the site to facilitate higher density residential development, including up to 76 new residential units. Future construction activities may include the temporary transport, storage, use, or disposal of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents, impacted groundwater, or contaminated soils. If spilled, these substances could pose a risk to the environment and to human health. However, the transport, storage, use, or disposal of hazardous materials is subject to various federal, state, and local regulations designed to reduce risks associated with hazardous materials, including potential risks associated with upset or accident conditions. Hazardous materials would be required to be transported under U.S. Department of Transportation (USDOT) regulations (USDOT Hazardous Materials Transport Act, 49 Code of Federal Regulations), which stipulate the types of containers, labeling, and other restrictions to be used in the movement of such material on interstate highways. In addition, the use, storage, and disposal of hazardous materials are regulated through RCRA. DTSC is responsible for implementing the RCRA program, as well as California's own hazardous waste laws, including the California Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations, Divisions 4 and 4.5). DTSC regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California. DTSC also oversees permitting, inspection, compliance, and corrective action programs to ensure that hazardous waste managers follow federal and State requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Compliance with existing regulations would reduce the risk of potential release of hazardous materials during demolition, dewatering, soil disturbance/grading, and construction.

The project would facilitate future construction of residential units on the site. Residential uses typically do not use or store large quantities of hazardous materials. Operation of the project would not involve the use, storage, transportation, or disposal of hazardous materials other than those typically used for household cleaning, maintenance, and landscaping. Therefore, operational impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

No schools are located within 0.25 mile of the project site. The nearest schools are Mount Toro High School and El Puente School located approximately 0.55 mile east of the site off Sherwood Drive. There would be no impact.

NO IMPACT

d. Would the project be located on a site that is included on a list of hazardous material 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?

The following databases were checked, pursuant to Government Code Section 95962.5, on June 11, 2021, for known hazardous materials contamination at parcels within a 0.25 radius of the site:

- Hazardous Waste and Substances site “Cortese” list (65962.5[a])
- GeoTracker: List of LUST Sites (65962.5[c][1])
- List of solid waste disposal sites identified by the Water Board (65962.5[c][2])
- List of “active” Cease and Desist Order and Cleanup Abatement Order sites (65962.5[c][3])

The project site is not listed on any of these databases, which were compiled pursuant to Government Code 65962.5. Both Envirostor and Geotracker identified several closed cleanup sites within 0.25 mile of the project site. The cleanup action reports and remediation status of these sites indicates that there is no potential for hazardous materials to impact the project site. Accordingly, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials within 0.25 mile of a school. There would be no impact.

NO IMPACT

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The site is not located within a public airport land use plan area or within two miles of a public airport. The Salinas Municipal Airport (SMS) is the closest airport to the site and there are no private airstrips in the vicinity of the site. SMS is a general aviation facility occupying 763 acres, with two runways serving single- and twin-engine aircraft and helicopters, as well as an increasing number of turbo-propeller and turbine engine business jets. The airport is located approximately 2.6 miles southeast of the site, and the site is located outside of the Airport Influence Area and Runway Protection Zone (Salinas Community Development Department 1982). Therefore, no impact related to airport safety would occur.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would facilitate the development of high-density housing on the site. The site is adequately served by local roadways, and the future development of the site would not require the construction of new roadways or obstruct existing roadways. In addition, local requirements and review procedures would ensure that new development facilitated by the project would not interfere with emergency response or evacuation. For example, new development is required to pay development fees, which would ensure adequate fire and police protection facilities are provided to maintain response time goals. The building permit application for future development on the site would be reviewed by the Department of Public Works and the Salinas Fire and Police Departments for potential problems with emergency access within the City. Therefore, the project would not result in buildings that would block emergency response or evacuation routes or interfere with adopted emergency response and emergency evacuation plans. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The site is located within an urbanized area of the City of Salinas and is primarily surrounded by existing urban development. Furthermore, the site is not within a Very High Fire Hazard Severity Zone (VHFHSZ) or an area of local responsibility (CAL FIRE 2007). Therefore, the project would not expose people or structures to a significant risk involving wildland fires. There would be no impact.

NO IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

The federal Clean Water Act establishes the framework for regulating discharges to Waters of the United States to protect their beneficial uses. The Porter-Cologne Water Quality Act regulates water quality within California and establishes the authority of the SWRCB and the nine Regional Water Quality Control Boards (RWQCBs). The SWRCB requires construction projects to provide careful management and close monitoring of runoff during construction, including on-site erosion protection, sediment management, and prevention of non-storm discharges. The SWRCB and RWQCBs issue NPDES permits to regulate specific discharges. The NPDES Construction General Permit regulates stormwater discharges from construction sites that disturb more than one acre of land.

The site overlies the Salinas Valley Groundwater Basin (SVGB), which extends from north of Marina and Salinas to the Monterey County/San Luis Obispo County line throughout the Salinas Valley. The site is within the 180-400 Foot Aquifer Subbasin of the SVGB, which covers 89,700 acres (140 square miles) of the SVGB. Groundwater is primarily recharged naturally through infiltration of surface water, deep percolation of excess irrigation water, and deep percolation of infiltrating precipitation. Recharge of the aquifer is limited due to the permeability of the Salinas Valley Aquitard, and there are no mapped springs, seeps, or discharge to streams identified in the Subbasin (SVBGSA 2020).

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Excavation, grading, and other activities associated with construction facilitated by the proposed project would result in soil disturbance that could cause water quality violations through potential erosion and subsequent sedimentation of receiving water bodies. Construction activities could also cause water quality violations in the event of an accidental fuel or hazardous materials leak or spill. If precautions are not taken to contain contaminants, construction activities could result in contaminated stormwater runoff that could enter nearby waterbodies. Construction activities resulting in ground disturbance of one acre or more are subject to the permitting requirements of the NPDES General Permit for Stormwater Discharges associated with Construction and Land Disturbance Activities (Construction General Permit Order No. 2009-0009-DWQ). The Construction General Permit requires the preparation and implementation of a SWPPP, which must be prepared before construction begins. The SWPPP includes specifications for BMPs implemented during project construction to minimize or prevent sediment or pollutants in stormwater runoff.

Construction facilitated by the project would comply with the requirements of the Construction General Permit. In addition, the contractor would be required to implement BMPs identified in the SWPPP to prevent construction pollution via stormwater and minimize erosion and sedimentation into waterways as a result of construction. Additionally, development facilitated the project would be required to comply with the City of Salinas MS4 Permit (Order No. R3-2019-0073, NPDES Permit No. CA0049981), which requires the volume of runoff from an 95th percentile storm event be retained on site through either retention basins or bioretention facilities. Development facilitated by the project would be required to include such facilities in the final design plans.

Compliance with the NPDES Construction General Permit would ensure the proposed project would not violate any water quality standards or water discharge regulations, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The site overlies the SVGB, 180-400 Foot Aquifer Subbasin. The Salinas Valley Basin Groundwater Sustainability Agency developed a Groundwater Sustainability Plan (GSP) for the subbasin, which was adopted in January 2020. The GSP describes current groundwater conditions, develops a hydrogeologic conceptual model, establishes a water budget, outlines local sustainable management criteria, and provides projects and programs for reaching sustainability in the Subbasin by 2040 (SVBGSA 2020).

The site is currently undeveloped and contains natural vegetation, bare soil, and soil stockpiles, located to the west of the termination of Preston Street. Topographically, the site and surrounding areas are relatively flat. The site is bounded by existing residential and commercial development on its eastern border, and to the other three sides by an open space reclamation ditch adjacent to a creek fed by Main Canal. Water supply to the site would be sourced from the local groundwater aquifer. The groundwater basin currently has issues with lowered groundwater elevations, seawater intrusion, and groundwater contamination.

As discussed in Environmental Checklist Section 19, *Utilities and Service Systems*, development facilitated by the project would increase demand for water above existing conditions on the site. The project's estimated water demand would be approximately 8,073,440 gallons per year or approximately 24.8 acre-feet per year (AFY) at full buildout (Appendix A). The project's water demands would be served by California Water Service-Salinas District (Cal-Water). Groundwater is the water source utilized by Cal-Water, with wells that extract water from five different groundwater basins, including the Corralitos-Pajaro Valley Subbasin, Salinas Valley-Langley Area Subbasin, Salinas Valley-180/400 Foot Aquifer Subbasin, Salinas Valley-East Side Aquifer Subbasin, and Salinas Valley-Monterey Subbasin. The project site's potential water demand would be less than 0.2 percent of Cal-Water Salinas District's 2025 water demand of 16,609 AFY (Appendix A). As discussed in Environmental Checklist Section 14, *Population and Housing*, the proposed project would not introduce an unplanned increase in population, and therefore the project's water supply needs are considered in the supply/demand estimates in the Salinas Valley Groundwater Basin 180/400-Foot Aquifer Subbasin Groundwater Sustainability Plan. Therefore, the project would not substantially deplete groundwater resources via water demand.

While development facilitated by the proposed project would construct new impervious surfaces that would prevent groundwater recharge in certain areas of the site, the project would be required to comply with the City of Salinas MS4 Permit (Order No. R3-2019-0073, NPDES Permit No. CA0049981), which requires the volume of runoff from an 95th percentile storm event be retained on site through either retention basins or bioretention facilities. Development would be required to include such facilities in the final design plans for the site, which would allow for the same volume of groundwater recharge on the site as existing conditions of the vacant site. Additionally, the project site is vacant but surrounded primarily by urban land uses consisting of Medium and Low Density residential neighborhoods to the west and north of the site, as well as commercial uses to the east along North Main Street. Impacts to groundwater recharge would be less than significant.

Because the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, the proposed project would not conflict with or obstruct implementation of the 180-400 Foot Aquifer GSP.

As discussed under criterion (a), the proposed project would not degrade surface or groundwater quality. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or groundwater management plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

   (i) Result in substantial erosion or siltation on- or off-site?

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

   (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

   (iv) Impede or redirect flood flows?

The site has been graded and contains natural vegetation, bare soil, and soil stockpiles. Development facilitated by the project would involve the construction of up to 76 units and stormwater drainage systems on the site. Construction would not substantially change the topography of the site. However, construction facilitated by the proposed project would include the addition of new impervious surfaces. Future development would be required to comply with the City of Salinas MS4 Permit (Order No. R3-2019-0073, NPDES Permit No. CA0049981), which requires the volume of runoff from an 95th percentile storm event be retained on site through either retention basins or bioretention facilities. Development facilitated by the project would be required to include such facilities in the final design plans for the site. Therefore, the project would not result in increased surface runoff that could result in flooding or exceed the capacity of existing stormwater drainage systems. Additionally, the project would not result in additional sources of polluted runoff.

As stated previously, construction facilitated by the project would be conducted in compliance with the State's Construction General Permit (Order No. 2009-0009-DWQ). Preparation of the SWPPP in accordance with the Construction General Permit would require erosion-control BMPs at the construction area. BMPs that are typically specified within the SWPPP may include, but would not be limited to, temporary measures during construction, revegetation, and structural BMPs. Therefore, the project would not result in substantial erosion or siltation during construction.

Construction and operational permitting requirements, including the NPDES Construction General Permit and City of Salinas MS4 Permit, would require erosion-control measures and the construction of on-site retention basins or bioretention facilities. These features would capture and treat stormwater runoff during construction and operation, ensuring no increase in erosion, siltation, surface runoff, or polluted runoff at the site.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the site and surrounding area is located within Flood Zone X, 0.2% Annual Chance Flood Hazard Area (FEMA 2009). Therefore, the project would not alter the flood zone boundaries, cause excess flooding downstream of the site, or impede or redirect flood flows. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

According to FEMA Flood Insurance Rate Maps, a majority of the site and surrounding area is located within Flood Zone X, 0.2% Annual Chance Flood Hazard Area (FEMA 2009). However, the site is bounded to the north, west, and southwest by a reclamation ditch which is located within a Flood Zone AE. Portions of the perimeter of the site are located within Flood Zone AE which is considered a Regulatory Floodway by FEMA. Future development within Flood Zone AE would be required to comply with the SMC Section 9-54.1, which states that all encroachments are prohibited, including fill, new construction, substantial improvement, and other new development unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in the base flood elevation during the occurrence of the base flood discharge, and a Conditional Letter of Map Revision is issued by FEMA. In addition, as discussed within Environmental Checklist Section 4, *Biological Resources*, the project would be required to comply with the City of Salinas Zoning Code Section 37-50.180(h) and General Plan Policy COS-17 which would require a 100-foot or 30-foot setback from the bank of the reclamation ditch.

The proposed project involves rezoning the project site, but no specific development proposal exists; therefore, there is not yet a proposed site plan. Any future development would be required to comply with the applicable provisions of the SMC and General Plan Policies outlined above, and development in Flood Zone AE would not be allowed without a Conditional Letter of Map Revision and certification by a registered professional engineer, as described above.

Furthermore, any materials stored on the site that could pollute runoff from flood events would be properly contained and stored per applicable local, state, and federal regulations (refer to Environmental Checklist Section 9, *Hazards and Hazardous Materials*, for additional information). There are no major water bodies within two miles of the site that could cause impacts from seiches on the site. Further, the site is not located in a tsunami inundation zone and there are no large bodies of water that could seiche and inundate the site (DOC 2020). Therefore, inundation of the site would not occur during the one-percent annual flood, the project would not release pollutants into floodwaters, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	□	□	□	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	□	□	■	□

a. Would the project physically divide an established community?

The site is surrounded primarily by urban land uses, including residential and commercial development. Development facilitated by the project would not require new roadways or other features that would divide existing communities or make them inaccessible. Additionally, future development of the site would not require internal streets, as the site is located within existing city blocks. Future development facilitated by the project would maintain existing vehicular, bicycle, and pedestrian connections through the surrounding area. No impact related to the physical division of an established community would occur.

NO IMPACT

b. Would the project 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?

The project consists of a GPA and RZ to modify the existing vacant 2.6-acre lot from Residential Medium Density (R-M-3.6) to Residential High Density (R-H-2.1). Land uses surrounding the project site consist of Medium and Low Density residential neighborhoods to the west and north of the site, as well as commercial uses to the east along North Main Street, shown in Figure 3. The site is also bound to the north, northwest, and west by an open space reclamation ditch.

Applicable policies intended to reduce environmental effects are discussed throughout the relevant sections of this IS-MND. Table 15 lists additional applicable policies intended to reduce environmental effects of projects from the 2002 General Plan and indicates the project's consistency with those policies. This table also includes policies related to land use and planning, for informational purposes. As described in Environmental Checklist Section 3, *Air Quality*, development facilitated by the project would not conflict with the current AQMP that MBARD adopted to provide a strategy for the attainment of state and federal air quality standards. In addition, as described in Environmental Checklist Section 6, *Energy*, development facilitated by the project would not conflict with General Plan energy-related policies, and as described in Environmental Checklist Section 9, *Greenhouse Gas Emissions*, development facilitated by the project would not conflict with GHG-related policies provided in the City's General Plan. Additionally, as described in Environmental

Checklist Section 10, *Hydrology and Water Quality*, the project would not conflict with adopted water quality standards or policies.

Table 15 Project Consistency with General Plan Policies

Policy	Consistency
Policy LU-1.1: Balanced Land Use Pattern. Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community	**Consistent.** The project would facilitate the development of under-utilized areas in an urbanized part of Salinas with approximately 76 residential units. The project would provide a higher-density residential option in an area of primarily low and medium density existing residential uses, and the site is located near existing commercial and mixed use development.
Policy LU-1.2: Accommodate Projected Growth. Provide a plan for land uses that includes capacity to accommodate growth projected for 2020 and beyond.	**Consistent.** The project includes a GPA that would modify the site to increase allowable density increases to create new housing, thereby accommodating projected growth.
Policy LU-2.1 Minimize Growth Impacts to Agricultural Lands. Minimize disruption of agriculture by maintaining a compact city form and directing urban expansion to the north and east, away from the most productive agricultural land.	**Consistent.** The project would involve infill development in an already urbanized area, where no active agricultural lands exist. Agriculture uses are located approximately 0.4 mile east of the project site.
Policy LU-2.4: Compact Growth. Utilized well-designed infill development and selective increase density within Focused Growth Areas to maintain compact city form.	**Consistent.** The project would facilitate new infill development to occur in an existing residential area, contributing to a more compact city form with increased density.

As demonstrated in Table 15, development facilitated by the project would be consistent with the applicable land use policies of the 2002 General Plan. Because the project would be consistent with applicable 2002 General Plan policies to avoid or reduce environmental impacts, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

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

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Salinas General Plan states that although quarrying operations have previously occurred in the City's planning area, most mineral extraction sites are no longer considered significant resources. The General Plan does not identify mineral resources within or near the site (City of Salinas 2002b). The site is currently undeveloped, and no mineral extraction presently occurs or is proposed to occur on at the site. Therefore, the project would not affect the availability of any mineral resources. There would be no impact.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	■	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a “sound power level” or a “sound pressure level,” which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}), Day-Night Average Level (DNL; may also be symbolized as L_{dn}), and the community noise equivalent level (CNEL; may also be symbolized as L_{den}).

L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).[7] The relationship between the peak-hour L_{eq} value and the L_{dn}/CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by L_{dn} and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 16.

Table 16 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5
Source: Caltrans 2020	

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the

[7] Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

general human response to different levels of groundborne vibration velocity levels, are described in Table 17.

Table 17 Vibration Annoyance Potential Criteria

	Vibration Level (in/sec PPV)	
Human Response	**Transient Sources**	**Continuous/Frequent Intermittent Sources[1]**
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

[1] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Noise Level Increases over Ambient Noise Levels

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis.

Regulatory Setting

Federal Transit Administration

The FTA has recommended noise criteria related to traffic-generated noise in *Transit Noise and Vibration Impact Assessment* that can be used to determine whether a change in traffic would result in a substantial permanent increase in noise (FTA 2018).

Table 18 shows the significance thresholds for increases in traffic-related noise levels. These standards are applicable to project impacts on existing sensitive receivers (as defined under *Environmental Setting* above).

Table 18 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (dBA DNL or L_{eq})	Allowable Noise Exposure Increase (dBA DNL or L_{eq})
45-49	7
50-54	5
55-59	3
60-64	2
65-74	1
75+	0

dBA = A-weighted sound pressure level
DNL =Day-Night Average Level
L_{eq} =Equivalent continuous sound level
Source: FTA 2018

The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For adjacent residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period. These values are used in the construction noise analysis as the thresholds as the City does not specify construction noise limits.

City of Salinas

SALINAS GENERAL PLAN

The City of Salinas Noise Element contains goals and policies that are designed to protect the community from excessive noise. The Noise Element establishes the following goals and policies that would apply to the proposed project:

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

Policy N-1.1: Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards and the Noise Contours Map as a guide for future planning and development decisions.

Policy N-1.2: Require the inclusion of noise-reducing design features in development and reuse/revitalization projects to address the impact of noise on residential development.

Policy N-1.4: Ensure proposed development meets Title 24 Noise Insulation Standards for construction.

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

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

Table 19 and Table 20 present the noise standards and noise/land use compatibility standards established by the General Plan Noise Element.

Table 19 Exterior Noise Standards

Designation/District of Property Receiving Noise	Maximum Noise Leve, L_{dn} or CNEL, dBA
Agricultural	70
Residential	60
Commercial	65
Industrial	70
Public and Semipublic	60

Source: City of Salinas 2002b

Table 20 Noise and Land Use Compatibility Matrix

Land Use Category	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential	50-60	60-70	70-75	75-85
Transient Lodging – Motel, Hotel	50-60	60-75	75-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-70	70-80	80-85
Auditoriums, Concert Halls, Amphitheaters	N/A	50-70	N/A	70-85
Sports Arena, Outdoor Spectator Sports	N/A	50-75	N/A	75-85
Playgrounds, Parks	50-70	N/A	70-75	75-85
Golf Course, Riding Stables, Water Recreation, Cemeteries	50-70	N/A	70-80	80-85
Office Buildings, Business Commercial, and Professional	50-65	60-75	75-85	N/A
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	80-85	N/A

[1] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.

[2] Conditionally Acceptable: New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.

[3] Normally Unacceptable: New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.

[4] Clearly Unacceptable: New construction or development clearly should not be undertaken.

Source: City of Salinas 2002b

According to the City's General Plan, if the noise level of a project falls within normally acceptable noise levels or conditionally acceptable noise levels, the project would be considered compatible with the nose environment. Normally acceptable noise levels implies that no mitigation would be needed. Conditionally acceptable noise levels implies that minor mitigation may be required to meet the City's and Title 24 noise standards. If the noise level falls within normally unacceptable noise levels, substantial mitigation would likely be needed to meet City noise standards. Mitigation may involve construction of noise barriers and substantial building sound insulation.

CITY OF SALINAS MUNICIPAL CODE

Section 37-50.180 of the Zoning Code identifies performance standards for noise for the receiving property based on its zoning. Residential and Public/Semipublic Districts allow maximum noise levels to be at or below 60 dBA or CNEL; Mixed Use and Commercial Districts allow maximum noise levels to be at or below 65 dBA or CNEL, as long as interior noise levels at residential developments do not exceed a maximum of 45 dBA from exterior ambient noise; Parks/Open Space Districts allow maximum noise levels to be at or below 70 dBA or CNEL.

SMC Section 5-12.03 describes examples of prohibited noise disturbances, which include the following:

(a) Residential devices: Yard supplies, radios, television sets, musical instruments, and similar devices. Operating, playing, or permitting the operation or the playing of devices necessary and commonly associated with residential living. Such noise includes, but is not limited to, noise created by power mowers, trimmers, home appliances (radios and televisions), musical instruments, home workshops, vehicle repairs and testing, home construction projects, or similar devices or activities which produces or reproduces sound. Noise generated from residential devices between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to create a noise disturbance across a residential or a commercial property line or at any time to violate the provisions of this section.

(b) Speakers; Amplified sounds. Using or operating for any purpose any speaker, speaker system, or similar device between the hours of 10:00 p.m. and 7:00 a.m., such that the sound therefrom creates a noise disturbance across a residential property line, or at any time otherwise violates the provisions of this section, except for any noncommercial public speaking, public assembly, or other activity or activity for which a permit has been issued pursuant to the provisions of this Code.

(c) Animals. Owning or possessing any animal (including a bird) which frequently or for long duration, howls, barks, meows, squawks, or makes other sounds which create a noise disturbance across a residential or a commercial property line.

(d) Loading and unloading. Loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, or similar objects between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance across a residential property line or at any time otherwise violate the provisions of this section.

(e) Emergency signaling devices. The intentional sounding or permitting the sounding outdoors of any fire, burglar, or similar emergency signaling device, except for emergency purposes or testing. Sounding or permitting the sounding of any exterior burglar or fire alarm or any motor vehicle alarm, unless such alarm is terminated within thirty (30) minutes of activation.

(f) Domestic power tools, machinery. Operating or permitting the operation of any mechanically-powered saw, sander, drill, grinder, lawn or garden tool, or similar tool between the hours of 10:00 p.m. and 7:00 a.m. so as to create a noise disturbance across a residential or a commercial property line.

SMC Section 5.13.01 restricts the use of sound amplifying equipment and sound trucks between the hours of 10:00 p.m. and 7:00 a.m.

Project Noise Setting

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Salinas General Plan Noise Element identifies noise-sensitive land uses as residences, schools, hospitals, religious meetings, and recreational areas (City of Salinas 2002b). Noise-sensitive receivers nearest to the site are provided in Table 21 below.

Table 21 Nearest Sensitive Receivers to Site

Nearest Receiver	Zoning	Distance from Property Line to Receiver (direction)	Distance from Center of Rezone Site to Receiver
Residences to the east	R-M-3.6	25 feet (east)	130 feet
Residences to the west	R-L-5.5	100 feet (west)	300 feet

Noise Measurements

The most prevalent source of noise in the project site vicinity is vehicular traffic along nearby roadways such as Preston Street adjacent immediately east of the project site and Casentini Street approximately 190 feet north of the project site. To characterize ambient sound levels at and near the project site, two 15-minute sound level measurements were conducted on Wednesday, August 11, 2021 at 12:16 p.m. and 12:34 p.m. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements. Noise Measurement (NM) 1 was taken at the entrance of the project site approximately 15 feet from the centerline of Preston Street to capture ambient noise levels of the adjacent residences east of the project site. NM2 was at the northwestern edge of the project site at to capture noise levels near residences along Greenbriar Way and vehicular traffic along Casentini Street north of the project site. Table 22 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix E. Figure 7 shows the noise measurement locations.

Table 22 Project Site Vicinity Sound Level Monitoring Results- Short-Term

Measurement Location	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L_{eq} (dBA)	L^{min} (dBA)	L_{max} (dBA)
NM1	Project Site Entrance west of Preston Street	12:16 – 12:36 p.m.	Approximately 15 feet to centerline of Preston Street	48	45	60
NM2	Northeastern edge of project boundary	12:34 – 12:49 p.m.	Approximately 500 feet to centerline of Casentini Street	49	44	60

L_{eq} = average noise level equivalent; dBA = A-weighted decibel; L_{min} = minimum instantaneous noise level; L_{max} = maximum instantaneous noise level

Detailed sound level measurement data are included in Appendix E.

Figure 7 Noise Level Measurement Locations

Imagery provided by Microsoft Bing and its licensors © 2022.

a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction

General Construction

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Variation in power from construction equipment imposes additional complexity in characterizing the noise source level. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2006). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels, but only during certain times of a day. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). Typical heavy construction equipment during project grading could include dozers, loaders, graders, and dump trucks. It is assumed that diesel engines would power all construction equipment. However, construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Per SMC Section 5-13.01, noise generated by construction activities would be required to occur between the hours of 7:00 a.m. to 10:00 p.m. However, for purposes of analyzing impacts from this project, the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) criteria were used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period (FTA 2018).

Project construction would occur nearest to single-family residences immediately to the east of the project site. Over the course of a typical construction day, construction equipment could be located as close as 15 feet to adjacent properties, but would typically be located at an average distance farther away due to the nature of construction and the size of the project. Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 170 feet from the single-family residences immediately adjacent southeast of the project site.

Construction noise is typically loudest during activities that involve excavation and moving soil, such as site preparation and grading. A potential high-intensity construction includes a dozer, grader, and front-end loader working during grading to excavate and move soil. At a distance of 170 feet, a dozer, grader and front-end loader would generate a noise level of 73 dBA L_{eq} (RCNM calculations are included in Appendix E). Therefore, construction noise levels would not exceed the FTA noise threshold of 80 dBA L_{eq} for residential uses, and impacts would be less than significant.

On-stie Operational Noise

The noise sources on the project site after completion of construction are anticipated to be those that would be typical of residential development, such as heating ventilation, and air conditioning (HVAC) units, vehicles arriving and leaving, children at play, and landscape maintenance machinery. Vehicles arriving and leaving, children at play, and landscape maintenance are consistent with the existing noise environment and would not be anticipated to exceed applicable noise level limits from the applicable regulatory thresholds. Therefore, these sources are not considered substantial and are not analyzed further.

Stationary Noise

The primary on-site operational noise source from the project would be HVAC units. This analysis assumes the use of a typical HVAC system for multi-family residential sites, which is a 2.5-ton Carrier 24ABA4030 air conditioner with Puron refrigerant that has a sound power level of 76 dBA (see Appendix E for manufacturer's specifications). The project was assumed to contain 83 HVAC units based on 83 dwelling units. Based on typical locations of HVAC units for multi-family buildings, it is assumed that 83 roof-top HVAC units distributed across the project site would be needed, producing a combined noise level at off-site receivers that is equivalent to all units being located at the center of the project site, which is measured at approximately 160 feet from the nearest off-site sensitive receivers adjacent west of the proposed development boundary along Olive Avenue(see Appendix E for the manufacturer's noise data and HVAC noise calculations). For this analysis and based upon a sound power level of 76 dBA, it is estimated that the sound power level of a single HVAC unit would generate an equivalent sound pressure level of 58 dBA at 7 feet.

HVAC units are considered continuous noise sources. Per SMC Section 37-50.180, project impacts would be significant if operational noise levels from the project's HVAC equipment exceed 60 dBA for nearby residential uses. Noise levels generated by the rooftop HVACs, would be approximately 50 dBA L_{eq} at 160 feet, which would not exceed the City's threshold of 60 dBA for nearby residential areas. Therefore, impacts related to HVAC equipment noise would be less than significant.

Traffic Noise

The project would not make substantial alterations to roadway alignments or substantially change the vehicle classifications mix on local roadways. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes. Noise levels with and without project generated traffic were developed based on algorithms and reference levels from the Federal Highway Administration's (FHWA's) Traffic Noise Model.

The project would generate additional vehicle trips when compared to existing conditions that would increase noise levels on nearby roadways. As discussed in the project Transportation Analysis, the project is anticipated to generate 377 average daily trips (ADT), including 31 trips during the a.m. peak hour and 32 trips during the p.m. peak hour (Hexagon Traffic Consultants, Inc. 2022).[8.] The Transportation Analysis study area includes roadway segments of North Main Street, West Menke Street, West Rossi Street, and Martella Street (Hexagon Traffic Consultants, Inc. 2022).

[8] ADT was derived from W-Trans. Transportation Analysis, which utilized 91 townhome dwelling units for the proposed project.

Project traffic intersection movements from the traffic study were used to estimate project ADT for each segment. In the Transportation Analysis, p.m. peak hour traffic was generally shown to consist of higher traffic volumes than the a.m. peak hour; therefore, p.m. peak hour traffic was utilized for conservative purposes. Traffic volumes depicted in this analysis are based on the Transportation Analysis scenarios that include existing conditions, existing plus project trip volumes (Hexagon Traffic Consultants, Inc. 2022).

The posted speed limit on West Menke Street and Martella Street is 25 miles per hour, while the speed limit for North Main Street and West Rossi Street is 40 miles per hour. There was no observed vehicle counts conducted during short term noise measurements due to restricted visibility of the roadway segments and the project site. Therefore, the vehicle classification mix for modeling assumes a typical breakdown of 97 percent automobiles, 2 percent medium trucks, and 1 percent heavy trucks. Traffic distribution through the day was modeled assuming 85 percent of total daily vehicle traffic during daytime hours and 15 percent of daily vehicle traffic during nighttime hours.

The project would not make substantial alterations to roadway alignments or substantially change the vehicle classifications mix on local roadways. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes from the proposed project. Noise levels with and without project-generated traffic for the existing volumes are shown in Table 23. As shown, traffic noise increases would be up to 2 dBA, which would not exceed the 3 dBA criterion for off-site traffic noise impacts. Impacts would be less than significant.

Table 23 Existing Conditions Traffic Noise Increases

Roadway	Segment	Speed (mph)	Existing Volume[1] (ADT)	Existing + Project Volume[2] (ADT)	Existing Noise Level[1] (dBA)	Existing + Project Noise Level[2] (dBA)	Noise Level Increase[3] (dBA)
West Menke Street	Martella Street to North Main Street (West)	25	420	530	57	58	1
West Menke Street	North Main Street to Bridge Street (East)	25	730	730	60	60	<1
North Main Street	Cassentini Street to West Menke Street (North)	40	25680	25800	73	73	<1
North Main Street	West Menke Street to West Rossi Street (South)	40	25570	25600	73	73	<1
West Rossi Street	Sansome Street to Martella Street (West)	40	11340	11450	70	70	<1
West Rossi Street	Martella Street to North Main Street (East)	40	11700	11790	70	70	<1
Martella Street	West Menke Street to West Rossi Street (North)	25	480	680	59	60	2
Martella Street	West Rossi Street to West Lake Street (South)	25	460	460	59	59	<1

dBA = A-weighted decibels; ADT = average daily trips; mph = miles per hour

[1] Transportation Analysis Existing PM Peak hour trips

[2] Transportation Analysis Project Trip Distribution

[3] Numbers may not add up due to rounding.

Source: Hexagon Traffic Consultants, Inc. 2022

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Project construction would not involve activities typically associated with excessive groundborne vibration such as pile driving or blasting. The equipment utilized during project construction that would generate the highest levels of vibration may include the operation of a large dozer[9]. The City of Salinas has not adopted standards to assess vibration impacts during construction and operation. However, Caltrans has developed limits for the assessment of vibrations from transportation and construction sources. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020a; FTA 2018). The thresholds of significance used in this analysis to evaluate vibration impacts are based on these impact criteria, as summarized in Table 17.

Project construction may require operation of vibratory equipment such as a large dozer within 15 feet of off-site residences. A dozer would create approximately 0.089 in/sec PPV at 25 feet (Caltrans 2020). This would equal a vibration level of 0.16 in/sec PPV at a distance of 15 feet.[10] This would be lower than what is considered a distinctly perceptible impact for humans of 0.24 in./sec. PPV, and the structural damage impact to residential structures of 0.2 in/sec PPV. Therefore, temporary vibration impacts associated with the dozer (and other potential equipment) would be less than significant.

Operation

As a residential use, the project would not generate significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operational vibration impact would occur.

LESS THAN SIGNIFICANT IMPACT

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?

The nearest public airport to the site is the Salinas Municipal Airport (SNS) located approximately 2.7 miles southeast of the project site. The project would not be located in the airport's 55 dBA CNEL contour (City of Salinas 2002b). Because the site is located outside the noise contours of the SNS, and no other airports are located nearby, the project would not expose people residing or working in the project area to excessive aircraft-related noise. There would be no impact.

NO IMPACT

[9] Construction equipment assumptions were based on CalEEMod standard construction equipment use as detailed in Appendix E.
[10] $PPV_{Equipment} = PPV_{Ref} (15/D)^n$ (in/sec), PPV_{Ref} = reference PPV at 15 feet, D = distance ,and n = 1.1

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	□	□	■	□
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	□	□	□	■

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

With full buildout and anticipating a density bonus, future development on the site may include the construction of up to 76 residential units over roughly 129,202 sf. As such, the project would directly generate population growth. Based on a per-person household rate of 3.85 for the City of Salinas (DOF 2021), the proposed 76 units would add an estimated 293 new residents to the City's population. The 2021 population of Salinas is estimated at 160,206 (DOF 2021). The addition of new residents at the site would therefore increase the population of Salinas to 160,499. AMBAG estimates that the City's population will increase to 175,358 by 2040, an increase of 17,299 residents since 2015 (AMBAG 2022). The population increase facilitated by the proposed project would therefore be within AMBAG's population forecast for the City.

The city also currently has 43,579 housing units (DOF 2021). The addition of 76 units would bring the total number of housing units to 43,655. The latest AMBAG projections also estimate that the number of housing units in the city in 2040 will be 52,229 (AMBAG 2022. The housing growth facilitated by the project is therefore well within AMBAG projections. Therefore, the proposed project would not substantially induce population growth through the provision of new housing units.

It should be noted that overcrowding is a documented issue in the City, with 7,351 households, or 18 percent of all households, categorized as overcrowded in 2016 (County of Monterey 2019). This is further evidenced by the persons per household rate in the City of Salinas (3.85) as compared to Monterey County (3.30) and the State of California as a whole (2.91) (DOF 2021). The project would assist in alleviating overcrowding in the City by providing more available units to existing residents. Therefore, the proposed project would not facilitate substantial unplanned population growth in the area and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The site is currently vacant and undeveloped. There are no existing housing units or people residing at the site. Therefore, future buildout facilitated by the proposed project would not displace any existing housing units or people. No impact would occur.

NO IMPACT

15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1. Fire protection?	□	□	■	□
2. Police protection?	□	□	■	□
3. Schools?	□	□	■	□
4. Parks?	□	□	■	□
5. Other public facilities?	□	□	■	□

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The Salinas Fire Department (SFD) provides all-risk fire protection to the City of Salinas in the form of fire suppression, search and rescue, emergency medical services, operational training, disaster preparedness, community education, and other services based on community needs. Total authorized staffing for the SFD is 99 personnel, 93 of which are sworn public safety employees. SFD operates with three platoons. Each platoon has six engine companies that are made up of a Captain, Engineer, and two Firefighters, with one of the members being a Paramedic. The department has six pumper trucks, two ladder trucks, a crash truck for airport emergencies and other service vehicles (City of Salinas 2021b).

According to the City of Salinas Community Risk Assessment, the SFD has established performance goals for the first unit response time of within five minutes, 90 percent of the time for emergency medical incidents; and within five minutes, 20 seconds, 90 percent of the time for fire and all other priority incidents. Overall, response time for all priority incidents was within seven minutes, 23 seconds, 90 percent of the time during 2018, indicating that the SFD is not meeting its performance goals (City of Salinas 2019a).

SFD Fire Station #1 is closest to the site at 216 West Alisal Street, approximately 0.8 mile southwest of the site. The site is in the existing service area of the SFD. Future development at the site would be required to comply with applicable Fire Code requirements and project design plans would be reviewed by the SFD prior to construction. The project would facilitate population growth and would result in an increased demand for services proportional to the population increase; however, the increase would be incremental and within the growth projections for Salinas, as discussed within Environmental Checklist Section 14, *Population and Housing*. The addition of an estimated 293 future residents would not create excessive demand for emergency services or introduce development to areas outside of normal service range that would necessitate new fire protection facilities. With the continued implementation of existing practices, including compliance with the California Fire Code, future development of the project site would undergo review by the SFD during the Building Permitting process to ensure adequate access, consistency with existing facilities, and acceptable response times. Therefore, the project would not place an unanticipated burden on fire protection services or affect response times or service ratios such that new or expanded fire facilities would be needed. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The Salinas Police Department (SPD) provides police protection in the City of Salinas, including to the project site. The SPD has 187 full-time sworn officers. Under this sworn staffing level, the SPD has one sworn officer for every 867 residents. The SPD is divided into three divisions: Field Operations, Investigations, and Administration. The Field Operations Division is headed by one Assistant Chief who oversees the Patrol Division, K-9 Unit, Traffic Unit, Crime Scene Investigators Unit, and Special Operations (SPD 2021).

The SPD communications center screens and assign calls on a priority basis based on the nature of the problem. SPD response time data is currently unavailable; however, the highest priority calls are typically answered within a few minutes. Less urgent calls can take longer depending on availability of the police officers and other calls the department is responding to at the time.

The nearest police station is at 312 East Alisal Street, located approximately 0.6 mile south of the site. The project would generate new population and associated demand for services; however, the increase would be incremental and within the growth projections for Salinas, as discussed within Environmental Checklist Section 14, *Population and Housing*. The addition of an estimated 293 residents would not create excessive demand for police services or introduce development to areas outside of the SPD’s normal service range that would necessitate new police protection facilities. Therefore, the project would not place an unanticipated burden on police protection services or affect response times or service ratios such that new or expanded police facilities would be needed. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The site is located in the Salinas City Elementary and Salinas Union High School Districts (City of Salinas 2017). In the 2019-2020 school year, Salinas City Elementary School District had an enrollment of 6,689 students and Salinas Union High School District had an enrollment of 15,818 students (California Department of Education 2021). Salinas City Elementary School District has a total capacity of approximately 9,000 students (Salinas City Elementary School District 2021) and Salinas Union High School District has a total enrollment capacity of 16,000 students (Salinas Union High School District 2021). Development facilitated by the proposed project would add up to 76 new residential units in the City. Assuming a conservative student generation rate of one student per residential unit, the development of the site would generate up to 76 additional students at local schools. While future development would increase the number of students, it would not do so to the extent that new school facilities would be required, as the increase would be incremental, and would not result in an exceedance in capacity of the local elementary and high school districts. Furthermore, a school impact fee is collected for each residential unit that is constructed. As stated in California Government Code Section 65997, the payment of mandatory fees to the affected school districts would reduce potential school impacts to less than significant level under CEQA. Therefore, the project would not result in significant impacts, as the payment of impact fees is considered adequate mitigation for this impact. Therefore, impacts related to the need for new school facilities as a result of implementing the proposed project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, public facilities, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

As described in Environmental Checklist Section 16, *Recreation*, the Salinas General Plan establishes a standard of 3.0 acres of parkland for every 1,000 residents and has a current ratio of 4.27 acres of parkland for every 1,000 residents. The addition of 293 residents as a result of the project would result in a ratio of approximately 4.25 acres of parkland for every 1,000 residents. This would result in an incremental reduction in available recreation space per resident in the City but would be above the minimum required parkland standard of 3.0 acres of parks for every 1,000 residents. Therefore, while the project would facilitate new housing development that would contribute additional residents to the City population, given the existing population in the City and the number of new residents the project would produce, it would not result in overuse of parks such that substantial physical alteration of parks would occur, or require the construction of new park facilities. Impacts would be less than significant; refer to Environmental Checklist Section 16, *Recreation*, for further discussion.

LESS THAN SIGNIFICANT IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

As described in criteria a.1 through a.4 above, impacts related to expanded or altered government facilities, including fire, police, school, and park facilities, would be less than significant.

Other government facilities include library services, which are provided by the Salinas Public Library. The public library system in Salinas is comprised of three branch libraries: John Steinbeck Library, Cesar Chavez Library, and El Gabilan Library. The library collection includes more than 100,000 books, magazines, movies, and audiobooks, and a separate Steinbeck Collection of more than a thousand books, articles, and historical items. The closest library branch is the John Steinbeck Library located at 350 Lincoln Avenue, approximately 0.8 mile south of the site.

As described in Environmental Checklist Section 14, *Population and Housing*, development facilitated by the proposed project would generate population growth of approximately 293 people. This level of population growth would not be substantial in relation to the City's overall population and would thus not require construction of new library facilities. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	□	□	■	□
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	□	□	■	□

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Pursuant to the City's Park Classifications and Sports Facilities Standards that were adopted in 2018, parkland is classified to assist in planning for the community's recreational needs. The six classifications of parks in Salinas include community parks, neighborhood parks, small parks, school parks, greenways, and special use areas. Each classification corresponds to a different size and type of park as well as a different population-based standard for parks to person ratios. According to a recreational facility inventory conducted in 2019, Salinas provides more than 684 acres of public parkland and recreation facilities distributed throughout 52 park sites and numerous open space parcels (City of Salinas 2019b). The City's current estimated population is 160,206 residents (DOF 2021). Therefore, the ratio of parks to residents in the City is 4.27 acres of developed public parkland for every 1,000 residents.

Recreational facilities nearest the site include the Rossi Rico Linear Parkway (located approximately 0.13 mile from the site), Bataan Memorial Park (0.41 mile from the site), and Central Community Park (0.76 mile from the site). Central Community Park is larger community park facility with a minimum of 20 acres or larger of developed recreational space that serves several neighborhoods. Rossi Rico Linear Parkway and Bataan Memorial Park are small parks that are generally less than two acres in size and provide some recreation services to residents within 0.25-mile walking distance. All parks are within a one-mile radius of the site (City of Salinas 2018).

Table LU-4 of the Salinas General Plan establishes public services and facility service standards in the city, including standards for the city's parks and recreation services. The service standard for parks in Salinas, as described by the Salinas General Plan is 3.0 acres of developed community parkland per 1,000 residents.

As described in Environmental Checklist Section 14, *Population and Housing*, the proposed project would facilitate the development of up to 76 housing units at the site and would increase the population of Salinas to 160,499. Therefore, if all 76 housing units potentially allowed under the proposed GPA were constructed, the ratio of urban parks to residents in the City would be 4.25 acres of developed public parkland for every 1,000 residents. This would result in an incremental reduction in available recreation space per resident in the City but would be above the minimum required parkland standard of 3.0 acres of parks for every 1,000 residents. Additionally, the SMC requires the provision of on-site open space areas for residential and mixed-use developments. Therefore, while the project would facilitate new housing development that would contribute additional residents to the City population, given the existing population in the City and the number of new residents the project would produce, it would not substantially alter citywide demand for parks such that substantial physical deterioration of parks would occur, or the construction of new recreational facilities would be required. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

17 Transportation

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

This section is based on transportation analysis for the project completed by Hexagon Transportation Consultants, Inc, provided in Appendix D.

Existing Roadway Setting

The project site is regionally accessible via US Highway 101, a four-lane freeway approximately 0.25 mile north of the site; SR 183, a two-lane highway approximately 0.4 mile south of the site; and SR 68, a four-lane highway approximately one mile south of the site. Local access to the project site is provided by North Main Street, West Rossi Street, West Menke Street, Martella Street, and Preston Street, which are described in detail below.

North Main Street is a four-lane, north-south roadway approximately 700 feet east of the project site. North Main Street is the primary north-south roadway in the City of Salinas and connects North Salinas and US Highway 101 to the city's downtown area. North Main Street provides sidewalks and on-street parking on both sides of the roadway. Access to the project site from North Main Street would be provided by West Menke Street and West Rossi Street.

West Menke Street is a two-lane, east-west roadway that intersects with North Main Street approximately 700 feet southeast of the project site. There is a continuous sidewalk on the north side of West Menke Street, with parking permitted on both sides of the roadway. Access to the project site from West Menke Street would be provided by Martella Street.

West Rossi Street is a two-lane, east-west roadway that intersects with North Main Street approximately 0.2 mile southeast of the project site. West Rossi Street provides sidewalks and bike lanes on both sides of the roadway and on-street parking on its northern side. Access to the project site from West Rossi Street would be provided by Martella Street.

Martella Street is a two-lane, north-south roadway perpendicular to West Rossi Street and parallel to North Main Street. Martella Street turns west toward the project site and becomes Preston Street approximately 350 feet east of the project site. Intermittent sidewalks and on-street parking is provided along both sides of Martella Street. Access to the project site from Martella Street would be provided by Preston Street.

Preston Street is a two-lane, north-south roadway immediately east of the project site. West Preston Street provides a sidewalk on its northern side with parking permitted on both sides of the roadway. The project site is located at the western end of Preston Street.

Existing Transit Setting

Existing transit services in the vicinity of the project site are provided by Amtrak and MST. The Salinas Amtrak station is located approximately 0.4 mile south of the project site and provides train and connecting bus services. Amtrak provides one daily train service in each direction via the Coast Starlight route and connecting bus services to train stations to the north several times daily.

The project site is served by five MST bus routes, including Routes 23, 29, 44, 49, and 95. Table 24 describes these routes and the bus stops' location in relation to the project site.

Table 24 Monterey-Salinas Transit Bus Services

Bus Route	Route Description	Hours of Operation	Headway[1]	Bus Stop Location
Route 23	Salinas to King City	6:45 am – 10:00 pm	60 minutes	0.2 mile southeast of the project site, west side of North Main Street
Route 29	Watsonville to Salinas via Prunedale	5:45 am – 7:00 pm	120 minutes	700 feet southeast of the project site, west side of North Main Street
Route 44	Northridge to Salinas	6:30 am – 6:15 pm	75 minutes	0.4 mile southwest of the project site, south side of West Rossi Street
Route 49	Santa Rita via Northridge	6:15 am – 10:00 pm	60 minutes	0.2 mile southeast of the project site, east side of North Main Street
Route 95	Williams Ranch to Northridge	9:30 am – 5:15 pm	120 minutes	0.2 mile southeast of the project site, east side of North Main Street

[1] Approximate headways during peak commute periods.

Source: Appendix D

Existing Bicycle Setting

There are several bicycle facilities in the vicinity of the project site, which are categorized into one of the following three classes:

- **Class I Bikeway (Bike Path).** Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel. The Rossi Rico Parkway is an east-west bike path that connects West Rossi Street to Davis Road on the western edge of Salinas. The Rossi Rico Parkway would be accessible from the project site via West Rossi Street, approximately 1,500 feet south of the site.
- **Class II Bikeway (Bike Lane).** Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Striped bike lanes are present on 1.3 miles of West Rossi Street between Davis Road and Sherwood Drive.

- **Class III Bikeway (Bike Route).** Class III bikeways are bike routes that have signs to help guide bicyclists on recommended routes. A Class III bikeway is present on Rico Street, a north-south roadway approximately 0.3 mile west of the project site, for approximately 0.4 mile between West Rossi Street and Larkin Street. A Class III bikeway is also present on Casentini Street, an east-west roadway approximately 350 feet north of the project site, for approximately 0.5 mile between North Main Street and Rico Street.

Existing Pedestrian Setting

Pedestrian facilities near the project site consist primarily of sidewalks along roadways in the vicinity of the project site. While sidewalks are absent along several property frontages on Preston Street, Martella Street, and West Menke Street, a continuous sidewalk connects the project site to North Main Street, a major street in the project vicinity. Other pedestrian facilities in the area include marked crosswalks at the intersections of North Main Street and West Rossi Street, North Main Street and West Menke Street, and Martella Street and West Rossi Street. The existing network of sidewalks and crosswalks provides adequate connectivity and provides pedestrians with safe routes to transit services in the area.

Regulatory Setting

California Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law, which eliminated automobile delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts under CEQA. In December 2018, the Office of Planning and Research (OPR) released the final update to the *CEQA Guidelines* consistent with SB 743, which states that VMT is the most appropriate metric of transportation impacts to align local environmental review under CEQA with California's long-term greenhouse gas emissions reduction goals. In October 2020, the City of Salinas adopted its SB 743 Implementation Policy for analyzing VMT in CEQA documents. This policy establishes a VMT impact threshold of 15 percent below the countywide residential VMT per capita for residential uses in the city. The City's VMT Evaluation Tool indicates that the current countywide average VMT per capita is 11.40; thus, a project would result in a significant impact if it would generate 9.7 VMT per capita or greater.

City of Salinas General Plan Policies

The General Plan contains the following transportation-related goals, policies, and programs, which apply to development projects in the City:

Goal CD-3 Create a community that promotes a pedestrian-friendly, livable environment.

Policy CD-3.6 Provide and maintain a pedestrian-friendly atmosphere by encouraging "pedestrian zones" with increased land-scaping, use of traffic-calming techniques on local streets, adequate separation from automobile traffic and the inclusion of amenities such as lighted crosswalks and increased lighting along sidewalks.

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

Policy C-1.2 Strive to maintain traffic Level of Service (LOS) D or better for all intersections and roadways.

Policy C-1.3 Require that new development and any proposal for an amendment to the Land Use Element of the General Plan demonstrate that traffic service levels meeting established General Plan standards will be maintained on arterial and collector streets.

Policy C-1.4 Continue to require new development to contribute to the financing of street improvements, including formation of roadway maintenance assessment districts, required to meet the demand generated by the project.

Policy C-1.5 Ensure that new development makes provisions for street maintenance through appropriate use of gas tax and formation of maintenance assessment districts.

Policy C-1.7 Design roadway capacities to adequately serve planned land uses.

Policy C-1.8 Whenever possible, in reuse/revitalization projects, reduce the number of existing driveways on arterial streets to improve traffic flow.

Policy C-2.1 Urge a countywide approach to Transportation Demand Management (TDM) and Transportation Systems Management (TSM) as the best way to reduce peak-hour vehicle trips and congestion at major employment centers.

Policy C-3.1 Support Monterey-Salinas Transit initiatives to provide adequate and improved (i.e. more frequent availability and use of Intelligent Transportation System measures where appropriate) public transportation service.

Policy C-3.2 Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service.

Policy C-3.3 Support the extension of commuter rail to Salinas to allow for alternatives to automobile use.

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

Policy C-4.2 Increase availability of facilities, such as bike racks and well-maintained and well-lit bike lanes, that promote bicycling.

Policy C-4.4 Improve the biking environment by providing safe and attractive cut-throughs, bike lanes, and bike paths for both recreational and commuting purposes.

Policy C-4.6 Ensure that all pedestrian and bicycle route improvements meet the Americans with Disabilities Act (ADA) standards for accessibility, and Caltrans standards for design.

Policy C-5.1 Increase availability of safe and well-maintained sidewalks in all areas of the City.

Policy C-5.5 Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes.

Implementation Program C-12: Salinas Bikeways Plan

Continue to implement the Salinas Bikeways Plan by applying for additional funding and requiring developers to assist in the provision of the needed facilities.

Implementation Program C-13: Pedestrian Facilities

Require new development and redevelopment to provide pedestrian facilities within the project and pedestrian connections with major destinations. Identify areas within the existing community that would benefit from improved pedestrian facilities. Explore additional funding sources to provide additional pedestrian facilities.

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Roadway Facilities

SB 743 has phased out the use of LOS to determine potential transportation impacts. However, in evaluating project consistency with the City's General Plan, a comparison of LOS is still required pursuant to General Plan Policies C-1.2 and C-1.3. This analysis is provided for informational purposes. LOS is a qualitative description of operating conditions ranging from LOS A, free-flow conditions with little to no delay, to LOS F, congested conditions with excessive delays.

Intersections evaluated in this analysis include the signalized intersection of North Main Street and West Rossi Street, and the two-way stop-controlled intersections of North Main Street and West Menke Street, and West Rossi Street and Martella Street. These study intersections were evaluated using the 2010 Highway Capacity Manual LOS methodology using Synchro software (Appendix D). The project would not be consistent with the City's General Plan roadway operations policies if:

- The addition of project traffic would cause operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F), or
- The addition of project traffic adds one vehicle trip to intersections already operating at an unacceptable level.

Table 25 summarizes the LOS analysis for each of the evaluated intersections. Further information regarding this analysis is provided in Appendix D.

Table 25 Intersection Level of Service Impacts

			No Project		With Project			
Intersection	Control	Peak Hour	Average Delay (sec)	LOS	Average Delay (sec)	LOS	Increase in Delay (sec)	Impact?
North Main Street and West Menke Street	Two-way stop	AM	65.9	F	79.5	F	13.6	**Yes**
		PM	183.3	F	183.3	F	0	No
North Main Street and West Rossi Street	Signal	AM	28.9	C	29.1	C	0.2	No
		PM	31.3	C	31.6	C	0.3	No
West Rossi Street and Martella Street	Two-way stop	AM	22.3	C	24.1	C	1.8	No
		PM	26.2	D	27.9	D	1.7	No

Source: Appendix D

As shown above, the signalized intersection of North Main Street and West Rossi Street and the unsignalized intersection of West Rossi Street and Martella Street operate at an acceptable LOS D or better during AM and PM peak hours. However, the unsignalized intersection of North Main Street and West Menke Street currently operates at an unacceptable LOS F during AM and PM peak hours. Implementation of the project is estimated to increase delay at the intersection by 13.6 seconds during AM peak hours.

While it is estimated that the project would adversely increase delay at the intersection of North Main Street and West Menke Street, field observations performed by Hexagon Transportation Consultants (Appendix D) indicate that gaps in traffic are available during both peak hours at the intersection. A gap in traffic, as defined by the 2010 Highway Capacity Manual, is the time needed for a driver to safely navigate from a minor street approach. The longest gap is typically a left turn from a minor street onto a two-way major street, or the left turn from West Menke Street onto northbound North Main Street. Based on the values described in the Highway Capacity Manual, vehicles originating at the project site would need a minimum gap of at least 7.5 seconds to turn from West Menke Street onto northbound North Main Street. Field observations indicate that vehicles on West Menke Street were easily able to make this turn, with AM peak hour gaps averaging 12 seconds and PM peak hour gaps averaging 16 seconds (Appendix D). This results in fewer vehicles approaching the unsignalized intersection of North Main Street and West Menke Street. Therefore, impacts to policies related to operation of roadway facilities would be less than significant.

Transit Facilities

The project site is adequately served by existing MST transit services along North Main Street, as listed in Table 24. The new transit trips generated by the project are not expected to create demand that exceeds capacity of transit service that is currently provided. The project would not remove any transit facilities, nor would it conflict with any adopted plans or policies for new transit facilities. Therefore, impacts to transit services would be less than significant.

Bicycle and Pedestrian Facilities

The proposed project would involve a GPA and subsequent rezoning to allow construction of high-density residential units at the project site. Future development at the project site would likely include sidewalks, pedestrian facilities, and bicycle facilities. The project would not involve removal of any bicycle or pedestrian facilities, nor would it conflict with any adopted plans or policies for bicycle or pedestrian facilities. Therefore, impacts would be less than significant.

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

As described under *Regulatory Setting*, SB 743 and *CEQA Guidelines* Section 15064.3 identify VMT as the most appropriate criteria to evaluate a project's transportation impacts. In adherence to SB 743, the City of Salinas has adopted its SB 743 Implementation Policy, which aligns with the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA.* As provided in the SB 743 Implementation Policy, a project would have to produce less than 9.7 VMT per capita to result in less than significant impacts. If it is anticipated that a project would have a significant impact on VMT, the impact must be reduced by modifying the project and/or implementing mitigation measures, which could include a travel demand management program, to reduce its VMT to an acceptable level.

According to VMT analysis performed using the City's VMT Evaluation Tool (Appendix D) using default values for the project's intended density, the proposed project is expected to generate 10.53 VMT per capita, which would exceed the impact threshold of 9.7 VMT per capita. Therefore, mitigation measures are required to reduce the VMT per capita from 10.53 to 9.7.

Mitigation Measure

TRA-1 VMT Reduction Program

The applicant shall prepare and implement a VMT Reduction Program that reduces VMT generated by the project to VMT per capita of 9.95. The following two strategies shall be included in the Program:

1. **Pedestrian Network Improvements**. Construct pedestrian facilities to connect the site to existing pedestrian facilities on Preston Street. Creating safe pedestrian connections would encourage future residents to walk instead of drive.
2. **Include Bike Parking, Pursuant to SMC Section 37-50.400**. Provide bicycle parking on site, which would encourage future residents to bike instead of drive.

In addition to the above strategies, one or several of the following travel demand management strategies shall be considered for inclusion in the VMT Reduction Program, to achieve a VMT per capita of 9.7 or less:

1. **Reduce On-Site Parking.** Reduce the number of on-site parking spaces for future residents to less than what is required by SMC Section 20-85; or
2. **Implement Unbundled Parking.** Separate or "unbundle" parking costs from leases or property costs, requiring those that wish to purchase parking spaces to do so at an additional cost; or
3. **Affordable Housing.** Provide affordable, below market-rate housing on site; or
4. **Voluntary Travel Behavior Change Pattern.** Implement a travel behavior change program by offering incentives to future residents to utilize alternative transportation modes, with at least 75 percent of future residents participating; and

5. **Promotions and Marketing.** Provide future residents with information regarding alternative transportation and travel demand management programs, with at least 75 percent of future residents participating; and
6. **School Carpool Program.** Implement a school carpool program among future residents of the project site.

The VMT Reduction Program shall be submitted to the City for review and approval prior to issuance of a building permit and shall demonstrate that the net VMT per capita would be 9.7 or less, using a combination of travel demand management strategies approved by the City.

Significance After Mitigation

Based on the City's SB 743 Implementation Policy and VMT Evaluation Tool, implementation of the travel demand management Strategies 1 and 2 would reduce the VMT generated by the project to 9.95 VMT per capita. Additional strategies in the measure could be combined to reduce VMT to below the 9.7 threshold. Examples of combinations to achieve this reduction include, but are not limited to:

- Strategies 1 through 3 would reduce VMT to 9.53 VMT per capita
- Strategies 1, 2, and 4 would reduce VMT to 9.7 VMT per capita
- Strategies 1, 2, and 5 would reduce VMT to 9.53 VMT per capita
- Strategies 1, 2, and 6 through 8 would reduce VMT generated by the project to 9.62 VMT per capita

The above combinations of measures would be sufficient to reduce VMT per capita to 9.7 or less. In practice, other measures may be included as appropriate. The intent of the above list is to demonstrate that implementation of Mitigation Measure TRA-1 is technically feasible, and as such, a reduction of VMT per capita to 9.7 or less is achievable.

Therefore, implementation of Mitigation Measure TRA-1 would reduce VMT per capita to 9.7 or less. Impacts would be less than significant with mitigation incorporated.

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c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

d. Would the project result in inadequate emergency access?

Currently, there are no proposed site plans for future development on the site. However, development facilitated by the project would be required to undergo site plan review and building permit approval prior to construction. This process includes an evaluation of the site plan by the City and local fire district for site circulation, which would ensure that project designs do not include hazardous design features, including sharp curves or dangerous intersections, or incompatible uses. Future development would include the potential for approximately 76 new residential units. This development is consistent to existing surrounding land uses and would be ensure that hazards from incompatible uses do not occur.

Future development on the site would also be subject to an evaluation of the site plan by the local fire district for emergency access, which would ensure that adequate access is provided. However, final project designs are not available to review for safety features and geometric design. Proposed vehicle access would be provided by a single driveway on Preston Street which would provide entry and exit to the site. No additional roadways or intersections are proposed at this time. Therefore, impacts are less than significant.

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	□	■	□	□
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	□	■	□	□

Assembly Bill 52

California Assembly Bill 52 of 2014 (AB 52) expanded CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
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 PRC Section 5024.1.

In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Senate Bill 18

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill [SB] 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005); "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places." SB 18 refers to PRC Section 5097.9 and 5097.995 to define cultural places as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9)
- and Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.995).

On May 20, 2021, and June 2, 2021, the City of Salinas sent via certified mail notification letters to nine California Native American Tribes that are traditionally and culturally affiliated with the project area per AB 52 and SB 18 requirements. The letters were sent to representatives of the Ohlone/Costanoan-Esselen Nation, the Amah Mutsun Tribal Band, the Indian Canyon Mutsun Band of Costanoan, the Xolon Salinan Tribe, the Amah Mutsun Tribal Band of Mission San Juan Bautista, the Torres Martinez Desert Cahuilla Indians, the Costanoan Rumsen Carmel Tribe, the Rumsen Am:a Tur:ataj Ohlone, the Wuksache Indian Tribe/Eshom Valley Band, the Salinan Tribe of Monterey, San Luis Obispo Counties, and the Esselen Tribe of Monterey County. On August 10, 2021, Helen Rubio of the Santa Ynez Band of Chumash Indians responded via email to City Associate Planner Oscar Resendiz, stating that no further consultation is requested for the project. No other responses were received.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

The cultural resources records search and Native American consultation through AB 52 and SB 18 did not identify potential tribal cultural resources within the project site. However, there is always potential to uncover buried archaeological and tribal cultural resources during ground disturbing activities, which could potentially be considered tribal cultural resources eligible for listing in the CRHR or a local register or be considered tribal cultural resources. Should project construction activities encounter and damage or destroy a tribal cultural resource or resources, impacts would be potentially significant. Mitigation Measure TCR-1 would ensure that tribal cultural resources are preserved in the event they are uncovered during construction and would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

Mitigation Measure

TCR-1 Inadvertent Discoveries During Construction

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

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	□	□	■	□
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	□	□	■	□
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	□	□	■	□
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	□	□	■	□
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	□	□	■	□

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water

Water for future development facilitated by the project would be provided by Cal-Water via existing utilities on and adjacent to the site. The Cal-Water Salinas District relies entirely on groundwater, with wells that extract water from five different groundwater basins, including the Corralitos-Pajaro Valley Subbasin, Salinas Valley-Langley Area Subbasin, Salinas Valley-180/400 Foot Aquifer Subbasin, Salinas Valley-East Side Aquifer Subbasin, and Salinas Valley-Monterey Subbasin. Water supply is discussed further under criterion (b) below.

New residential development facilitated by the project would increase demand for water above existing conditions on the site. The project's estimated water demand would be approximately 7,083,090 gallons per year or approximately 21.75 acre-feet per year (AFY) at full buildout, which is less than 0.2 percent of Cal-Water Salinas District's 2025 water demand of 16,609 AFY (Appendix A). Existing supplies would be sufficient to meet forecasted water demand for development facilitated by the project. Therefore, impacts would be less than significant.

Wastewater

M1W provides wastewater collection, treatment, and disposal services for the City of Salinas. Wastewater is transported to the M1W Regional Treatment Plant (RTP) located in Marina. The RTP is designed with a daily capacity of 29.6 million gallons for secondary and tertiary treatment, and 5 million gallons for advanced purification for groundwater replenishment. The RTP treats an average of 17 million gallons per day and has a remaining capacity of 12.6 million gallons per day (M1W 2021).

The project's estimated wastewater generation would be approximately 6,727,867 gallons per year or 20.6 AFY (assuming water use is approximately 120 percent of wastewater generation), or approximately 0.018 million gallons per day. This would represent approximately 0.15 percent of the RTP wastewater treatment plant's remaining capacity. Therefore, the RTP has capacity to meet the wastewater treatment demands that would be generated by future development facilitated by the project. Therefore, impacts associated with project's incremental wastewater generation would be less than significant.

Stormwater

Future development facilitated by the project would be designed and engineered with drainage features appropriate to accommodate the needs of the future development. As discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, development facilitated the project would be required to comply with the City of Salinas MS4 Permit (Order No. R3-2019-0073, NPDES Permit No. CA0049981), which requires the volume of runoff from an 95th percentile storm event be retained on site through either retention basins or bioretention facilities. The proposed project would not require the construction of new off-site stormwater drainage facilities or expansion of existing facilities. Impacts would be less than significant.

Electricity, Natural Gas, and Telecommunications

A significant impact to electricity, natural gas, and telecommunications facilities may occur if a project's demand for these services exceeds the capacity of local providers. Telecommunications in the area are provided by multiple providers including Xfinity and AT&T, which are available in the project area. Existing infrastructure occurs near the project site and facility upgrades would not likely be necessary.

As described in Environmental Checklist Section 6, *Energy*, project operation would require approximately 0.32 GWh of electricity per year and approximately 637 MMBtu of natural gas per year. Central Coast Community Energy (3CE) would provide electricity to new development at the site and procures energy from clean and renewable sources such as solar, wind, geothermal, and biomass. 3CE works in partnership with PG&E which continues to provide the project site with electricity transmission and natural gas. PG&E maintains power lines along Powell Street, West Market Street, Sherwood Drive, Clark Street, and others within Salinas (CEC 2017). The substation that powers lines in the vicinity of the site has a facility rating of 11.82 megawatts (MW) and a typical load of 9.01 MW, with a remaining capacity of 2.81 MW (PG&E 2022). The project would require approximately 0.04 MW,[11] less than 1 percent of the remaining capacity of the PG&E substation. In addition, each year, the California Independent System Operator Corporation (CAISO) publishes a comprehensive evaluation of the Independent System Operator transmission grid to assess grid reliability requirements, identify upgrades needed to successfully meet California's policy goals, and explore projects that can bring economic benefits to consumers. The plan is prepared to support important energy and environmental policies while maintaining reliability through a resilient electric system. PG&E's participation in the transmission plan process would ensure adequate electrical service and capacity (CAISO 2021). PG&E has adequate natural gas storage to ensure adequate natural gas supply, and supply often exceeds demand (PG&E 2022). Accordingly, the project would be accommodated adequately by existing electricity, natural gas, and telecommunication facilities and would not require improvements to existing facilities, or the provision of new facilities, that would cause significant environmental effects. This impact would be less than significant.

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b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Estimated water demand for development facilitated by the project is 8,073,440 gallons per year or approximately 24.8 AFY (Appendix A). The California Urban Water Management Planning Act requires that each water supplier provide an assessment of the reliability of its water supply during normal, dry, and multiple dry years. Table 26 shows Cal-Water's assessment for normal, single dry, and multiple-dry year periods, estimating supply and demand during the years 2025, 2030, 2035, 2040, and 2045.

As shown in Table 26, available supply is expected to be adequate to serve projected water demand for the normal, single dry, and multiple-dry year scenarios assessed through 2045. Considering the additional water demand resulting from development facilitated by the project, adequate water supply would be available to serve full buildout of the site in any of the above water year scenarios through 2045. However, it should be noted that water supply available through the Salinas Public Water System would experience small shortfalls towards the end of the planning period. Specifically, a 2.6 percent shortfall in normal years in 2045, 1.7 percent shortfall in 2040 and 2045 during single-dry years, and 3.6 percent shortfall in 2040 and 2045 during multiple dry year periods. However, any potential dry year shortfalls in 2040 or 2045 in the Salinas Public Water System service area would be alleviated by proactive actions conducted by Cal Water, including efforts to identify new water supply sources and further reduce projected demand through conservation efforts (Cal Water 2021). Therefore, adequate water supply facilities would be available to serve the

[11] The project would consume approximately 320 MWh per year, or 0.036 MW.

project for the reasonably foreseeable future, and the project's water system would connect to existing water supply infrastructure. Water supply impacts would be less than significant.

Table 26 Multiple Dry Years Water Supply and Demand – Salinas District

	2025	2030	2035	2040	2045
Normal Year					
Total Supply (AFY)	16,609	16,988	17,575	18,175	18,853
Total Demand	16,609	16,988	17,575	18,175	18,853
Supply Shortage?	**No**	**No**	**No**	**No**	**No**
Single Dry Year					
Total Supply (AFY)	17,152	17,542	18,147	18,765	19,464
Total Demand	17,152	17,542	18,147	18,765	19,464
Supply Shortage?	**No**	**No**	**No**	**No**	**No**
First Dry Year					
Total Supply (AFY)	17,489	17,886	18,501	19,130	19,842
Total Demand	17,489	17,886	18,501	19,130	19,842
Supply Shortage?	**No**	**No**	**No**	**No**	**No**
Second Dry Year					
Total Supply (AFY)	17,489	17,886	18,501	19,130	19,842
Total Demand	17,489	17,886	18,501	19,130	19,842
Supply Shortage?	**No**	**No**	**No**	**No**	**No**
Third Dry Year					
Total Supply (AFY)	17,489	17,886	18,501	19,130	19,842
Total Demand	17,489	17,886	18,501	19,130	19,842
Supply Shortage?	**No**	**No**	**No**	**No**	**No**
Fourth Dry Year					
Total Supply (AFY)	17,489	17,886	18,501	19,130	19,842
Total Demand	17,489	17,886	18,501	19,130	19,842
Supply Shortage?	**No**	**No**	**No**	**No**	**No**
Fifth Dry Year					
Total Supply (AFY)	17,489	17,886	18,501	19,130	19,842
Total Demand	17,489	17,886	18,501	19,130	19,842
Supply Shortage?	**No**	**No**	**No**	**No**	**No**

Source: California Water Service 2021

LESS THAN SIGNIFICANT IMPACT

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

To comply with the California Integrated Waste Management Act of 1989 (AB 939), the County must divert at least 50 percent of its solid waste from landfills. In addition, Assembly Bill 341 (AB 341) sets a statewide 75 percent recycling goal by 2020. AB 341 also requires businesses generating more than four cubic yards of solid waste to recycle and requires owners of multi-family housing with five or more units to provide recycling for their tenants.

The Salinas Valley Solid Waste Authority transports solid waste generated in the City of Salinas to the Johnson Canyon Landfill. The landfill is permitted to receive a maximum throughput of 1,574 tons per day. The landfill has remaining capacity of 6,923,297 cubic yards an estimated closure date of 2055 (California Department of Resources Recycling and Recovery [CalRecycle] 2020).

Based on CalEEMod outputs (Appendix A), development facilitated by the project would generate approximately 35 tons per year (approximately 192 pounds of solid waste per day). Assuming a minimum of 50 percent diversion from landfills in accordance with AB 939, the project would send approximately 96 pounds per day, or 0.05 ton per day, to the Johnson Canyon Landfill.[12] This represents approximately 0.003 percent of the landfill's allowable daily throughput of 1,694 tons per day (CalRecycle 2022). Therefore, the project would be served by a landfill with sufficient available capacity and would comply with applicable regulations related to solid waste. Impacts would be less than significant.

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[12] Calculation: 192 pounds divided by 2 = 96 pounds

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	□	□	□	■
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	□	□	□	■
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	□	□	□	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	□	□	□	■

While nearly all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather and other relevant factors (PRC 4201-4204, California Government Code 51175-89). The primary factors that increase an area's susceptibility to fire hazards include topography and slope, vegetation type and vegetation condition, and weather and atmospheric conditions. CAL FIRE maps fire hazards based on zones, referred to as Fire Hazard Severity Zones. Each of the zones influence how people construct buildings and protect property to reduce risk associated with wildland fires. Under state regulations, areas within Very High Fire Hazard Severity Zones (VHFHSZ) must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas.

In California, responsibility for wildfire prevention and suppression is shared by federal, state, and local agencies. Federal agencies have legal responsibility to prevent and suppress wildfires in Federal Responsibility Areas. CAL FIRE prevents and suppresses wildfires in State Responsibility Area lands, which are non-federal lands in unincorporated areas with watershed value, are of statewide interest, defined by land ownership, population density, and land use. Wildfire prevention and suppression in Local Responsibility Areas (LRA) are typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government. These lands include incorporated cities, cultivated agriculture lands, and portions of the desert (CAL FIRE 2007).

The site is within a primarily developed and urbanized area, with minimal vegetation. The site is not within a State Responsibility Area (SRA) and is not within an area classified as Very High, High, or Moderate for fire hazard severity. The nearest VHFHSZ occurs approximately four miles southwest and the nearest SRA with a hazard severity rating is located roughly five miles east of the site (CAL FIRE 2007).

a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The site is not located within or near (within two miles of) a VHFHSZ or SRA (CAL FIRE 2007). The site is bounded by primarily developed land and paved urban areas. All areas immediately surrounding the site are non-VHFHSZs. As discussed in Environmental Checklist Section 15, *Public Services*, the SFD provides emergency response and public safety services for the site. In addition, the project would not involve the installation of overhead powerlines or other infrastructure that may exacerbate fire risk. Therefore, the project would not expose people or structures to a significant risk involving wildfires nor exacerbate the risk of wildfire. There would be no impact.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	■	☐	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed in Environmental Checklist Section 4, *Biological Resources*, the project would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife species population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal. Mitigation Measure BIO-1 would reduce impacts to nesting bird species to less than significant. In addition, Mitigation Measures BIO-2, BIO-3, and BIO-4 would reduce impacts to coast range newts, western pond turtles, and western burrowing owls.

As discussed in Environmental Checklist Section 5, *Cultural Resources*, no archaeological resources are known to occur on the site. Nevertheless, the potential for the recovery of buried cultural materials during development activities remains. Implementation of Mitigation Measures CUL-1 would reduce impacts to previously undiscovered cultural resources to a less than significant level by providing a process for evaluating and, as necessary, avoiding impacts to any resources found during construction. As discussed in Environmental Checklist Section 18, *Tribal Cultural Resources,* the potential to discover unanticipated resources during development is a possibility. Mitigation Measure TCR-1 provides for guidance steps to take in the event of an unanticipated discovery of tribal cultural resources. With the implementation of Mitigation Measure TCR-1, impacts related to tribal cultural resources would be reduced to a less than significant level. Therefore, impacts to important examples of California history or prehistory would be less than significant with mitigation incorporated.

As noted throughout the Initial Study, most other potential environmental impacts related to the quality of environment would be less than significant or less than significant with implementation of mitigation measures.

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b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The cumulative setting includes proposed and approved projects within a one-mile radius of the project site. Cumulative projects were based upon a list of projects available for public review and comment on the City of Salinas website as well as approved projects within the area, including the Downtown Parking Lot and Intermodal Transportation Center Rezone Project and 11 Hill Circle Residential Project.

Cumulative impacts associated with some of the resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gas Emissions, Water Supply, and Solid Waste (*CEQA Guidelines* Section 15064[h][3]) and would be less than significant. Some of the other resource areas were determined to have no impact in comparison to existing conditions and therefore would not contribute to cumulative impacts, such as Agriculture and Forestry Resources, Mineral Resources, and Wildfire. As such, cumulative impacts in these issue areas would also be less than significant (not cumulatively considerable). Other issues (e.g., Aesthetics, Hazards and Hazardous Materials) are site-specific, and impacts at one location do not add to impacts at other locations or create additive impacts. The project would increase traffic compared to existing conditions. However, Mitigation Measure TRA-1 proposes TDM measures and impacts would be less than significant with mitigation. Therefore, the project's impacts would not be cumulatively considerable.

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As discussed in Environmental Checklist Section 3, *Air Quality,* the project would not conflict with an air quality plan, result in cumulatively considerable net increase in pollutants, or expose sensitive receptors to substantial concentrations of pollutants or odors. As discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials,* construction and operation of the project would not result in the upset, release, or use of hazardous materials. As discussed in Environmental Checklist Section 13, *Noise,* the project would not generate significant impacts to ambient noise or ground-borne vibration. Therefore, the project would not cause substantial adverse effects on human beings.

LESS THAN SIGNIFICANT IMPACT

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Appendix A

CalEEMod Output Files

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

1 Preston Street AQ

Monterey Bay Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	166.00	Space	0.00	66,400.00	0
Apartments Mid Rise	76.00	Dwelling Unit	2.60	167,960.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.8	**Precipitation Freq (Days)**	53
Climate Zone	4			**Operational Year**	2024
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	151	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Salinas, Monterey County --> MBARD. Utility provider would be Central Coast Community Energy. The CO2e rate is 151 pounds per MWh

Land Use - Project is 76 dwelling units (approx 2,210 sf) and 166 parking lot spaces. Acreage is approximately 2.6

Construction Phase - Default construction schedule

Off-road Equipment - Default construction equipment

Architectural Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Vehicle Trips - Default trip gen rate

Woodstoves -

Area Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Water And Wastewater - No septic tanks proposed. Changed the percentage and added to aerobic

Area Mitigation -

Water Mitigation - 2019 Title 24 standards require a 20% reduction for indoor water use

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	100	50
tblAreaMitigation	UseLowVOCPaintParkingValue	100	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	100
tblLandUse	LandUseSquareFeet	76,000.00	167,960.00
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	2.00	2.60
tblProjectCharacteristics	CO2IntensityFactor	0	151
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7680	1.7427	1.9672	4.0600e-003	0.1117	0.0738	0.1855	0.0343	0.0706	0.1048	0.0000	350.1704	350.1704	0.0511	8.0600e-003	353.8507
Maximum	**0.7680**	**1.7427**	**1.9672**	**4.0600e-003**	**0.1117**	**0.0738**	**0.1855**	**0.0343**	**0.0706**	**0.1048**	**0.0000**	**350.1704**	**350.1704**	**0.0511**	**8.0600e-003**	**353.8507**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7680	1.7427	1.9672	4.0600e-003	0.1117	0.0738	0.1855	0.0343	0.0706	0.1048	0.0000	350.1701	350.1701	0.0511	8.0600e-003	353.8505
Maximum	**0.7680**	**1.7427**	**1.9672**	**4.0600e-003**	**0.1117**	**0.0738**	**0.1855**	**0.0343**	**0.0706**	**0.1048**	**0.0000**	**350.1701**	**350.1701**	**0.0511**	**8.0600e-003**	**353.8505**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.5380	0.5380
2	4-2-2023	7-1-2023	0.5445	0.5445
3	7-2-2023	9-30-2023	0.5445	0.5445
		Highest	0.5445	0.5445

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	0.7375	9.0500e-003	0.7856	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2400e-003	0.0000	1.3154
Energy	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	55.7113	55.7113	6.5000e-004	6.2000e-004	55.9133
Mobile	0.2296	0.3200	2.1682	4.3100e-003	0.4212	3.9300e-003	0.4252	0.1126	3.6700e-003	0.1163	0.0000	404.4946	404.4946	0.0283	0.0205	411.2944
Waste						0.0000	0.0000		0.0000	0.0000	7.0966	0.0000	7.0966	0.4194	0.0000	17.5814
Water						0.0000	0.0000		0.0000	0.0000	1.7519	2.5835	4.3354	0.0458	3.8100e-003	6.6157
Total	**0.9705**	**0.3584**	**2.9663**	**4.5400e-003**	**0.4212**	**0.0107**	**0.4319**	**0.1126**	**0.0104**	**0.1230**	**8.8485**	**464.0739**	**472.9224**	**0.4953**	**0.0249**	**492.7203**

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	0.7375	9.0500e-003	0.7856	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2400e-003	0.0000	1.3154
Energy	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	55.7113	55.7113	6.5000e-004	6.2000e-004	55.9133
Mobile	0.2296	0.3200	2.1682	4.3100e-003	0.4212	3.9300e-003	0.4252	0.1126	3.6700e-003	0.1163	0.0000	404.4946	404.4946	0.0283	0.0205	411.2944
Waste						0.0000	0.0000		0.0000	0.0000	7.0966	0.0000	7.0966	0.4194	0.0000	17.5814
Water						0.0000	0.0000		0.0000	0.0000	1.4015	2.2165	3.6180	0.0366	3.0500e-003	5.4422
Total	**0.9705**	**0.3584**	**2.9663**	**4.5400e-003**	**0.4212**	**0.0107**	**0.4319**	**0.1126**	**0.0104**	**0.1230**	**8.4981**	**463.7068**	**472.2049**	**0.4862**	**0.0241**	**491.5468**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.96**	**0.08**	**0.15**	**1.85**	**3.05**	**0.24**

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	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	

4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 340,119; Residential Outdoor: 113,373; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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

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	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	83.00	19.00	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	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	**1.9500e-003**	**0.0214**	**0.0147**	**4.0000e-005**	**2.3900e-003**	**8.1000e-004**	**3.2000e-003**	**2.6000e-004**	**7.5000e-004**	**1.0100e-003**	**0.0000**	**3.2317**	**3.2317**	**1.0500e-003**	**0.0000**	**3.2578**

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0803	0.0803	0.0000	0.0000	0.0811
Total	**4.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0803**	**0.0803**	**0.0000**	**0.0000**	**0.0811**

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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	**1.9500e-003**	**0.0214**	**0.0147**	**4.0000e-005**	**2.3900e-003**	**8.1000e-004**	**3.2000e-003**	**2.6000e-004**	**7.5000e-004**	**1.0100e-003**	**0.0000**	**3.2317**	**3.2317**	**1.0500e-003**	**0.0000**	**3.2578**

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0803	0.0803	0.0000	0.0000	0.0811
Total	**4.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0803**	**0.0803**	**0.0000**	**0.0000**	**0.0811**

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					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**4.0000e-003**	**0.0434**	**0.0261**	**6.0000e-005**	**0.0213**	**1.8100e-003**	**0.0231**	**0.0103**	**1.6700e-003**	**0.0119**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

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	1.0000e-004	8.0000e-005	8.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2007	0.2007	1.0000e-005	1.0000e-005	0.2028
Total	**1.0000e-004**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2007**	**0.2007**	**1.0000e-005**	**1.0000e-005**	**0.2028**

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	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**4.0000e-003**	**0.0434**	**0.0261**	**6.0000e-005**	**0.0213**	**1.8100e-003**	**0.0231**	**0.0103**	**1.6700e-003**	**0.0119**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

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	1.0000e-004	8.0000e-005	8.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2007	0.2007	1.0000e-005	1.0000e-005	0.2028
Total	**1.0000e-004**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2007**	**0.2007**	**1.0000e-005**	**1.0000e-005**	**0.2028**

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	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4723	228.4723	0.0432	0.0000	229.5525
Total	**0.1885**	**1.4986**	**1.5636**	**2.7500e-003**		**0.0675**	**0.0675**		**0.0647**	**0.0647**	**0.0000**	**228.4723**	**228.4723**	**0.0432**	**0.0000**	**229.5525**

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	2.9700e-003	0.1064	0.0335	4.3000e-004	0.0138	6.8000e-004	0.0145	3.9900e-003	6.5000e-004	4.6400e-003	0.0000	41.5639	41.5639	3.6000e-004	6.1100e-003	43.3925
Worker	0.0298	0.0229	0.2562	6.6000e-004	0.0726	4.7000e-004	0.0731	0.0193	4.4000e-004	0.0198	0.0000	61.0868	61.0868	2.1500e-003	1.9100e-003	61.7112
Total	**0.0328**	**0.1292**	**0.2897**	**1.0900e-003**	**0.0864**	**1.1500e-003**	**0.0876**	**0.0233**	**1.0900e-003**	**0.0244**	**0.0000**	**102.6507**	**102.6507**	**2.5100e-003**	**8.0200e-003**	**105.1037**

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	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4720	228.4720	0.0432	0.0000	229.5522
Total	**0.1885**	**1.4986**	**1.5636**	**2.7500e-003**		**0.0675**	**0.0675**		**0.0647**	**0.0647**	**0.0000**	**228.4720**	**228.4720**	**0.0432**	**0.0000**	**229.5522**

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	2.9700e-003	0.1064	0.0335	4.3000e-004	0.0138	6.8000e-004	0.0145	3.9900e-003	6.5000e-004	4.6400e-003	0.0000	41.5639	41.5639	3.6000e-004	6.1100e-003	43.3925
Worker	0.0298	0.0229	0.2562	6.6000e-004	0.0726	4.7000e-004	0.0731	0.0193	4.4000e-004	0.0198	0.0000	61.0868	61.0868	2.1500e-003	1.9100e-003	61.7112
Total	**0.0328**	**0.1292**	**0.2897**	**1.0900e-003**	**0.0864**	**1.1500e-003**	**0.0876**	**0.0233**	**1.0900e-003**	**0.0244**	**0.0000**	**102.6507**	**102.6507**	**2.5100e-003**	**8.0200e-003**	**105.1037**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8179**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.9000e-004	2.1000e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5018	0.5018	2.0000e-005	2.0000e-005	0.5069
Total	**2.4000e-004**	**1.9000e-004**	**2.1000e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5018**	**0.5018**	**2.0000e-005**	**2.0000e-005**	**0.5069**

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	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8178**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.9000e-004	2.1000e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5018	0.5018	2.0000e-005	2.0000e-005	0.5069
Total	**2.4000e-004**	**1.9000e-004**	**2.1000e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5018**	**0.5018**	**2.0000e-005**	**2.0000e-005**	**0.5069**

3.6 Architectural Coating - 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					
Archit. Coating	0.5347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.5357**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.3800e-003	1.0000e-005	6.8000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5687	0.5687	2.0000e-005	2.0000e-005	0.5745
Total	**2.8000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5687**	**0.5687**	**2.0000e-005**	**2.0000e-005**	**0.5745**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.5357**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.3800e-003	1.0000e-005	6.8000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5687	0.5687	2.0000e-005	2.0000e-005	0.5745
Total	**2.8000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5687**	**0.5687**	**2.0000e-005**	**2.0000e-005**	**0.5745**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2296	0.3200	2.1682	4.3100e-003	0.4212	3.9300e-003	0.4252	0.1126	3.6700e-003	0.1163	0.0000	404.4946	404.4946	0.0283	0.0205	411.2944
Unmitigated	0.2296	0.3200	2.1682	4.3100e-003	0.4212	3.9300e-003	0.4252	0.1126	3.6700e-003	0.1163	0.0000	404.4946	404.4946	0.0283	0.0205	411.2944

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,132,272	1,132,272
Parking Lot	0.00	0.00	0.00		
Total	413.44	373.16	310.84	1,132,272	1,132,272

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.512341	0.052370	0.194493	0.150484	0.029151	0.007004	0.010494	0.009415	0.001203	0.000586	0.027411	0.001303	0.003746
Parking Lot	0.512341	0.052370	0.194493	0.150484	0.029151	0.007004	0.010494	0.009415	0.001203	0.000586	0.027411	0.001303	0.003746

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	21.7182	21.7182	0.0000	0.0000	21.7182
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.7182	21.7182	0.0000	0.0000	21.7182
NaturalGas Mitigated	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952
NaturalGas Unmitigated	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	637008	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952
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
Total		**3.4300e-003**	**0.0294**	**0.0125**	**1.9000e-004**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.0000**	**33.9932**	**33.9932**	**6.5000e-004**	**6.2000e-004**	**34.1952**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	637008	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952
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
Total		**3.4300e-003**	**0.0294**	**0.0125**	**1.9000e-004**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.0000**	**33.9932**	**33.9932**	**6.5000e-004**	**6.2000e-004**	**34.1952**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	293849	20.1264	0.0000	0.0000	20.1264
Parking Lot	23240	1.5918	0.0000	0.0000	1.5918
Total		**21.7182**	**0.0000**	**0.0000**	**21.7182**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	293849	20.1264	0.0000	0.0000	20.1264
Parking Lot	23240	1.5918	0.0000	0.0000	1.5918
Total		**21.7182**	**0.0000**	**0.0000**	**21.7182**

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	0.7375	9.0500e-003	0.7856	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2400e-003	0.0000	1.3154
Unmitigated	0.7375	9.0500e-003	0.7856	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2400e-003	0.0000	1.3154

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	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0238	9.0500e-003	0.7856	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2400e-003	0.0000	1.3154
Total	**0.7375**	**9.0500e-003**	**0.7856**	**4.0000e-005**		**4.3500e-003**	**4.3500e-003**		**4.3500e-003**	**4.3500e-003**	**0.0000**	**1.2844**	**1.2844**	**1.2400e-003**	**0.0000**	**1.3154**

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	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0238	9.0500e-003	0.7856	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2400e-003	0.0000	1.3154
Total	**0.7375**	**9.0500e-003**	**0.7856**	**4.0000e-005**		**4.3500e-003**	**4.3500e-003**		**4.3500e-003**	**4.3500e-003**	**0.0000**	**1.2844**	**1.2844**	**1.2400e-003**	**0.0000**	**1.3154**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.6180	0.0366	3.0500e-003	5.4422
Unmitigated	4.3354	0.0458	3.8100e-003	6.6157

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.95171 / 3.12173	4.3354	0.0458	3.8100e-003	6.6157
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.3354**	**0.0458**	**3.8100e-003**	**6.6157**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.96136 / 3.12173	3.6180	0.0366	3.0500e-003	5.4422
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**3.6180**	**0.0366**	**3.0500e-003**	**5.4422**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.0966	0.4194	0.0000	17.5814
Unmitigated	7.0966	0.4194	0.0000	17.5814

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.96	7.0966	0.4194	0.0000	17.5814
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**7.0966**	**0.4194**	**0.0000**	**17.5814**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.96	7.0966	0.4194	0.0000	17.5814
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**7.0966**	**0.4194**	**0.0000**	**17.5814**

9.0 Operational Offroad

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

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

1 Preston Street AQ

Monterey Bay Unified APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	166.00	Space	0.00	66,400.00	0
Apartments Mid Rise	76.00	Dwelling Unit	2.60	167,960.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.8	**Precipitation Freq (Days)**	53
Climate Zone	4			**Operational Year**	2024
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	151	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Salinas, Monterey County --> MBARD. Utility provider would be Central Coast Community Energy. The CO2e rate is 151 pounds per MWh

Land Use - Project is 76 dwelling units (approx 2,210 sf) and 166 parking lot spaces. Acreage is approximately 2.6

Construction Phase - Default construction schedule

Off-road Equipment - Default construction equipment

Architectural Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Vehicle Trips - Default trip gen rate

Woodstoves -

Area Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Water And Wastewater - No septic tanks proposed. Changed the percentage and added to aerobic

Area Mitigation -

Water Mitigation - 2019 Title 24 standards require a 20% reduction for indoor water use

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	100	50
tblAreaMitigation	UseLowVOCPaintParkingValue	100	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	100
tblLandUse	LandUseSquareFeet	76,000.00	167,960.00
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	2.00	2.60
tblProjectCharacteristics	CO2IntensityFactor	0	151
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	107.1914	14.7377	16.9612	0.0353	7.1647	0.6241	7.7696	3.4465	0.5979	4.0030	0.0000	3,350.1277	3,350.1277	0.7700	0.0787	3,384.9923
Maximum	**107.1914**	**14.7377**	**16.9612**	**0.0353**	**7.1647**	**0.6241**	**7.7696**	**3.4465**	**0.5979**	**4.0030**	**0.0000**	**3,350.1277**	**3,350.1277**	**0.7700**	**0.0787**	**3,384.9923**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	107.1914	14.7377	16.9612	0.0353	7.1647	0.6241	7.7696	3.4465	0.5979	4.0030	0.0000	3,350.1277	3,350.1277	0.7700	0.0787	3,384.9923
Maximum	**107.1914**	**14.7377**	**16.9612**	**0.0353**	**7.1647**	**0.6241**	**7.7696**	**3.4465**	**0.5979**	**4.0030**	**0.0000**	**3,350.1277**	**3,350.1277**	**0.7700**	**0.0787**	**3,384.9923**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995
Energy	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
Mobile	1.3991	1.7022	12.3993	0.0259	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,683.1655	2,683.1655	0.1700	0.1234	2,724.1979
Total	**5.5188**	**1.9354**	**18.7522**	**0.0273**	**2.5131**	**0.0705**	**2.5837**	**0.6703**	**0.0691**	**0.7393**	**0.0000**	**2,899.8126**	**2,899.8126**	**0.1849**	**0.1272**	**2,942.3383**

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	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995
Energy	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
Mobile	1.3991	1.7022	12.3993	0.0259	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,683.1655	2,683.1655	0.1700	0.1234	2,724.1979
Total	**5.5188**	**1.9354**	**18.7522**	**0.0273**	**2.5131**	**0.0705**	**2.5837**	**0.6703**	**0.0691**	**0.7393**	**0.0000**	**2,899.8126**	**2,899.8126**	**0.1849**	**0.1272**	**2,942.3383**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	
4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 340,119; Residential Outdoor: 113,373; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	83.00	19.00	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	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5908**	**0.5419**	**2.1326**	**0.1718**	**0.4985**	**0.6703**		**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0265	0.0176	0.2358	6.1000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.8000e-004	0.0178		62.1115	62.1115	1.9600e-003	1.6900e-003	62.6654
Total	**0.0265**	**0.0176**	**0.2358**	**6.1000e-004**	**0.0657**	**4.2000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**62.1115**	**62.1115**	**1.9600e-003**	**1.6900e-003**	**62.6654**

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5908**	**0.5419**	**2.1326**	**0.1718**	**0.4985**	**0.6703**	**0.0000**	**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0265	0.0176	0.2358	6.1000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.8000e-004	0.0178		62.1115	62.1115	1.9600e-003	1.6900e-003	62.6654
Total	**0.0265**	**0.0176**	**0.2358**	**6.1000e-004**	**0.0657**	**4.2000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**62.1115**	**62.1115**	**1.9600e-003**	**1.6900e-003**	**62.6654**

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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0332	0.0220	0.2947	7.6000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.6394	77.6394	2.4500e-003	2.1200e-003	78.3318
Total	**0.0332**	**0.0220**	**0.2947**	**7.6000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**77.6394**	**77.6394**	**2.4500e-003**	**2.1200e-003**	**78.3318**

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

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**	**0.0000**	**1,995.614 7**	**1,995.614 7**	**0.6454**		**2,011.750 3**

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	0.0332	0.0220	0.2947	7.6000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.6394	77.6394	2.4500e-003	2.1200e-003	78.3318
Total	**0.0332**	**0.0220**	**0.2947**	**7.6000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**77.6394**	**77.6394**	**2.4500e-003**	**2.1200e-003**	**78.3318**

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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	0.0275	0.9314	0.3009	3.9200e-003	0.1287	6.1700e-003	0.1349	0.0371	5.9000e-003	0.0430		416.1973	416.1973	3.6600e-003	0.0611	434.4905
Worker	0.2753	0.1824	2.4459	6.3000e-003	0.6818	4.3100e-003	0.6861	0.1809	3.9700e-003	0.1848		644.4071	644.4071	0.0204	0.0176	650.1539
Total	**0.3027**	**1.1137**	**2.7468**	**0.0102**	**0.8105**	**0.0105**	**0.8210**	**0.2179**	**9.8700e-003**	**0.2278**		**1,060.6044**	**1,060.6044**	**0.0240**	**0.0787**	**1,084.6444**

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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	0.0275	0.9314	0.3009	3.9200e-003	0.1287	6.1700e-003	0.1349	0.0371	5.9000e-003	0.0430		416.1973	416.1973	3.6600e-003	0.0611	434.4905
Worker	0.2753	0.1824	2.4459	6.3000e-003	0.6818	4.3100e-003	0.6861	0.1809	3.9700e-003	0.1848		644.4071	644.4071	0.0204	0.0176	650.1539
Total	**0.3027**	**1.1137**	**2.7468**	**0.0102**	**0.8105**	**0.0105**	**0.8210**	**0.2179**	**9.8700e-003**	**0.2278**		**1,060.6044**	**1,060.6044**	**0.0240**	**0.0787**	**1,084.6444**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.992 6	1,709.992 6	0.5420		1,723.541 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8802**	**8.6098**	**11.6840**	**0.0179**		**0.4338**	**0.4338**		**0.4003**	**0.4003**		**1,709.992 6**	**1,709.992 6**	**0.5420**		**1,723.541 4**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0498	0.0330	0.4420	1.1400e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		116.4591	116.4591	3.6800e-003	3.1800e-003	117.4977
Total	**0.0498**	**0.0330**	**0.4420**	**1.1400e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**116.4591**	**116.4591**	**3.6800e-003**	**3.1800e-003**	**117.4977**

3.5 Paving - 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	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8802**	**8.6098**	**11.6840**	**0.0179**		**0.4338**	**0.4338**		**0.4003**	**0.4003**	**0.0000**	**1,709.9926**	**1,709.9926**	**0.5420**		**1,723.5414**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0498	0.0330	0.4420	1.1400e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		116.4591	116.4591	3.6800e-003	3.1800e-003	117.4977
Total	**0.0498**	**0.0330**	**0.4420**	**1.1400e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**116.4591**	**116.4591**	**3.6800e-003**	**3.1800e-003**	**117.4977**

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

3.6 Architectural Coating - 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					
Archit. Coating	106.9434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**107.1350**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.0564	0.0374	0.5010	1.2900e-003	0.1397	8.8000e-004	0.1405	0.0370	8.1000e-004	0.0379		131.9870	131.9870	4.1700e-003	3.6000e-003	133.1640
Total	**0.0564**	**0.0374**	**0.5010**	**1.2900e-003**	**0.1397**	**8.8000e-004**	**0.1405**	**0.0370**	**8.1000e-004**	**0.0379**		**131.9870**	**131.9870**	**4.1700e-003**	**3.6000e-003**	**133.1640**

3.6 Architectural Coating - 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					
Archit. Coating	106.9434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**107.1350**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.0564	0.0374	0.5010	1.2900e-003	0.1397	8.8000e-004	0.1405	0.0370	8.1000e-004	0.0379		131.9870	131.9870	4.1700e-003	3.6000e-003	133.1640
Total	**0.0564**	**0.0374**	**0.5010**	**1.2900e-003**	**0.1397**	**8.8000e-004**	**0.1405**	**0.0370**	**8.1000e-004**	**0.0379**		**131.9870**	**131.9870**	**4.1700e-003**	**3.6000e-003**	**133.1640**

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	1.3991	1.7022	12.3993	0.0259	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,683.165 5	2,683.165 5	0.1700	0.1234	2,724.197 9
Unmitigated	1.3991	1.7022	12.3993	0.0259	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,683.165 5	2,683.165 5	0.1700	0.1234	2,724.197 9

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,132,272	1,132,272
Parking Lot	0.00	0.00	0.00		
Total	413.44	373.16	310.84	1,132,272	1,132,272

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.512341	0.052370	0.194493	0.150484	0.029151	0.007004	0.010494	0.009415	0.001203	0.000586	0.027411	0.001303	0.003746
Parking Lot	0.512341	0.052370	0.194493	0.150484	0.029151	0.007004	0.010494	0.009415	0.001203	0.000586	0.027411	0.001303	0.003746

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	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
NaturalGas Unmitigated	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1745.23	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
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
Total		**0.0188**	**0.1608**	**0.0684**	**1.0300e-003**		**0.0130**	**0.0130**		**0.0130**	**0.0130**		**205.3208**	**205.3208**	**3.9400e-003**	**3.7600e-003**	**206.5409**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.74523	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
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
Total		**0.0188**	**0.1608**	**0.0684**	**1.0300e-003**		**0.0130**	**0.0130**		**0.0130**	**0.0130**		**205.3208**	**205.3208**	**3.9400e-003**	**3.7600e-003**	**206.5409**

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	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995
Unmitigated	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1900	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348		11.3263	11.3263	0.0109		11.5995
Total	**4.1009**	**0.0724**	**6.2844**	**3.3000e-004**		**0.0348**	**0.0348**		**0.0348**	**0.0348**	**0.0000**	**11.3263**	**11.3263**	**0.0109**	**0.0000**	**11.5995**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1900	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348		11.3263	11.3263	0.0109		11.5995
Total	**4.1009**	**0.0724**	**6.2844**	**3.3000e-004**		**0.0348**	**0.0348**		**0.0348**	**0.0348**	**0.0000**	**11.3263**	**11.3263**	**0.0109**	**0.0000**	**11.5995**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

1 Preston Street AQ

Monterey Bay Unified APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	166.00	Space	0.00	66,400.00	0
Apartments Mid Rise	76.00	Dwelling Unit	2.60	167,960.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.8	**Precipitation Freq (Days)**	53
Climate Zone	4			**Operational Year**	2024
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	151	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Salinas, Monterey County --> MBARD. Utility provider would be Central Coast Community Energy. The CO2e rate is 151 pounds per MWh

Land Use - Project is 76 dwelling units (approx 2,210 sf) and 166 parking lot spaces. Acreage is approximately 2.6

Construction Phase - Default construction schedule

Off-road Equipment - Default construction equipment

Architectural Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Vehicle Trips - Default trip gen rate

Woodstoves -

Area Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Water And Wastewater - No septic tanks proposed. Changed the percentage and added to aerobic

Area Mitigation -

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

Water Mitigation - 2019 Title 24 standards require a 20% reduction for indoor water use

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	100	50
tblAreaMitigation	UseLowVOCPaintParkingValue	100	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	100
tblLandUse	LandUseSquareFeet	76,000.00	167,960.00
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	2.00	2.60
tblProjectCharacteristics	CO2IntensityFactor	0	151
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	107.1950	14.8383	16.9465	0.0349	7.1647	0.6241	7.7696	3.4465	0.5979	4.0030	0.0000	3,316.3342	3,316.3342	0.7703	0.0817	3,352.1769
Maximum	**107.1950**	**14.8383**	**16.9465**	**0.0349**	**7.1647**	**0.6241**	**7.7696**	**3.4465**	**0.5979**	**4.0030**	**0.0000**	**3,316.3342**	**3,316.3342**	**0.7703**	**0.0817**	**3,352.1769**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	107.1950	14.8383	16.9465	0.0349	7.1647	0.6241	7.7696	3.4465	0.5979	4.0030	0.0000	3,316.3342	3,316.3342	0.7703	0.0817	3,352.1769
Maximum	**107.1950**	**14.8383**	**16.9465**	**0.0349**	**7.1647**	**0.6241**	**7.7696**	**3.4465**	**0.5979**	**4.0030**	**0.0000**	**3,316.3342**	**3,316.3342**	**0.7703**	**0.0817**	**3,352.1769**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995
Energy	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
Mobile	1.3402	1.9519	13.3949	0.0249	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,573.8839	2,573.8839	0.1906	0.1356	2,619.0528
Total	**5.4599**	**2.1851**	**19.7477**	**0.0262**	**2.5131**	**0.0705**	**2.5837**	**0.6703**	**0.0691**	**0.7393**	**0.0000**	**2,790.5310**	**2,790.5310**	**0.2055**	**0.1393**	**2,837.1931**

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	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995
Energy	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
Mobile	1.3402	1.9519	13.3949	0.0249	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,573.8839	2,573.8839	0.1906	0.1356	2,619.0528
Total	**5.4599**	**2.1851**	**19.7477**	**0.0262**	**2.5131**	**0.0705**	**2.5837**	**0.6703**	**0.0691**	**0.7393**	**0.0000**	**2,790.5310**	**2,790.5310**	**0.2055**	**0.1393**	**2,837.1931**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	
4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 340,119; Residential Outdoor: 113,373; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

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

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	83.00	19.00	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	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5908**	**0.5419**	**2.1326**	**0.1718**	**0.4985**	**0.6703**		**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0282	0.0220	0.2335	5.7000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.8000e-004	0.0178		58.7816	58.7816	2.2100e-003	1.9700e-003	59.4240
Total	**0.0282**	**0.0220**	**0.2335**	**5.7000e-004**	**0.0657**	**4.2000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**58.7816**	**58.7816**	**2.2100e-003**	**1.9700e-003**	**59.4240**

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5908**	**0.5419**	**2.1326**	**0.1718**	**0.4985**	**0.6703**	**0.0000**	**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0282	0.0220	0.2335	5.7000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.8000e-004	0.0178		58.7816	58.7816	2.2100e-003	1.9700e-003	59.4240
Total	**0.0282**	**0.0220**	**0.2335**	**5.7000e-004**	**0.0657**	**4.2000e-004**	**0.0661**	**0.0174**	**3.8000e-004**	**0.0178**		**58.7816**	**58.7816**	**2.2100e-003**	**1.9700e-003**	**59.4240**

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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.614 7**	**1,995.614 7**	**0.6454**		**2,011.750 3**

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	0.0353	0.0275	0.2918	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		73.4770	73.4770	2.7600e-003	2.4600e-003	74.2799
Total	**0.0353**	**0.0275**	**0.2918**	**7.2000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**73.4770**	**73.4770**	**2.7600e-003**	**2.4600e-003**	**74.2799**

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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0353	0.0275	0.2918	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		73.4770	73.4770	2.7600e-003	2.4600e-003	74.2799
Total	**0.0353**	**0.0275**	**0.2918**	**7.2000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**73.4770**	**73.4770**	**2.7600e-003**	**2.4600e-003**	**74.2799**

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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	0.0267	0.9863	0.3100	3.9300e-003	0.1287	6.1900e-003	0.1349	0.0371	5.9200e-003	0.0430		416.9522	416.9522	3.5900e-003	0.0613	435.3055
Worker	0.2927	0.2281	2.4221	5.9600e-003	0.6818	4.3100e-003	0.6861	0.1809	3.9700e-003	0.1848		609.8587	609.8587	0.0229	0.0204	616.5235
Total	**0.3194**	**1.2144**	**2.7320**	**9.8900e-003**	**0.8105**	**0.0105**	**0.8210**	**0.2179**	**9.8900e-003**	**0.2278**		**1,026.8109**	**1,026.8109**	**0.0265**	**0.0817**	**1,051.8290**

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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	0.0267	0.9863	0.3100	3.9300e-003	0.1287	6.1900e-003	0.1349	0.0371	5.9200e-003	0.0430		416.9522	416.9522	3.5900e-003	0.0613	435.3055
Worker	0.2927	0.2281	2.4221	5.9600e-003	0.6818	4.3100e-003	0.6861	0.1809	3.9700e-003	0.1848		609.8587	609.8587	0.0229	0.0204	616.5235
Total	**0.3194**	**1.2144**	**2.7320**	**9.8900e-003**	**0.8105**	**0.0105**	**0.8210**	**0.2179**	**9.8900e-003**	**0.2278**		**1,026.8109**	**1,026.8109**	**0.0265**	**0.0817**	**1,051.8290**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8802**	**8.6098**	**11.6840**	**0.0179**		**0.4338**	**0.4338**		**0.4003**	**0.4003**		**1,709.9926**	**1,709.9926**	**0.5420**		**1,723.5414**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0529	0.0412	0.4377	1.0800e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		110.2154	110.2154	4.1400e-003	3.6900e-003	111.4199
Total	**0.0529**	**0.0412**	**0.4377**	**1.0800e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**110.2154**	**110.2154**	**4.1400e-003**	**3.6900e-003**	**111.4199**

3.5 Paving - 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	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8802**	**8.6098**	**11.6840**	**0.0179**		**0.4338**	**0.4338**		**0.4003**	**0.4003**	**0.0000**	**1,709.9926**	**1,709.9926**	**0.5420**		**1,723.5414**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0529	0.0412	0.4377	1.0800e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		110.2154	110.2154	4.1400e-003	3.6900e-003	111.4199
Total	**0.0529**	**0.0412**	**0.4377**	**1.0800e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**110.2154**	**110.2154**	**4.1400e-003**	**3.6900e-003**	**111.4199**

3.6 Architectural Coating - 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					
Archit. Coating	106.9434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**107.1350**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.0600	0.0467	0.4961	1.2200e-003	0.1397	8.8000e-004	0.1405	0.0370	8.1000e-004	0.0379		124.9108	124.9108	4.6900e-003	4.1900e-003	126.2759
Total	**0.0600**	**0.0467**	**0.4961**	**1.2200e-003**	**0.1397**	**8.8000e-004**	**0.1405**	**0.0370**	**8.1000e-004**	**0.0379**		**124.9108**	**124.9108**	**4.6900e-003**	**4.1900e-003**	**126.2759**

3.6 Architectural Coating - 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					
Archit. Coating	106.9434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**107.1350**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.0600	0.0467	0.4961	1.2200e-003	0.1397	8.8000e-004	0.1405	0.0370	8.1000e-004	0.0379		124.9108	124.9108	4.6900e-003	4.1900e-003	126.2759
Total	**0.0600**	**0.0467**	**0.4961**	**1.2200e-003**	**0.1397**	**8.8000e-004**	**0.1405**	**0.0370**	**8.1000e-004**	**0.0379**		**124.9108**	**124.9108**	**4.6900e-003**	**4.1900e-003**	**126.2759**

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	1.3402	1.9519	13.3949	0.0249	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,573.883 9	2,573.883 9	0.1906	0.1356	2,619.052 8
Unmitigated	1.3402	1.9519	13.3949	0.0249	2.5131	0.0227	2.5359	0.6703	0.0213	0.6915		2,573.883 9	2,573.883 9	0.1906	0.1356	2,619.052 8

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,132,272	1,132,272
Parking Lot	0.00	0.00	0.00		
Total	413.44	373.16	310.84	1,132,272	1,132,272

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.512341	0.052370	0.194493	0.150484	0.029151	0.007004	0.010494	0.009415	0.001203	0.000586	0.027411	0.001303	0.003746
Parking Lot	0.512341	0.052370	0.194493	0.150484	0.029151	0.007004	0.010494	0.009415	0.001203	0.000586	0.027411	0.001303	0.003746

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	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
NaturalGas Unmitigated	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1745.23	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
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
Total		**0.0188**	**0.1608**	**0.0684**	**1.0300e-003**		**0.0130**	**0.0130**		**0.0130**	**0.0130**		**205.3208**	**205.3208**	**3.9400e-003**	**3.7600e-003**	**206.5409**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.74523	0.0188	0.1608	0.0684	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.3208	205.3208	3.9400e-003	3.7600e-003	206.5409
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
Total		**0.0188**	**0.1608**	**0.0684**	**1.0300e-003**		**0.0130**	**0.0130**		**0.0130**	**0.0130**		**205.3208**	**205.3208**	**3.9400e-003**	**3.7600e-003**	**206.5409**

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	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995
Unmitigated	4.1009	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3263	11.3263	0.0109	0.0000	11.5995

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1900	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348		11.3263	11.3263	0.0109		11.5995
Total	**4.1009**	**0.0724**	**6.2844**	**3.3000e-004**		**0.0348**	**0.0348**		**0.0348**	**0.0348**	**0.0000**	**11.3263**	**11.3263**	**0.0109**	**0.0000**	**11.5995**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1900	0.0724	6.2844	3.3000e-004		0.0348	0.0348		0.0348	0.0348		11.3263	11.3263	0.0109		11.5995
Total	**4.1009**	**0.0724**	**6.2844**	**3.3000e-004**		**0.0348**	**0.0348**		**0.0348**	**0.0348**	**0.0000**	**11.3263**	**11.3263**	**0.0109**	**0.0000**	**11.5995**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

1 Preston Street GHG

Monterey Bay Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	166.00	Space	0.00	66,400.00	0
Apartments Mid Rise	76.00	Dwelling Unit	2.60	167,960.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.8	**Precipitation Freq (Days)**	53
Climate Zone	4			**Operational Year**	2030
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	151	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Salinas, Monterey County --> MBARD. Utility provider would be Central Coast Community Energy. The CO2e rate is 151 pounds per MWh

Land Use - Project is 76 dwelling units (approx 2,210 sf) and 166 parking lot spaces. Acreage is approximately 2.6

Construction Phase - Default construction schedule

Off-road Equipment - Default construction equipment

Architectural Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Vehicle Trips - Default trip gen rate

Woodstoves -

Area Coating - MBARD Rule 426 architectural coatings 50 g/L for nonflat coatings and 100 g/L for traffic markings

Water And Wastewater - No septic tanks proposed. Changed the percentage and added to aerobic

Area Mitigation -

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

Water Mitigation - 2019 Title 24 standards require a 20% reduction for indoor water use

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	50.00
tblLandUse	LandUseSquareFeet	76,000.00	167,960.00
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	2.00	2.60
tblProjectCharacteristics	CO2IntensityFactor	0	151
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7680	1.7427	1.9672	4.0600e-003	0.1117	0.0738	0.1855	0.0343	0.0706	0.1048	0.0000	350.1704	350.1704	0.0511	8.0600e-003	353.8507
Maximum	**0.7680**	**1.7427**	**1.9672**	**4.0600e-003**	**0.1117**	**0.0738**	**0.1855**	**0.0343**	**0.0706**	**0.1048**	**0.0000**	**350.1704**	**350.1704**	**0.0511**	**8.0600e-003**	**353.8507**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7680	1.7427	1.9672	4.0600e-003	0.1117	0.0738	0.1855	0.0343	0.0706	0.1048	0.0000	350.1701	350.1701	0.0511	8.0600e-003	353.8505
Maximum	**0.7680**	**1.7427**	**1.9672**	**4.0600e-003**	**0.1117**	**0.0738**	**0.1855**	**0.0343**	**0.0706**	**0.1048**	**0.0000**	**350.1701**	**350.1701**	**0.0511**	**8.0600e-003**	**353.8505**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-2-2023**	**4-1-2023**	0.5380	0.5380
2	**4-2-2023**	**7-1-2023**	0.5445	0.5445
3	**7-2-2023**	**9-30-2023**	0.5445	0.5445
		Highest	0.5445	0.5445

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	0.7903	9.0300e-003	0.7838	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2300e-003	0.0000	1.3151
Energy	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	55.7113	55.7113	6.5000e-004	6.2000e-004	55.9133
Mobile	0.1745	0.2155	1.6654	3.5800e-003	0.4206	2.8100e-003	0.4234	0.1124	2.6300e-003	0.1150	0.0000	349.0859	349.0859	0.0216	0.0158	354.3431
Waste						0.0000	0.0000		0.0000	0.0000	7.0966	0.0000	7.0966	0.4194	0.0000	17.5814
Water						0.0000	0.0000		0.0000	0.0000	1.7519	2.5835	4.3354	0.0458	3.8100e-003	6.6157
Total	**0.9682**	**0.2539**	**2.4617**	**3.8100e-003**	**0.4206**	**9.5300e-003**	**0.4302**	**0.1124**	**9.3500e-003**	**0.1217**	**8.8485**	**408.6651**	**417.5136**	**0.4887**	**0.0203**	**435.7687**

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7903	9.0300e-003	0.7838	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2300e-003	0.0000	1.3151
Energy	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	55.7113	55.7113	6.5000e-004	6.2000e-004	55.9133
Mobile	0.1745	0.2155	1.6654	3.5800e-003	0.4206	2.8100e-003	0.4234	0.1124	2.6300e-003	0.1150	0.0000	349.0859	349.0859	0.0216	0.0158	354.3431
Waste						0.0000	0.0000		0.0000	0.0000	7.0966	0.0000	7.0966	0.4194	0.0000	17.5814
Water						0.0000	0.0000		0.0000	0.0000	1.4015	2.2165	3.6180	0.0366	3.0500e-003	5.4422
Total	**0.9682**	**0.2539**	**2.4617**	**3.8100e-003**	**0.4206**	**9.5300e-003**	**0.4302**	**0.1124**	**9.3500e-003**	**0.1217**	**8.4981**	**408.2981**	**416.7962**	**0.4795**	**0.0195**	**434.5953**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.96	0.09	0.17	1.87	3.75	0.27

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	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	

4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 340,119; Residential Outdoor: 113,373; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 3,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	83.00	19.00	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	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	**1.9500e-003**	**0.0214**	**0.0147**	**4.0000e-005**	**2.3900e-003**	**8.1000e-004**	**3.2000e-003**	**2.6000e-004**	**7.5000e-004**	**1.0100e-003**	**0.0000**	**3.2317**	**3.2317**	**1.0500e-003**	**0.0000**	**3.2578**

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0803	0.0803	0.0000	0.0000	0.0811
Total	**4.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0803**	**0.0803**	**0.0000**	**0.0000**	**0.0811**

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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	**1.9500e-003**	**0.0214**	**0.0147**	**4.0000e-005**	**2.3900e-003**	**8.1000e-004**	**3.2000e-003**	**2.6000e-004**	**7.5000e-004**	**1.0100e-003**	**0.0000**	**3.2317**	**3.2317**	**1.0500e-003**	**0.0000**	**3.2578**

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0803	0.0803	0.0000	0.0000	0.0811
Total	**4.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0803**	**0.0803**	**0.0000**	**0.0000**	**0.0811**

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					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**4.0000e-003**	**0.0434**	**0.0261**	**6.0000e-005**	**0.0213**	**1.8100e-003**	**0.0231**	**0.0103**	**1.6700e-003**	**0.0119**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

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	1.0000e-004	8.0000e-005	8.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2007	0.2007	1.0000e-005	1.0000e-005	0.2028
Total	**1.0000e-004**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2007**	**0.2007**	**1.0000e-005**	**1.0000e-005**	**0.2028**

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	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**4.0000e-003**	**0.0434**	**0.0261**	**6.0000e-005**	**0.0213**	**1.8100e-003**	**0.0231**	**0.0103**	**1.6700e-003**	**0.0119**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

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	1.0000e-004	8.0000e-005	8.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2007	0.2007	1.0000e-005	1.0000e-005	0.2028
Total	**1.0000e-004**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2007**	**0.2007**	**1.0000e-005**	**1.0000e-005**	**0.2028**

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	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4723	228.4723	0.0432	0.0000	229.5525
Total	**0.1885**	**1.4986**	**1.5636**	**2.7500e-003**		**0.0675**	**0.0675**		**0.0647**	**0.0647**	**0.0000**	**228.4723**	**228.4723**	**0.0432**	**0.0000**	**229.5525**

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	2.9700e-003	0.1064	0.0335	4.3000e-004	0.0138	6.8000e-004	0.0145	3.9900e-003	6.5000e-004	4.6400e-003	0.0000	41.5639	41.5639	3.6000e-004	6.1100e-003	43.3925
Worker	0.0298	0.0229	0.2562	6.6000e-004	0.0726	4.7000e-004	0.0731	0.0193	4.4000e-004	0.0198	0.0000	61.0868	61.0868	2.1500e-003	1.9100e-003	61.7112
Total	**0.0328**	**0.1292**	**0.2897**	**1.0900e-003**	**0.0864**	**1.1500e-003**	**0.0876**	**0.0233**	**1.0900e-003**	**0.0244**	**0.0000**	**102.6507**	**102.6507**	**2.5100e-003**	**8.0200e-003**	**105.1037**

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	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4720	228.4720	0.0432	0.0000	229.5522
Total	**0.1885**	**1.4986**	**1.5636**	**2.7500e-003**		**0.0675**	**0.0675**		**0.0647**	**0.0647**	**0.0000**	**228.4720**	**228.4720**	**0.0432**	**0.0000**	**229.5522**

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

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9700e-003	0.1064	0.0335	4.3000e-004	0.0138	6.8000e-004	0.0145	3.9900e-003	6.5000e-004	4.6400e-003	0.0000	41.5639	41.5639	3.6000e-004	6.1100e-003	43.3925
Worker	0.0298	0.0229	0.2562	6.6000e-004	0.0726	4.7000e-004	0.0731	0.0193	4.4000e-004	0.0198	0.0000	61.0868	61.0868	2.1500e-003	1.9100e-003	61.7112
Total	**0.0328**	**0.1292**	**0.2897**	**1.0900e-003**	**0.0864**	**1.1500e-003**	**0.0876**	**0.0233**	**1.0900e-003**	**0.0244**	**0.0000**	**102.6507**	**102.6507**	**2.5100e-003**	**8.0200e-003**	**105.1037**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8179**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.9000e-004	2.1000e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5018	0.5018	2.0000e-005	2.0000e-005	0.5069
Total	**2.4000e-004**	**1.9000e-004**	**2.1000e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5018**	**0.5018**	**2.0000e-005**	**2.0000e-005**	**0.5069**

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	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8178**

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

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.9000e-004	2.1000e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5018	0.5018	2.0000e-005	2.0000e-005	0.5069
Total	**2.4000e-004**	**1.9000e-004**	**2.1000e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5018**	**0.5018**	**2.0000e-005**	**2.0000e-005**	**0.5069**

3.6 Architectural Coating - 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					
Archit. Coating	0.5347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.5357**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.3800e-003	1.0000e-005	6.8000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5687	0.5687	2.0000e-005	2.0000e-005	0.5745
Total	**2.8000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5687**	**0.5687**	**2.0000e-005**	**2.0000e-005**	**0.5745**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.5357**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.3800e-003	1.0000e-005	6.8000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5687	0.5687	2.0000e-005	2.0000e-005	0.5745
Total	**2.8000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5687**	**0.5687**	**2.0000e-005**	**2.0000e-005**	**0.5745**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1745	0.2155	1.6654	3.5800e-003	0.4206	2.8100e-003	0.4234	0.1124	2.6300e-003	0.1150	0.0000	349.0859	349.0859	0.0216	0.0158	354.3431
Unmitigated	0.1745	0.2155	1.6654	3.5800e-003	0.4206	2.8100e-003	0.4234	0.1124	2.6300e-003	0.1150	0.0000	349.0859	349.0859	0.0216	0.0158	354.3431

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,132,272	1,132,272
Parking Lot	0.00	0.00	0.00		
Total	413.44	373.16	310.84	1,132,272	1,132,272

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.541220	0.054515	0.190757	0.133854	0.023260	0.005971	0.010451	0.009212	0.001090	0.000543	0.025209	0.001134	0.002785
Parking Lot	0.541220	0.054515	0.190757	0.133854	0.023260	0.005971	0.010451	0.009212	0.001090	0.000543	0.025209	0.001134	0.002785

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	21.7182	21.7182	0.0000	0.0000	21.7182
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.7182	21.7182	0.0000	0.0000	21.7182
NaturalGas Mitigated	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952
NaturalGas Unmitigated	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	637008	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952
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
Total		**3.4300e-003**	**0.0294**	**0.0125**	**1.9000e-004**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.0000**	**33.9932**	**33.9932**	**6.5000e-004**	**6.2000e-004**	**34.1952**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	637008	3.4300e-003	0.0294	0.0125	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9932	33.9932	6.5000e-004	6.2000e-004	34.1952
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
Total		**3.4300e-003**	**0.0294**	**0.0125**	**1.9000e-004**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.0000**	**33.9932**	**33.9932**	**6.5000e-004**	**6.2000e-004**	**34.1952**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	293849	20.1264	0.0000	0.0000	20.1264
Parking Lot	23240	1.5918	0.0000	0.0000	1.5918
Total		**21.7182**	**0.0000**	**0.0000**	**21.7182**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	293849	20.1264	0.0000	0.0000	20.1264
Parking Lot	23240	1.5918	0.0000	0.0000	1.5918
Total		**21.7182**	**0.0000**	**0.0000**	**21.7182**

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	0.7903	9.0300e-003	0.7838	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2300e-003	0.0000	1.3151
Unmitigated	0.7903	9.0300e-003	0.7838	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2300e-003	0.0000	1.3151

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	0.1065					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0236	9.0300e-003	0.7838	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2300e-003	0.0000	1.3151
Total	**0.7903**	**9.0300e-003**	**0.7838**	**4.0000e-005**		**4.3500e-003**	**4.3500e-003**		**4.3500e-003**	**4.3500e-003**	**0.0000**	**1.2844**	**1.2844**	**1.2300e-003**	**0.0000**	**1.3151**

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	0.1065					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0236	9.0300e-003	0.7838	4.0000e-005		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	1.2844	1.2844	1.2300e-003	0.0000	1.3151
Total	**0.7903**	**9.0300e-003**	**0.7838**	**4.0000e-005**		**4.3500e-003**	**4.3500e-003**		**4.3500e-003**	**4.3500e-003**	**0.0000**	**1.2844**	**1.2844**	**1.2300e-003**	**0.0000**	**1.3151**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.6180	0.0366	3.0500e-003	5.4422
Unmitigated	4.3354	0.0458	3.8100e-003	6.6157

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.95171 / 3.12173	4.3354	0.0458	3.8100e-003	6.6157
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.3354**	**0.0458**	**3.8100e-003**	**6.6157**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.96136 / 3.12173	3.6180	0.0366	3.0500e-003	5.4422
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**3.6180**	**0.0366**	**3.0500e-003**	**5.4422**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.0966	0.4194	0.0000	17.5814
Unmitigated	7.0966	0.4194	0.0000	17.5814

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.96	7.0966	0.4194	0.0000	17.5814
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**7.0966**	**0.4194**	**0.0000**	**17.5814**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.96	7.0966	0.4194	0.0000	17.5814
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**7.0966**	**0.4194**	**0.0000**	**17.5814**

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

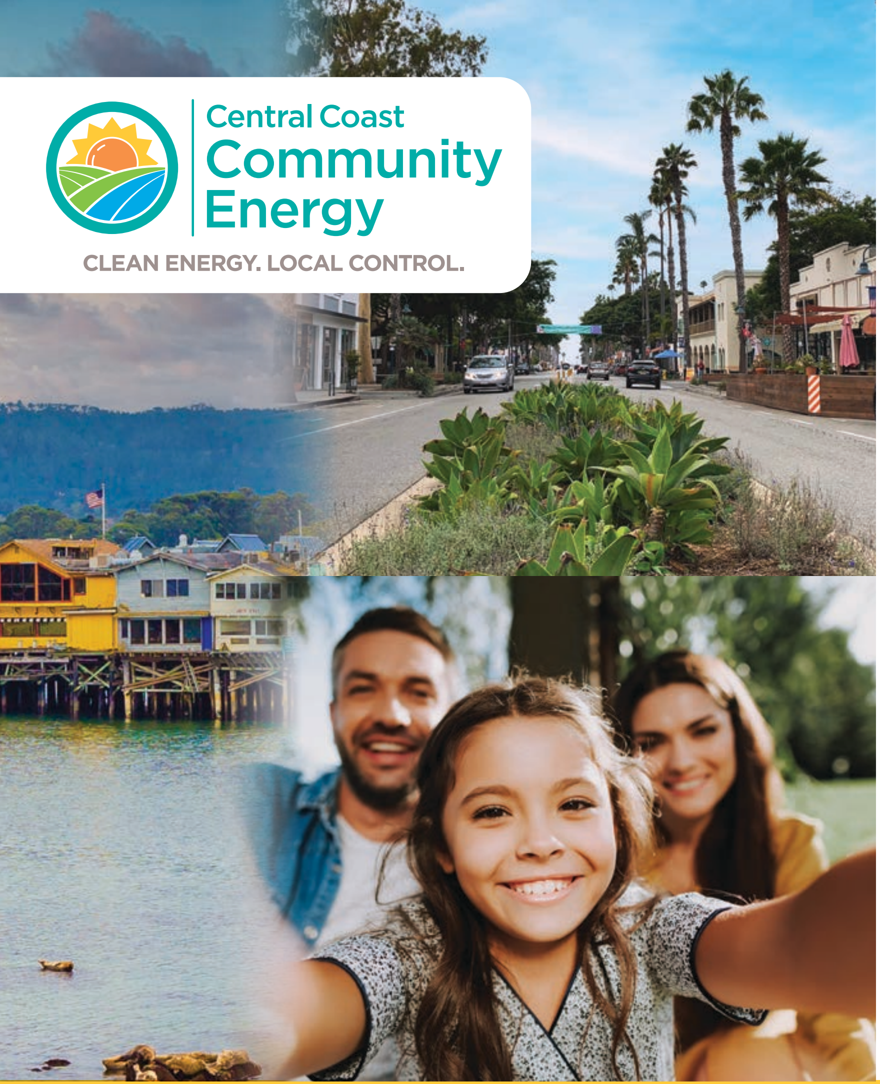
Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation



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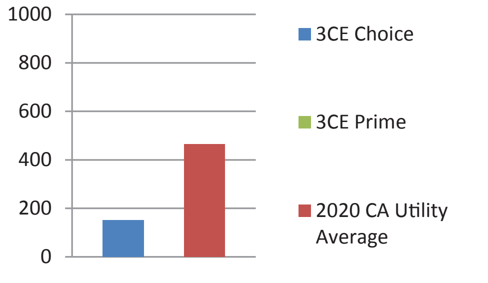
2020 POWER CONTENT LABEL

Central Coast Community Energy

https://3cenergy.org/understanding-clean-energy/

Greenhouse Gas Emissions Intensity (lbs CO_2e/MWh)

3CE Choice	3CE Prime	2020 CA Utility Average
151	0	466



Energy Resources	3CE Choice	3CE Prime	2020 CA Power Mix
Eligible Renewable[1]	**31.1%**	**100.0%**	**33.1%**
Biomass & Biowaste	1.7%	0.0%	2.5%
Geothermal	8.8%	0.0%	4.9%
Eligible Hydroelectric	2.8%	0.0%	1.4%
Solar	15.3%	50.0%	13.2%
Wind	2.5%	50.0%	11.1%
Coal	**0.0%**	**0.0%**	**2.7%**
Large Hydroelectric	**55.7%**	**0.0%**	**12.2%**
Natural Gas	**0.0%**	**0.0%**	**37.1%**
Nuclear	**0.0%**	**0.0%**	**9.3%**
Other	**0.0%**	**0.0%**	**0.2%**
Unspecified Power[2]	**13.2%**	**0.0%**	**5.4%**
TOTAL	**100.0%**	**100.0%**	**100.0%**
Percentage of Retail Sales Covered by Retired Unbundled RECs[3]:	**0%**	**0%**	

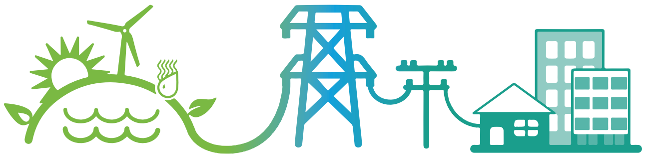
[1]The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.
[2]Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.
[3]Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled RECs represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.

For specific information about this electricity portfolio, contact:	**Central Coast Community Energy (831) 641-7222**
For general information about the Power Content Label, visit:	http://www.energy.ca.gov/pcl/
For additional questions, please contact the California Energy Commission at:	Toll-free in California: 844-454-2906 Outside California: 916-653-0237

Version: October 2021

You are receiving this notice because you were a Central Coast Community Energy customer in 2020. Receipt of this notice does not mean that your electricity generation services are currently with CCCE. The generation data highlighted in the CCCE 2020 Power Content Label is provided in the Annual Report to the California Energy Commission: Power Source Disclosure Program. Percentages may not round to 100% due to rounding.

CLEAN ENERGY. LOCAL CONTROL.



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70 Garden Court, Suite 300
Monterey, CA 93940

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COMMUNITY ENERGY

Appendix B

Biological Resources Assessment

Rincon Consultants, Inc.

2511 Garden Road, Suite C-250
Monterey, California 93940

831 333 0310

info@rinconconsultants.com
www.rinconconsultants.com

January 9, 2023
Project No: 21-10851

Lisa Brinton, Planning Manager
Community Development Department
City of Salinas
65 West Alisal Street, 2nd Floor
Salinas, California 93901
Via email: lisab@ci.salinas.ca.us
cc: Megan Hunter, meganh@ci.salinas.ca.us

Subject: Biological Resources Assessment for 1 Preston Street Project in Salinas, California 95003

Dear Ms. Brinton:

This report documents the findings of a Biological Resources Assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon) for the 1 Preston Street Project (project) in Salinas, California. The purpose of this report is to document existing conditions at the project site and to evaluate the potential for impacts to special-status biological resources including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and suitable habitat for nesting birds, in compliance with the County of Monterey's California Environmental Quality Act (CEQA) environmental review requirements.

Project Location and Description

The project site, here after known as the study area, includes County Assessor's Parcel Number 003-161-008-000 and is located at 1 Preston Street in central Salinas, California, within Monterey County, on the east of the Monterey Bay (Figure 1; Attachment 1). The study area is south of Highway (HWY) 101. Land uses surrounding the approximately 2.6-acre study area consist of Medium and Low-Density residential neighborhoods to the west and north of the site, as well as commercial uses to the east along north Main Street. The study area is bordered on the north and west by an open space reclamation ditch which is fed by Main Canal, and collects water from Alisal Creek, Gabilan Creek, and Natividad Creek. A small park is located between existing residential developments, roughly 245 feet northwest of the project site on the far side of the reclamation ditch. The site is undeveloped with bare ground and sparse ruderal vegetation in the center and nonnative annual grasslands around the perimeter.

The proposed project consists of a General Plan Amendment and Rezone to modify the existing vacant 2.6-acre lot at 1 Preston Street from Residential Medium Density (R-M-3.6) to Residential High Density (R-H-2.1), which would facilitate the development of up to approximately 76 housing units (anticipating a density bonus) across approximately 129,202 square feet (sf). Because there are currently no development proposals, this BRA assumes the maximum potential buildout of the site.

Regulatory Background

Regulatory authority over biological resources is shared by Federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Salinas). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California and federal Endangered Species Acts (CESA/ESA), the CDFW and the U.S. Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as threatened or endangered, and species protected by the Migratory Bird Treaty Act (MBTA). The U.S. The City of Salinas is the designated lead agency under CEQA for this project.

Methods

This biological resources assessment consists of a review of relevant literature and background information, a reconnaissance-level field survey to confirm existing conditions and determine which biological resources are present or may occur at the site, and an evaluation of the development to determine potentially significant impacts to biological resources under CEQA. The potential presence of special-status species is based on the literature review and a survey designed to map vegetation communities and assess habitat suitability and presence of target species. The study area evaluated for this biological resource assessment is defined as the limits of the subject parcel (Figure 2; Attachment 1).

Literature Review

The literature review included database research on special-status resource occurrences within the *Salinas, California* 7.5-minute U.S. Geological Survey (USGS) quadrangle and eight surrounding quads. Sources included the CDFW California Natural Diversity Data Base (CNDDB) (CDFW 2021a), Biogeographic Information and Observation System (Bios) (CDFW 2021b), USFWS Information for Planning and Consultation (IPaC) (USWFS 2021a), and USFWS Critical Habitat Portal (USWFS 2021b). Other resources included the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2021), CDFW's Special Animals List (CDFW 2021c), and CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2021d). Aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined.

Field Survey

A reconnaissance-level site visit was conducted to assess the habitat suitability for potential special-status species; map existing vegetation communities and any evident sensitive biological resources currently on site; note the presence of potential jurisdictional waters or wetlands; document any wildlife connectivity/movement features; and record all observations of plant and wildlife species within the study area. Site photos from the survey are included as Attachment 2.

Existing Conditions

Topography and Soils

The site's elevation is roughly 48 feet above mean sea level. With the exception of the reclamation ditch, the topography of the study area and its immediate surroundings is generally flat and has been previously graded and compacted. The site is located in Salinas, California. Based on the most recent soil survey for Monterey County (U.S. Department of Agriculture, Natural Resources Conservation Service [USDA,NRCS] 1980), the study area contains two soil map units:

- **Clear Lake clay, sandy substratum, drained, 0 to 1 percent slopes,** is basin alluvium. This soil type is derived from igneous, metamorphic and sedimentary rock over flood plain alluvium.
- **Xerorthents, loamy,** occurs on old alluvial fans, footslope terraces and footslopes.

Vegetation and Other Land Cover

No natural vegetation communities exist within the study area. Vegetation within the study area is regularly maintained, and was comprised of largely bare ground in the center with sparse ruderal vegetation, with non-native annual grassland along the perimeter (refer to Figure 3, Attachment 1). The dominant species were wild oats (*Avena sp.*), rip-gut brome (*Bromus diandrus*), and foxtail barley (*Hordeum murinum*) within the non-native annual grassland.

General Wildlife

The study area and its surroundings provide habitat for wildlife species that commonly occur in urban habitats such as house finch (*Haemorhous mexicanus*), Botta's pocket gopher (*Thomomys bottae*) and California scrub jay (*Aphelocoma californica*); however, the site is regularly maintained and, therefore, only provides marginal habitat for urban wildlife such as Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and fox squirrel (*Sciurus niger*). The adjacent reclamation ditch channel may provide a dispersal corridor for wildlife. Species such as coyote, bobcat, and raccoon may utilize the channel.

Special-Status Biological Resources

This section discusses special-status biological resources observed in the study area and evaluates the potential for the study area to support special-status biological resources.

Special-Status Species

Local, State, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB species occurrence records from other sites in the vicinity of the study area, and previous reports for the study area. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the CFGC (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern (SSC) by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system per the following definitions:

- **Rank 1A:** Plants presumed extinct in California;
- **Rank 1B.1:** Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);
- **Rank 1B.2:** Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened);
- **Rank 1B.3:** Rare or endangered in California and elsewhere, not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known);
- **Rank 2:** Rare, threatened or endangered in California, but more common elsewhere.

Based on a query of the CNDDB, there are 45 special-status plant species and 32 special-status wildlife species documented within the *Salinas, California* 7.5-minute U.S. Geological Survey (USGS) quadrangle and 8 surrounding quads. All 77 special-status species have been evaluated for potential to occur within the study area (Attachment 3).

Special-Status Plant Species

No special-status plants were incidentally observed during the reconnaissance-level field survey. The reconnaissance survey was conducted in May 2021, within the spring blooming period when many species are identifiable. Based on the impacted nature of the site, lack of natural vegetation communities, and habitat requirements of special-status plant species, Rincon determined of the 45 special-status plant species known to occur in the region, Congdon's tarplant (*Centromadia parryi ssp. Congdonii*) is the only species to have a low potential to occur within the study area (see Attachment 3). No other special-status species are expected to occur in the study area. This is due to a lack of species-specific habitat requirements on site and the overall lack of suitable habitat such as natural vegetation communities or natural wetland habitats (e.g., marshes or seeps). For the purposes of CEQA analysis, special-status species with low potential to occur will not be addressed further.

Special-Status Wildlife Species

No federal or State-listed or other special-status wildlife species were observed during the field survey. Of the 32 species evaluated (see Attachment 3), two species had a low potential to occur and three species had a moderate potential to occur. California red-legged frog (*Rana draytonii*) and Monterey shrew (*Sorex ornatus salarius*) had a low potential to occur. Coast range newt (*Taricha torosa*), western pond turtle (*Emys marmorata*), and western burrowing owl (*Athene cunicularia*), had a moderate potential to occur in the study area. For the purposes of CEQA analysis, special-status species with low potential to occur will not be addressed further. No other special-status species are expected to occur in the study area. This is due to a lack of species-specific habitat requirements on site and the overall lack of suitable habitat such as natural vegetation communities or natural wetland habitats (e.g., marshes or seeps). The study area is relatively small and isolated by development from any natural habitats. As such, it does not support a prey base for larger predators/raptors and lacks connectivity to regional populations of special-status species.

Coast Range Newt

Coast range newt is a CDFW species of special concern that inhabits terrestrial habitats such as oak woodlands, annual grassland, and chaparral where sufficient moisture is present. As adults they will migrate over 0.62 mile (1 km) to breed in ponds, reservoirs, and slow-moving streams. There is one CNDDB record for the coast range newt within five miles of the study area. The study area is within the known range of the species and suitable terrestrial and aquatic habitat is present within and immediately adjacent to the study area.

Western Pond Turtle

Western pond turtle is a CDFW species of special concern that is found in ponds, lakes, rivers, creeks, marshes, and irrigation ditches, with abundant vegetation. It requires basking sites of logs, rocks, cattail mats, or exposed banks. Western pond turtle is active from approximately February to November. It will estivate during summer droughts by burying itself in soft bottom mud. When creeks and ponds dry up in summer, some turtles will travel along the creek until they find an isolated deep pool, others stay within moist mats of algae in shallow pools, and many turtles move to woodlands above the creek or pond and bury themselves in loose soil. Western pond turtle will overwinter underground until temperatures warm up and the heavy winter flows of the creek subside. They return to the creek in the spring.

There are two occurrences within five miles of the study area, with the closest occurrence approximately 3.6 miles to the east within Natividad Creek. The ditch immediately adjacent to the study area is connected to Natividad creek.

Western Burrowing Owl

Western burrowing owl is a CDFW Species of Special Concern that occupies open, treeless areas within grassland, low density scrub, and desert biomes. This species generally inhabits gently sloping areas, characterized by low, sparse vegetation, and is often associated with high densities of burrowing mammals (Poulin et al. 2011). Western burrowing owl often uses relatively disturbed areas such as agricultural fields, golf courses, cemeteries, and vacant urban lots in addition to natural breeding habitats. Nests are most often in fossorial animal burrows, such as California ground squirrel or American badger, but atypical nests such as culverts or rubble piles may also be used. Nest sites are typically selected in an area with a high density of burrows.

There are five occurrences within five miles of the study area, with the closest occurrence approximately 0.45 miles to the west. Suitable habitat is present throughout the study area within both the nonnative annual grassland and the ruderal habitats. Even though burrows of suitable size were not observed within the study area ground squirrels were observed in the open space alongside the adjacent reclamation ditch within 500 feet of the study area. The species is known to occur in the region and is determined to have a moderate potential to occur within the study area.

Nesting Birds

Birds may nest in trees, shrubs, or directly on the ground. The study area contains suitable nesting habitat for ground-nesting avian species, including killdeer (*Charadrius vociferus*). Therefore, the study area contains suitable nesting habitat for resident and migratory birds. Adjacent parcels contain trees and shrubs which provide suitable nesting habitat for other avian species. Native bird nests are protected by the MBTA and CFGC Section 3503. The nesting season generally extends from February through August but can vary based upon annual climatic conditions.

Special-Status Vegetation Communities

Plant communities are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in CNDDB. CNDDB vegetation alliances are ranked 1 through 5 based on NatureServe’s (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2018 sensitive natural communities list under CDFW’s revised ranking methodology (CDFW 2020e).

Based on the current list, no special-status vegetation communities are present in the study area.

Jurisdictional Waters and Wetlands

While no potentially jurisdictional features occur within the study area, the reclamation ditch immediately adjacent to the study area is a potentially jurisdictional feature.

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The study area is not within any Essential Connectivity Areas or Natural Landscape Blocks (CDFW 2021b). The adjacent ditch may provide a wildlife movement corridor, or habitat linkage; however, it is not within the study area.

Impact Analysis and Mitigation Measures

This section discusses the potential impacts and effects to biological resources that may occur from implementation of the proposed project and recommends mitigation measures that would reduce those impacts where applicable.

Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Special-Status Plants

The proposed project has potential to result in direct impacts to special-status plant species if they are present in the disturbance footprint due to removal of individuals or crushing by heavy equipment.

No sensitive plant species were observed during the reconnaissance survey in May 2021 and no special-status plants are expected to occur within the study area.

Special-Status Wildlife

The site contains nesting bird habitat. If nesting birds protected by the CFGC or MBTA are present on-site during construction, direct effects could include injury or mortality from construction activity, or nest abandonment from construction noise, dust, and other project activities.

Nesting Birds

The loss of active nests would be a violation of the MBTA and CFGC sections 3503 and 3513. The loss of common avian species is not likely to constitute a significant impact under CEQA; however, the following measures are recommended for all avian species to maintain compliance with federal and State laws:

- To avoid disturbance of nesting and special-status birds or migratory species protected by the MBTA and Sections 3503, 3503.5, and 3513 of the CFGC, activities related to the project site development, including, but not limited to, vegetation and/or tree removal should occur outside of the bird breeding season (February 1 through August 30). If ground disturbance, vegetation removal or heavy equipment work must begin within the nesting season, then the project applicant shall submit evidence to the City that a qualified biologist conducted a pre-construction nesting bird survey, within 14 days of the start of construction. The nesting bird pre-construction survey will be conducted by a qualified biologist within the disturbance footprint and a 300-foot buffer.
- If nests are found, an avoidance buffer will be established by a qualified biologist. The buffer should be established to ensure nesting activity is not disturbed by construction activity, and should be determined by the qualified biologist based on the species' known tolerances, the proposed work

activity, and existing disturbances associated with land uses outside of the site. The buffer should be demarcated by the biologist with bright construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel should be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities should occur within this buffer until the qualified biologist has confirmed that breeding/nesting has completed, and the young have fledged the nest, or the nest has become otherwise inactive. Encroachment into the buffer should occur only at the discretion of the qualified biologist.

This measure will reduce impacts to nesting birds to less than significant.

Coast Range Newt

Suitable aquatic breeding habitat for coast range newt is present adjacent to the study area within the unnamed reclamation ditch. There is moderate potential for this species to occur within the study area, and no impacts to breeding habitat are expected from project development. However, direct impacts in the form of injury or mortality could occur if individuals are present during construction activity.

Pre-construction clearance surveys for coast range newt should be conducted within 14 days prior to the start of construction (including staging and mobilization) in areas of suitable habitat. The surveys should cover the entire disturbance footprint. A wildlife exclusion fence should be placed along the top of bank of the adjacent ditch and maintained regularly to deter wildlife from entering the project area during construction. The project applicant shall submit evidence to the City that a qualified biologist conducted pre-construction clearance surveys for coast range newt no more than 14 days prior to the start of construction. These measures will reduce impacts to coast range newt to less than significant.

Western Pond Turtle

Western pond turtle has potential to occur along the adjacent ditch and within the nonnative grassland habitat. The species may be directly adversely affected by the proposed project if individuals are present in the work areas. Injury or mortality of individuals that may result from construction activity may be considered a significant impact under CEQA.

Pre-construction clearance surveys for western pond turtle should be conducted within 14 days prior to the start of construction (including staging and mobilization) in areas of suitable habitat. The surveys should cover the entire disturbance footprint. A wildlife exclusion fence should be placed along the top of bank of the adjacent ditch and maintained regularly to deter wildlife from entering the project area during construction. The project applicant shall submit evidence to the City that a qualified biologist conducted pre-construction clearance surveys for western pond turtle no more than 14 days prior to the start of construction. These measures will reduce impacts to western pond turtle to less than significant.

Western Burrowing Owl

Suitable western burrowing owl habitat is present in annual grassland, and ruderal habitats throughout the study area and within the nearby park and along the adjacent reclamation ditch. Even though there is a lack of burrows and a high degree of disturbance, with the nearby suitable habitat in the adjacent open space and along the reclamation ditch the likelihood of western burrowing owl occupying the study area is increased; therefore, the species is determined to have a moderate potential to occur within the study area. Impacts to western burrowing owls would be limited to project activity that would directly affect an occupied burrow (temporarily or permanently damage or destroy the burrow), or project activity that would disrupt active breeding or wintering owls within 500 feet of construction activity. Because of the lack of suitable burrows within the study area, direct impacts to active burrows are unlikely; however, owls can be disturbed by construction noise and human activity and may abandon active burrows, including during breeding. Impacts to active western burrowing owl burrows would be considered significant under CEQA.

The project applicant shall submit evidence to the City that a qualified biologist conducted pre-construction clearance surveys prior to ground disturbance activities within suitable natural habitats and ruderal areas throughout the study area, to confirm the presence/absence of active western burrowing owl burrows. The surveys should be consistent with the recommended survey methodology provided by CDFW (2012). Clearance surveys should be conducted within 30 days prior to construction and ground disturbance activities. If no western burrowing owls are observed, no further actions are required. If western burrowing owls are detected during the pre-construction clearance surveys, the following measures should apply:

- Avoidance buffers during the breeding and non-breeding season should be implemented in accordance with the CDFW (2012) and Burrowing Owl Consortium (1993) minimization mitigation measures.
- If avoidance of western burrowing owls is not feasible, then additional measures such as passive relocation during the nonbreeding season and construction buffers of 200 feet during the breeding season should be implemented, in consultation with CDFW. In addition, a Western Burrowing Owl Exclusion Plan and Mitigation and Monitoring Plan should be developed by a qualified biologist in accordance with the CDFW (2012) and Burrowing Owl Consortium (1993).

These measures will reduce impacts to western burrowing owl to less than significant.

Special-Status Vegetation

The proposed project would have a significant effect on biological resources if it would:

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

The reclamation ditch to the north and west of the project area is outside the project boundaries. This is a potentially jurisdictional feature. The project will not impact this feature. No CDFW listed sensitive natural communities or riparian habitats are present within the project boundaries. Therefore, no impacts to sensitive natural communities are expected.

Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

c. Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish & Game Code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means.

No jurisdictional waters or wetlands exist within the project site and no direct impacts are anticipated. However, potentially jurisdictional features within the vicinity of the project site include the reclamation ditch located immediately adjacent to the project site. Indirect impacts from project activities could occur if sediment or pollutants were allowed to enter nearby waterways. Future project activities could include grading, excavation, and removal of soil... Development of the project site would disturb more than one acre of land, which would mandate implementation of a National Pollutant Discharge Elimination System (NPDES)-compliant Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would include Best Management Practices (BMP) to prevent and retain stormwater runoff and to prevent soil erosion. Such BMPs could include checking vehicles daily for leaks, maintaining vehicles in good working order, providing spill kits, preparing a spill response plan, and sediment and erosion control measures (e.g., straw wattles, silt fending, check dams). With mandatory implementation of the SWPPP and erosion control measures, impacts to the potentially jurisdictional reclamation ditch would be less than significant.

Pursuant to the City of Salinas Zoning Code Section 37-50,180(h), a 100-foot setback area would be required from the top of the bank of the reclamation ditch in which no building or development could occur. Furthermore, the project would be required to comply with the City of Salinas General Plan Policies COS-17 and COS-18 which require developments to protect wetland and riparian areas through a 100-foot setback and implement a riparian/wetland habitat mitigation and management plan. Development activities may be considered within the setback area if a City Planner determines the encroachment to be minor and a Biotic Resources Study has determined that the proposed encroachment would not result in significant adverse impacts to the applicable creek or wetland because the implementation of alternative mitigation measures would achieve a comparable or better level of mitigation than the strict application of the 100-foot setback. This BRA has determined that a 30-foot reduced setback would be appropriate for this site, as implementation of the SWPPP and erosion control measures would be equally as protective as a 100-foot setback.

Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

The adjacent reclamation ditch is a potential wildlife movement corridor however, it is outside the proposed project area and not within the study area. Therefore, no impacts to wildlife movement corridors are expected.

Local Policies and Ordinance

The proposed project would have a significant effect on biological resources if it would:

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

The Salinas General Plan Conservation and Open Space Element includes Policy COS-5.1, which aims to "protect and enhance creek, corridors, river corridors, the reclamation ditch, sloughs, wetlands, hillsides, and other potentially significant biological resources for their value in providing visual amenity, flood protection, habitat for wildlife and recreational opportunities" (City of Salinas 2002b). The project would be consistent with Policy COS-5.1 as the project would adhere to applicable regulations and implement mitigation measures to reduce potential impacts to a less than significant level, as described under criteria (a) through (d), above.

Chapter 35 of the Salinas Municipal Code sets forth regulations and provisions pertaining to the planting, maintenance, and removal of trees and shrubs in Salinas. According to Section 35-1 of the Salinas Municipal Code, the City defines a heritage and/or landmark tree as 1) an oak tree that is at least 24 inches in diameter at two feet above the ground surface; or 2) an oak tree that is visually significant, historically significant, or exemplary in its species. Section 35-18 of the Salinas Municipal Code prohibits the removal of heritage or landmark trees from City property unless approved by the City's Public Works Director. Heritage and landmark trees do not occur within the study area, and development facilitated by the project would not result in the removal of heritage or landmark trees.

Pursuant to Section 35-9 of the Salinas Municipal Code, no person shall root-trim, trim, prune, plant, injure, remove, or interfere with any tree, shrub or plant upon any street, parkway or alley in the City without written permission from the City's Public Works Director. No trees protected by this policy exist within the study area, therefore the proposed project would not conflict with the Salinas Municipal Code, as applicable.

Habitat Conservation Plan

The proposed project would have a significant effect on biological resources if it would:

f. Conflict with the provisions of an adopted Habitat Conservation Plan, natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The study area is outside all Habitat Conservation Plan and Natural Community Conservation Plan Areas. Therefore, the proposed project will not conflict with any adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

Sincerely,
Rincon Consultants, Inc.

Christian Knowlton
Biologist

Sherri Miller
Principal

Attachments

Attachment 1 Figures

Attachment 2 Representative Site Photographs

Attachment 3 Special-Status Species Evaluation Tables

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Attachment 1

Figures

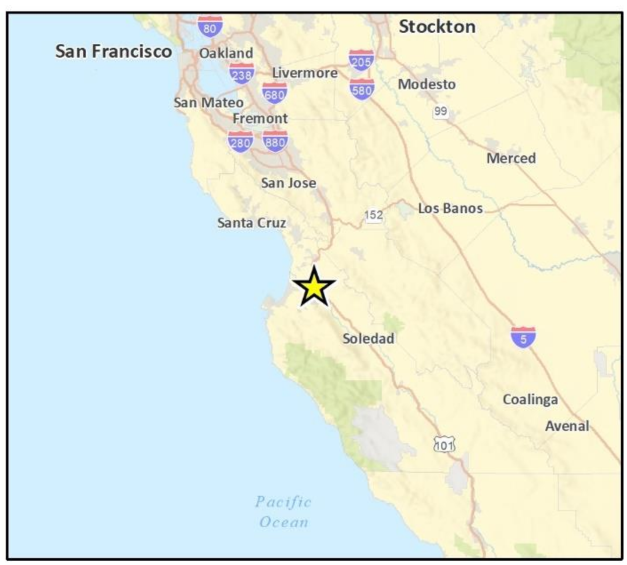
Figure 1 Regional Location

Basemap provided by National Geographic Society, Esri and its licensors © 2021. Salinas Quadrangle. T14S R03E S29. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may havechanged since the original topographic map was assembled.

Project Location

0 1,000 2,000 Feet

N

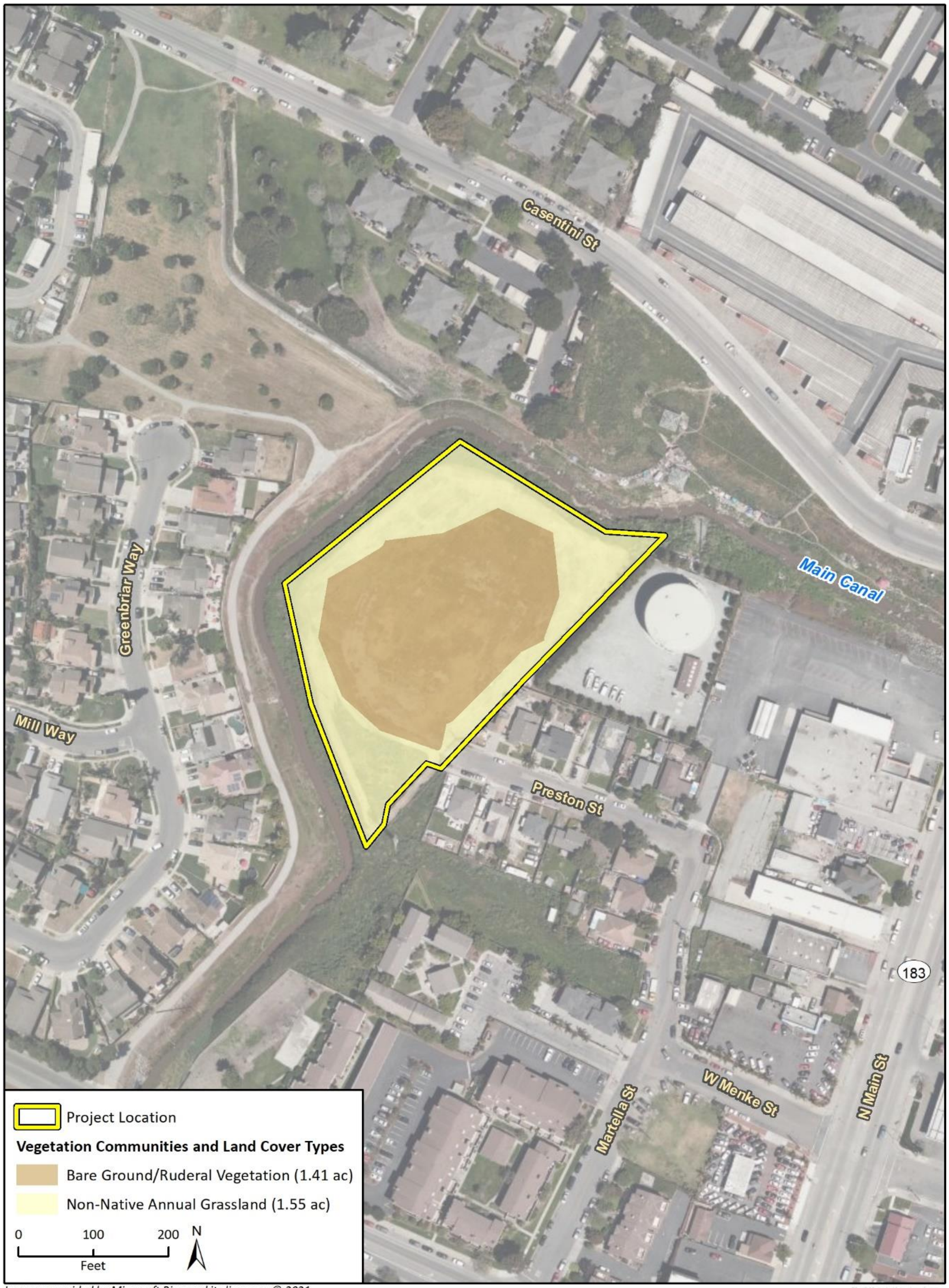


CRFig 1 Proj Locn Map

Figure 2 Study Area

Imagery provided by Microsoft Bing and its licensors © 2021.

Figure 3 Vegetation/Landcover



Imagery provided by Microsoft Bing and its licensors © 2021.
Additional sources provided by City of Salinas, 2014; USGS, 2021.

Attachment 2

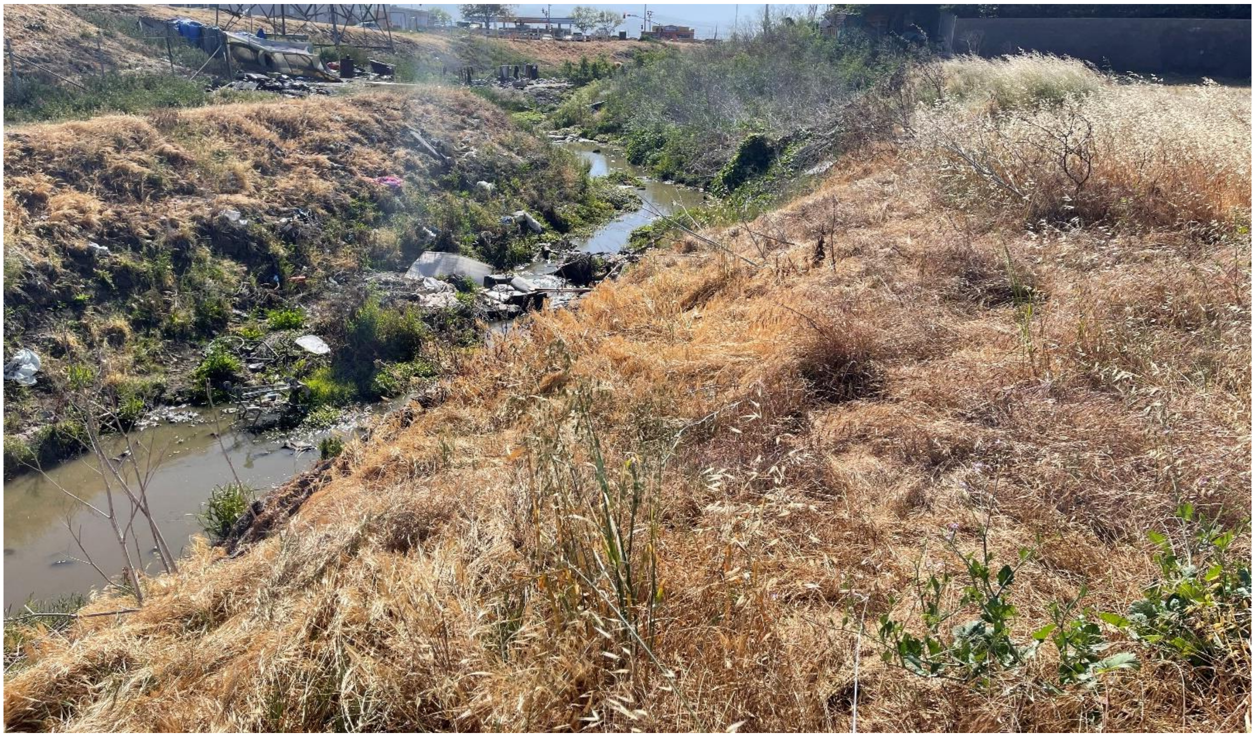
Representative Site Photographs

Photograph 1. The southwest corner of the study area, facing southwest.

Photograph 2. The southwest corner of the study area, facing north. Soil stockpiles in the midground.

Photograph 3. Adjacent reclamation ditch with non-native annual grassland along the bank.

Photograph 4. The north side of the study area facing south. Non-native annual grassland along the bank.



Photograph 5. Illegal dumpsite and homeless encampment along adjacent reclamation ditch. Northeast corner of the study area.

Photograph 6. Soil and gravel stockpiles along the western edge of the study area.

Photograph 7. Heavily disturbed soil in the center of the study area.

Attachment 3

Special-Status Species Evaluation Tables

Special-Status Species in the Regional Vicinity of the Study Area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Plants and Lichens				
Agrostis lacuna-vernalis vernal pool bent grass	None/None G1/S1 1B.1	Vernal pools. In mima mound areas or on the margins of vernal pools. 125-150 m. Blooms April - May	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Allium hickmanii Hickman's onion	None/None G2/S2 1B.2	Closed-cone coniferous forest, chaparral, coastal scrub, coastal prairie, valley and foothill grassland. Sandy loam, damp ground and vernal swales; mostly in grassland though can be associated with chaparral or woodland. 5-200 m. Blooms March - May	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Arctostaphylos hookeri ssp. *hookeri* Hooker's manzanita	None/None G3T2/S2 1B.2	Chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland. Sandy soils, sandy shales, sandstone outcrops. 30-550 m. Blooms February - April	Not Expected	No natural vegetation communities or suitable habitat occur in the study area. Would have been observed if present.
Arctostaphylos montereyensis Toro manzanita	None/None G2?/S2? 1B.2	Chaparral, cismontane woodland, coastal scrub. Sandy soil, usually with chaparral associates. 45-765 m. Blooms January - March	Not Expected	No natural vegetation communities or suitable habitat occur in the study area. Would have been observed if present.
Arctostaphylos pajaroensis Pajaro manzanita	None/None G1/S1 1B.1	Chaparral. Sandy soils. 30-170 m. Blooms December - February	Not Expected	No natural vegetation communities or suitable habitat occur in the study area. Would have been observed if present.
Arctostaphylos pumila sandmat manzanita	None/None G1/S1 1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal dunes, coastal scrub. On sandy soil with other chaparral associates. 3-210 m. Blooms February - April	Not Expected	No natural vegetation communities or suitable habitat occur in the study area. Would have been observed if present.
Astragalus tener var. *tener* alkali milk-vetch	None/None G2T1/S1 1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-170 m. Blooms March - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Castilleja ambigua var. *insalutata* pink Johnny-nip	None/None G4T2/S2 1B.1	Coastal bluff scrub, coastal prairie. Wet or moist coastal strand or scrub habitats. 3-135 m. Blooms May - July	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Centromadia parryi ssp. *Congdonii* Congdon's tarplant	None/None G3T1T2/S1S2 1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0-245 m. Blooms June - October	Low Potential	Potentially suitable habitat exists along the creek channel and in the disturbed areas. With the regular vegetation maintenance, it is unlikely the species would be observed within the study area.

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Chorizanthe minutiflora Fort Ord spineflower	None/None G1/S1 1B.2	Coastal scrub, chaparral (maritime). Sandy, openings. 60-145 m. Blooms April - July	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Chorizanthe pungens var. *pungens* Monterey spineflower	FT/None G2T2/S2 1B.2	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes or more inland within chaparral or other habitats. 3-270 m. Blooms April - July	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Chorizanthe robusta var. *robusta* robust spineflower	FE/None G2T1/S1 1B.1	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. 5-245 m. Blooms May - September	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Clarkia jolonensis Jolon clarkia	None/None G2/S2 1B.2	Cismontane woodland, chaparral, coastal scrub, riparian woodland. 10-1280 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Collinsia multicolor San Francisco collinsia	None/None G2/S2 1B.2	Annual herb. Blooms March-May. Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus. 30-250m. Blooms March - May	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Cordylanthus rigidus ssp. *littoralis* seaside bird's-beak	None/SE G5T2/S2 1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes. Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m. Blooms July - August	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Delphinium californicum ssp. *interius* Hospital Canyon larkspur	None/None G3T3/S3 1B.2	Cismontane woodland, chaparral, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. 195-1095 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Delphinium hutchinsoniae Hutchinson's larkspur	None/None G2/S2 1B.2	Broad leafed upland forest, chaparral, coastal prairie, coastal scrub. On semi-shaded, slightly moist slopes, usually west-facing. 15-535 m. Blooms March - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Delphinium umbraculorum umbrella larkspur	None/None G3/S3 1B.3	Cismontane woodland, chaparral. Mesic sites. 215-2075 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Ericameria fasciculata Eastwood's goldenbush	None/None G2/S2 1B.1	Closed-cone coniferous forest, chaparral (maritime), coastal scrub, coastal dunes. In sandy openings. 30-215 m. Blooms July - October	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Eriogonum nortonii Pinnacles buckwheat	None/None G2/S2 1B.3	Chaparral, valley and foothill grassland. Sandy soils; often on recent burns; western Santa Lucias. 90-975 m. Blooms May - August	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Erysimum ammophilum sand-loving wallflower	None/None G2/S2 1B.2	Chaparral (maritime), coastal dunes, coastal scrub. Sandy openings. 3-320 m. Blooms March - April	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Erysimum menziesii Menzies' wallflower	FE/SE G1/S1 1B.1	Bloom period: January-August. Occurs in coastal dunes, headlands, and cliffs. Localized on dunes and coastal strands. Elevations: 1-25 m. Blooms January - August.	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Fritillaria liliacea fragrant fritillary	None/None G2/S2 1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 3-385 m. Blooms February - April	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Gilia tenuiflora ssp. *arenaria* Monterey gilia	FE/ST G3G4T2/S2 1B.2	Coastal dunes, coastal scrub, chaparral (maritime), cismontane woodland. Sandy openings in bare, wind-sheltered areas. Often near dune summit or in the hind dunes; two records from Pleistocene inland dunes. 5-245 m. Blooms March - May	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Holocarpha macradenia Santa Cruz tarplant	FT/SE G1/S1 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. 10-275 m. Blooms June -November	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Horkelia cuneata var. *sericea* Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m. Blooms April - August	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Horkelia marinensis Point Reyes horkelia	None/None G2/S2 1B.2	Coastal dunes, coastal prairie, coastal scrub. Sandy flats and dunes near coast; in grassland or scrub plant communities. 2-775 m. Blooms May - September	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Lasthenia conjugens Contra Costa goldfields	FE/None G1/S1 1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-450 m. Blooms March - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Legenere limosa legenere	None/None G2/S2 1B.1	Vernal pools. In beds of vernal pools. 1-1005 m. Blooms May - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Lupinus tidestromii Tidestrom's lupine	FE/SE G1/S1 1B.1	Coastal dunes. Partially stabilized dunes, immediately near the ocean. 4-25 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Malacothamnus palmeri var. *involucratus* Carmel Valley bush-mallow	None/None G3T2Q/S2 1B.2	Cismontane woodland, chaparral, coastal scrub. Talus hilltops and slopes, sometimes on serpentine. Fire dependent. 5-520 m. Blooms May - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Malacothrix saxatilis var. *arachnoidea* Carmel Valley malacothrix	None/None G5T2/S2 1B.2	Chaparral, coastal scrub. Rock outcrops or steep rocky roadcuts. 30-1040 m. Blooms May - August	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Meconella oregana Oregon meconella	None/None G2G3/S2 1B.1	Coastal prairie, coastal scrub. Open, moist places. 60-640 m. Blooms March - May	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Microseris paludosa marsh microseris	None/None G2/S2 1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 3-610 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Monardella sinuata ssp. *Nigrescens* northern curly-leaved monardella	None/None G3T2/S2 1B.2	Coastal dunes, coastal scrub, chaparral, lower montane coniferous forest. Sandy soils. 10-245 m. Blooms May - July	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Monolopia gracilens woodland woollythreads	None/None G3/S3 1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broad leafed upland forest, North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. 120-975 m. Blooms March - July	Not Expected	No natural vegetation communities or suitable habitat occur in the study area
Pinus radiata Monterey pine	None/None G1/S1 1B.1	Closed-cone coniferous forest, cismontane woodland. Five primary stands are native to California. Dry bluffs and slopes. 60-125 m.	Not Expected	No natural vegetation communities or suitable habitat occur in the study area. Would have been observed if present.

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Piperia yadonii Yadon's rein orchid	FE/None G1/S1 1B.1	Closed-cone coniferous forest, chaparral, coastal bluff scrub. On sandstone and sandy soil, but poorly drained and often dry. 10-505 m. Blooms June - July	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	None/None G3T1Q/S1 1B.2	Chaparral, coastal scrub, coastal prairie. Mesic sites. 5-705 m. Blooms March - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Plagiobothrys diffusus San Francisco popcornflower	None/SE G1Q/S1 1B.1	Valley and foothill grassland, coastal prairie. Historically from grassy slopes with marine influence. 45-360 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Rosa pinetorum pine rose	None/None G2/S2 1B.2	Closed-cone coniferous forest, cismontane woodland. 5-1090 m. Blooms May - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Stebbinsoseris decipiens Santa Cruz microseris	None/None G2/S2 1B.2	Broad leafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. 90-750 m. Blooms April - May	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Trifolium buckwestiorum Santa Cruz clover	None/None G2/S2 1B.1	Coastal prairie, broad leafed upland forest, cismontane woodland. Moist grassland. Gravelly margins. 30-805 m. Blooms May - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Trifolium hydrophilum saline clover	None/None G2/S2 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.
Trifolium polyodon Pacific Grove clover	None/SR G1/S1 1B.1	Closed-cone coniferous forest, meadows and seeps, coastal prairie, valley and foothill grassland. Along small springs and seeps in grassy openings. 5-260 m. Blooms April - June	Not Expected	No natural vegetation communities or suitable habitat occur in the study area.

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations

Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
SE = State Endangered
ST = State Threatened
SR = State Rare

CRPR (CNPS California Rare Plant Rank)

1B = Rare, Threatened, or Endangered in California and elsewhere

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant

Additional Notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact Numeric rank

Special-Status Animal Species in the Regional Vicinity of the Study Area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Invertebrates				
Euphilotes enoptes smithi Smith's blue butterfly	FE/None G5T1T2/S1	Most commonly associated with coastal dunes & coastal sage scrub plant communities in Monterey & Santa Cruz counties. Hostplant: Eriogonum latifolium and Eriogonum parvifolium are utilized as both larval and adult foodplants.	Not Expected	No suitable coastal dune or coastal sage scrub habitat occurs in the study area and this species host plants were not observed.
Fish				
Eucyclogobius newberryi tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not Expected	No suitable habitat occurs in the study area. The adjacent ditch is fed primarily by agriculture runoff.
Lavinia exilicauda harengus Monterey hitch	None/None G4T2T4/S2S4 SSC	Occupies a wide variety of habitats, although they are most abundant in lowland areas with large pools or in small reservoirs that mimic such conditions.	Not Expected	Potential habitat occurs within the adjacent reclamation ditch, which outside the project area.
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	FT/None G5T2Q/S2	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including the Santa Maria River.	Not Expected	Potential habitat occurs within the adjacent reclamation ditch, which is outside the project area.
Spirinchus thaleichthys longfin smelt	FC/ST G5/S1	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Not Expected	Potential habitat occurs within the adjacent reclamation ditch, which is outside the project area.
Amphibians				
Ambystoma californiense California tiger salamander	FT/ST G2G3/S2S3 WL	Central California DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not Expected	The site is surrounded by development and has been heavily disturbed.
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	FE/SE G5T1T2/S1S2 FP	Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties. Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover. Adults use mammal burrows.	Not Expected	Suitable habitat is not present, and the site is surrounded by development.

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Rana boylii foothill yellow-legged frog	None/SE G3/S3 SSC	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Not Expected	Suitable habitat is not present, and the site is surrounded by development.
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Low Potential	Potentially suitable habitat occurs along the adjacent reclamation ditch. California red-legged frogs may use the urban creeks as dispersal corridors however, the urban nature of the reclamation ditch and a lack of suitable breeding habitat may preclude them from the study area. Dispersing individuals may transiently occur within the study area
Spea hammondii western spadefoot	None/None G2G3/S3 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	No suitable habitat occurs in the study area
Taricha torosa Coast Range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs and slow moving streams.	Moderate Potential	Potentially suitable habitat occurs along the adjacent reclamation ditch. Coast range newts may use the urban creeks as dispersal corridors however, the urban nature of the reclamation ditch may preclude them from the study area.
Reptiles				
Anniella pulchra Northern California legless lizard	None/None G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Not Expected	No suitable habitat occurs in the study area.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Moderate Potential	Potentially suitable habitat occurs within the adjacent reclamation ditch corridor.
Phrynosoma blainvillii coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected	No suitable habitat occurs in the study area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected	No suitable habitat occurs in the study area
Birds				
Agelaius tricolor tricolored blackbird	None/ST G1G2/S1S2 SSC	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	No suitable habitat occurs in the study area
Aquila chrysaetos golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected	No suitable habitat occurs in the study area
Asio flammeus short-eared owl	None/None G5/S3 SSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Not Expected	No suitable habitat occurs in the study area
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Moderate Potential	Suitable habitat occurs within the study area. There are occurrences 0.45 miles to the west and ground squirrels were observed in the nearby open space.
Buteo swainsoni Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Not Expected	No suitable habitat occurs in the study area
Charadrius nivosus western snowy plover	FT/None G3T3/S2 SSC	Sandy beaches, salt pond levees, and shores of large alkali lakes. needs sandy, gravelly or friable soils for nesting.	Not Expected	No suitable habitat occurs in the study area
Coturnicops noveboracensis yellow rail	None/None G4/S1S2 SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.	Not Expected	No suitable habitat occurs in the study area
Elanus leucurus white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	No suitable habitat occurs in the study area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Falco peregrinus anatum American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected	No suitable habitat occurs in the study area
Rallus obsoletus obsoletus California Ridgway's rail	FE/SE G3T1/S1 FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed however, feeds away from cover on invertebrates from mud-bottomed sloughs.	Not Expected	No suitable habitat occurs in the study area
Riparia riparia bank swallow	None/ST G5/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not Expected	No suitable habitat occurs in the study area
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Not Expected	No suitable habitat occurs in the study area
Mammals				
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not Expected	No suitable habitat occurs in the study area
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	Not Expected	No suitable habitat occurs in the study area
Neotoma macrotis luciana Monterey dusky-footed woodrat	None/None G5T3/S3 SSC	Forest habitats of moderate canopy and moderate to dense understory. Also, in chaparral habitats. Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	Not Expected	No suitable habitat occurs in the study area

Scientific Name/ Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Sorex ornatus salarius Monterey shrew	None/None G5T1T2/S1S2 SSC	Riparian, wetland, and upland areas in the vicinity of the Salinas River delta. Prefers moist microhabitats. feeds on insects & other invertebrates found under logs, rocks & litter.	Low Potential	Marginal habitat occurs adjacent to the study area however, the disturbed nature of the study area precludes the species from the project site.
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	No suitable habitat occurs in the study area

Regional Vicinity refers to within a 6-quad search radius of site.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
SE = State Endangered
ST = State Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant

Additional Notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority

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Appendix C

Energy Construction and Operational Energy Fuel Consumption Calculations

1 Preston Street Project

Last Updated: 4/7/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Graders	1	8	187	0.41	Site Preparation Phase	97.26
Scrapers	1	8	367	0.48	Site Preparation Phase	223.48
Tractors/Loaders/Backhoes	1	7	97	0.37	Site Preparation Phase	44.29
Graders	1	8	187	0.41	Grading Phase	194.53
Rubber Tired Dozers	1	8	247	0.4	Grading Phase	250.68
Tractors/Loaders/Backhoes	1	7	97	0.37	Grading Phase	88.58
Cranes	1	8	231	0.29	Building Construction Phase	6,232.20
Forklifts	2	7	89	0.2	Building Construction Phase	3,221.69
Generator Sets	1	8	84	0.74	Building Construction Phase	6,428.90
Tractors/Loaders/Backhoes	1	8	97	0.37	Building Construction Phase	3,711.92
Welders	3	8	46	0.45	Building Construction Phase	6,422.69
Air Compressors	1	6	78	0.48	Architectural Coating Phase	132.01
Cement and Mortar Mixers	1	8	9	0.56	Paving Phase	23.69
Pavers	1	8	130	0.42	Paving Phase	230.89
Paving Equipment	1	8	132	0.36	Paving Phase	200.95
Rollers	1	8	80	0.38	Paving Phase	142.91
Tractors/Loaders/Backhoes	1	8	97	0.37	Paving Phase	168.72
					Total Fuel Used	**27,815.41**
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	3
Grading Phase	6
Building Construction Phase	220
Paving Phase	10
Architectural Coating Phase	10
Total Days	249

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	25.3	8	10.8	10.25
Grading Phase	25.3	10	10.8	25.61
Building Construction Phase	25.3	83	10.8	7794.78
Paving Phase	25.3	15	10.8	64.03
Architectural Coating Phase	25.3	17	10.8	72.57
			Total	**7,967.24**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
		HAULING TRIPS		
Site Preparation Phase	7.6	0	20.0	0.00
Grading Phase	7.6	0	20.0	0.00
Building Construction Phase	7.6	0	20.0	0.00
Paving Phase	7.6	0	20.0	0.00

Architectural Coating Phase	7.6	0	20.0	0.00
		Total		-
		VENDOR TRIPS		
Site Preparation Phase	7.6	0	7.3	0.00
Grading Phase	7.6	0	7.3	0.00
Building Construction Phase	7.6	19	7.3	4015.00
Paving Phase	7.6	0	7.3	0.00
Architectural Coating Phase	7.6	0	7.3	0.00
		Total		**4,015.00**

Total Gasoline Consumption (gallons)	**7,967.24**
Total Diesel Consumption (gallons)	**31,830.41**

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

1 Preston Street Project

Last Updated: 4/7/2022

Populate one of the following tables (Leave the other blank):

Annual VMT	OR	Daily Vehicle Trips	
Annual VMT: 1,132,272		Daily Vehicle Trips:	
		Average Trip Distance:	

Fleet Class	Fleet Mix
Light Duty Auto (LDA)	0.512341
Light Duty Truck 1 (LDT1)	0.05237
Light Duty Truck 2 (LDT2)	0.194493
Medium Duty Vehicle (MDV)	0.150484
Light Heavy Duty 1 (LHD1)	0.029151
Light Heavy Duty 2 (LHD2)	0.007004
Medium Heavy Duty (MHD)	0.010494
Heavy Heavy Duty (HHD)	0.009415
Other Bus (OBUS)	0.001203
Urban Bus (UBUS)	0.000586
Motorcycle (MCY)	0.027411
School Bus (SBUS)	0.001303
Motorhome (MH)	0.003746

Fuel Economy (MPG) [1]	
Passenger Vehicles	25.3
Light-Med Duty Trucks	18.2
Heavy Trucks/Other	7.6
Motorcycles	44

Fleet Mix

Vehicle Type	**Percent**	**Fuel Type**	**Annual VMT: VMT**	**Vehicle Trips: VMT**	**Fuel Consumption (Gallons)**
Passenger Vehicles	*51.23%*	*Gasoline*	580,109	0.00	22,929
Light-Medium Duty Trucks	*39.73%*	*Gasoline*	449,905	0.00	24,720
Heavy Trucks/Other	*6.29%*	*Diesel*	71,222	0.00	9,371
Motorcycle	*2.74%*	*Gasoline*	31,037	0.00	705

Total Gasoline Consumption (gallons)	**48,355**
Total Diesel Consumption (gallons)	**9,371**

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: https://www.bts.gov/topics/national-transportation-statistics.

Equipment	Horsepower	Load Factor
Aerial Lifts	63	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	221	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	231	0.29
Crawler Tractors	212	0.43
Crushing/Proc. Equipment	85	0.78
Excavators	158	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	187	0.41
Off-Highway Tractors	124	0.44
Off-Highway Trucks	402	0.38
Other Construction Equipment	172	0.42
Other General Industrial Equipment	88	0.34
Other Material Handling Equipment	168	0.4
Pavers	130	0.42
Paving Equipment	132	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.3
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	247	0.4
Rubber Tired Loaders	203	0.36
Scrapers	367	0.48
Signal Boards	6	0.82
Skid Steer Loaders	65	0.37
Surfacing Equipment	263	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	78	0.5
Welders	46	0.45

Appendix D

Transportation Analysis

Hexagon Transportation Consultants, Inc.

1 Preston Residential

Transportation Analysis

Prepared for:

Rincon Consultants

February 28, 2022

Hexagon Transportation Consultants, Inc.
Hexagon Office: 8070 Santa Teresa Boulevard, Suite 230
Gilroy, CA 95020
Hexagon Job Number: 22DC01
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Executive Summary

This report presents the results of a Transportation Analysis (TA) for the proposed residential development located at 1 Preston Street in Salinas, California. The project consists of a General Plan Amendment and Zoning Code Amendment to modify the existing vacant 2.6-acre lot at 1 Preston Street from Residential Medium Density (R-M-3.6) to Residential High Density (R-H-2.1). There is currently no development proposal. With full buildout and anticipating a density bonus, future development on the site may include the construction of up to 83 residential units.

Transportation Analysis Scope

The transportation analysis of the project was evaluated following the standards and methodologies of the City of Salinas. The transportation analysis will consist of a CEQA-level transportation analysis to determine environmental impacts related to Vehicle Miles Traveled (VMT) and a transportation operations analysis to determine local impacts to nearby transportation facilities within the project vicinity.

CEQA Transportation Analysis Scope

The CEQA transportation analysis for the project consists of a project-level VMT impact analysis using the City's VMT tool.

Transportation Operations Analysis Scope

The transportation operations analysis includes the evaluation of weekday AM and PM peak hour operations at a limited number of intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) at intersections in the general vicinity of the project site. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

CEQA VMT Analysis

CEQA Transportation Analysis Exemption Criteria

The City of Salinas *Draft SB 743 Implementation Policy* describes screening criteria that determines a non-significant transportation impact for development projects. The criteria are based on the type of project, characteristics, and/or location. The project does not meet the screening criteria described in the *Draft SB 743 Implementation Policy* and would be required to conduct a CEQA level VMT analysis.

Project-Level VMT Impact Analysis

The results of the VMT analysis, using the City's VMT analysis tool, indicate that the proposed project is projected to generate 10.53 VMT per capita. Therefore, the proposed project would have an impact on the transportation system based on the City's VMT impact criteria.

Project Impacts and Mitigation Measures

Project Impact: Since the VMT generated by the project (10.53 VMT per capita) would exceed the threshold of 9.7 VMT per capita, the project would result in a significant transportation impact on VMT. Therefore, mitigation measures are required to reduce the VMT impact.

Mitigation Measures: Implementation of the following project design measures would reduce the VMT generated by the project to VMT per capita of 9.95:

1. Higher Density: The project proposes to construct residential units at a higher density in an infill location. **and**
2. Pedestrian Network Improvements: The project could construct pedestrian facilities within the project site to connect the project site to existing pedestrian facilities on Preston Street. Creating safe pedestrian connections could encourage future residents to walk instead of drive. **and**
3. Include Bike Parking Per City Code: The project could provide bike parking on-site. Providing bike parking may encourage future residents to utilize bicycles as a mode of transportation instead of driving.

The implementation of the following TDM strategies would be required to further reduce the project impact to VMT to insignificant levels:

4. Reduce On-Site Parking: Reduce to the number of on-site parking spaces for residents to less than that which is required per the municipal code. **or**
5. Implement Unbundled Parking: Separate or unbundle parking costs from leases/property costs requiring those that wish to purchase parking spaces to do so at an additional cost. Unbundled parking also would require the implementation of residential permit parking zones in the project area at the expense of the developer. **or**
6. Affordable Housing: Provide below market-rate housing on-site. **or**
7. Voluntary Travel Behavior Change Program: The project could implement a travel behavior change program by offering incentives to future residents to utilize alternative transportation modes. The program would require 75% participation by residents. **and**
8. Promotions and Marketing: The project could provide future residents with information about alternative transportation and other TDM programs available to them at move in. The program would require 75% participation by residents. **and**
9. School Carpool Program: The project could implement a school carpool program. Residents would be provided information about the school carpool program at move-in. Interested residents would provide their contact information to similar families that have children at the same school.

Transportation Operations Analysis

The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection operation is not considered a CEQA impact metric.

The transportation operations analysis includes the analysis of AM and PM peak-hour traffic conditions for one signalized intersection and two unsignalized intersections. The intersections were evaluated using Synchro software, utilizing the Highway Capacity Manual (HCM) 2010 methodology.

Trip Generation

Based on the trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*, it is estimated that the project would generate 377 daily vehicle trips, with 31 trips (7 inbound and 24 outbound) occurring during the AM peak hour and 32 trips (20 inbound and 12 outbound) occurring during the PM peak hour.

Intersection Operation Conditions

The operations analysis shows that the signalized intersection of N. Main Street/Rossi Street and the unsignalized intersection of Martella Street/Rossi Street would continue to operate at an acceptable LOS D or better during both the AM and PM peak hours with and without the project. The N. Main Street/Menke Street intersection would operate at an unacceptable LOS F during both peak hours with and without the project. The addition of project generated trips to the intersection would increase the average delay experienced by each vehicle on the worst-leg approach by 13.6 seconds during the AM peak hour. Due to the small number of vehicles traveling along Menke Street relative to the traffic along N. Main Street, improvements are not recommended as drivers have the option to use Martella Street to access Rossi Street and N. Main Street.

Table ES-1
Intersection Level of Service Summary

				Existing Conditions				
				No Project		with Project		
Study #	Intersection	Control	Peak Hour	Avg. Delay[1] (sec)	LOS	Avg. Delay[1] (sec)	LOS	Increase in Crit. Delay (sec)
1	N. Main Street & Menke Street	TWSC	AM	**65.9**	**F**	$\boxed{\textbf{79.5}}$	$\boxed{\textbf{F}}$	13.6
			PM	**183.3**	**F**	**183.3**	**F**	0.0
2	N. Main Street & Rossi Street	Signal	AM	28.9	C	29.1	C	0.2
			PM	31.3	C	31.6	C	0.3
3	Martella Street & Rossi Street	TWSC	AM	22.3	C	24.1	C	1.8
			PM	26.2	D	27.9	D	1.7

Notes:
[1] Average delay is reported for signalized intersections. Delay for the worst approach leg is reported for TWSC intersections.
Bold indicates a substandard level of service.
$\boxed{\textbf{Bold}}$ indicates an adverse effect with the addition of project trips.

Unsignailzed Intersection Control and Critical Gaps

Both the unsignalized intersections of N. Main Street/Menke Street and Martella Street/Rossi Street are stop-controlled along the minor street approaches. Since neither of the unsignalized study intersections meet the minimum threshold for minor streets, in can be concluded that the peak hour signal warrant is not met for either intersection. Field observations show that gaps in traffic are available during both peak hours at both intersections.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Pedestrian generators in the project vicinity include commercial areas and bus stops along N. Main Street and Rossi Street. Downtown Salinas is located approximately ½-mile walking distance from the project site.

Pedestrian facilities in the project vicinity include sidewalks, crosswalks, and pedestrian signals at the signalized study intersection. The sidewalk is discontinuous on the south and west side of Preston Street and Martella Street, respectively. Additionally, a sidewalk and curb ramp are missing at the southeast corner of the Martella Street/Menke Street intersection. Although sidewalks are missing along some property frontages along Preston Street, Martella Street, and Menke Street, a continuous sidewalk connects the project site to N. Main Street, which provides access to additional pedestrian facilities and to nearby points of interest.

The project proposes a general plan amendment which would allow construction of buildings that would be either row houses, condominiums, or apartments. Since a site plan has not yet been proposed, the final site plan should be designed to include sidewalks, pathways, and curb ramps connecting buildings to existing pedestrian facilities on Preston Street.

Bicycle Facilities

Bicycle facilities in the project vicinity include bike paths, bike lanes, and bike routes. The project site is not directly served by any bicycle facilities. However, Preston Street and Martella Street carry low volume and is conducive to bicyclists. Existing bike lanes along Rossi Street connect the project vicinity to other bicycle facilities and nearby points of interest.

The Monterey County Active Transportation Plan identifies future improvements to bicycle facilities in the project vicinity. A planned Class I share use path is proposed between Market Street and Rossi Street, opposite from Martella Street. This would provide a safe bicycle connection between the project site to the downtown Salinas area without needing to head west to Davis Road. The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities.

Transit Facilities

The project site is adequately served by existing MST transit services. Within the project vicinity, bus routes run along N. Main Street and Rossi Street. The project site is primarily served by five MST bus routes (Routes 23, 29, 44, 49, and 95). The nearest bus stops to the project site are located along both sides of Main Street (at Rossi Street), approximately ¼-mile from the project site. Additionally, the Salinas Amtrak station and the Salinas Transit Center are located approximately 0.6-mile from the project site. The new transit trips generated by the project are not expected to create demand in excess of the transit service that is currently provided. The project would not remove any transit facilities, nor would it conflict with any adopted plans or policies for new transit facilities.

1. Introduction

This report presents the results of a Transportation Analysis (TA) for the proposed residential development located at 1 Preston Street in Salinas, California. The site is located at the western end of Preston Street. The project site location and surrounding study area are shown on Figure 1.

The project consists of a General Plan Amendment and Zoning Code Amendment to modify the existing vacant 2.6-acre lot at 1 Preston Street from Residential Medium Density (R-M-3.6) to Residential High Density (R-H-2.1). The maximum potential buildout of the site was evaluated as part of this traffic analysis since there currently is no development proposal. With full buildout and anticipating a density bonus, future development on the site may include the construction of up to 83 residential units.

Transportation Policies

Draft SB 743 Implementation Policy

Historically, traffic impact analysis has utilized vehicular delay to identify traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to proposed/planned growth. However, the State of California has recognized the limitations of measuring and mitigating only vehicle delay at intersections and in 2013 passed Senate Bill (SB) 743, which requires jurisdictions to stop using congestion and delay metrics, such as Level of Service (LOS), as the measurement for CEQA transportation analysis. With the adoption of SB 743 legislation, public agencies are now required to base the determination of transportation impacts on Vehicle Miles Traveled (VMT) rather than level of service (LOS).

In adherence to SB 743, the City of Salinas has adopted a new Transportation Analysis Policy, the City of Salinas *Draft SB 743 Implementation Policy*. The policy establishes the thresholds for transportation impacts under the CEQA based on VMT instead of LOS. The intent of this change is to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and the creation of robust multimodal networks that support integrated land uses. All new development projects are required to analyze transportation impacts using the VMT metric and conform to the *Draft SB 743 Implementation Policy*.

General Plan Goals & Policies

The Circulation Element of the *City of Salinas General Plan* includes a set of balanced, long-range, multi-modal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). These transportation goals and policies are intended to improve multi-modal accessibility to all land uses and create a city where people are less reliant on driving to meet their daily needs. The 2002 General Plan contains the following policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT:

- Use traffic calming methods within residential areas where necessary to create a pedestrian-friendly circulation system (C-1.8);
- Encourage car-pooling, at government offices, business, schools, and other facilities, to reduce the number of vehicles using the roadway system (C1.9);
- Urge a countywide approach to Transportation Demand Management (TDM) and Transportation Systems Management (TSM) as the best way to reduce peak-hour vehicle trips and congestion at major employment centers. (C2.1);
- Work with Caltrain and Amtrak to provide commuter rail service to the Silicon Valley and other major destinations to provide alternatives to automobile use (C-2.5);
- Support continued maintenance and expanded use of the City's Intermodal Transportation Center (C-2.7);
- Support Monterey-Salinas Transit initiatives to provide adequate and improved public transportation service (C-3.1);
- Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service (C 3.2);
- Support the extension of commuter rail to Salinas to allow for alternatives to automobile use. (C 3.3);
- Support public transportation that is "bike" friendly, such as buses with bicycle racks and reduced fares for bicycle riders and provision of bicycle racks at public transportation stations (C-3.4);
- Continue to develop a network of on- and off-street bicycle routes to encourage and facilitate the use of bicycles for commute, recreational, and other trips. Eliminate gaps and provide connections between existing bicycle routes (C-4.1);
- Increase availability of facilities, such as bike racks and well-maintained and well-lit bike lanes, that promote bicycling (C-4.2);
- Encourage existing businesses and require new construction to provide on-premise facilities to aid bicycle commuters, such as on-site safe bicycle parking (C-4.3);
- Improve the biking environment by providing safe and attractive cut-through, bike lanes, and bike paths for both recreational and commuting purposes (C-4.4);
- Ensure that all pedestrian and bicycle route improvements meet the Americans with Disabilities Act (ADA) standards for accessibility, and Caltrans standards for design (C-4.5);
- Encourage parking lot designs that provide for safe and secure bicycle parking (C-4.6);
- Increase availability of safe and well-maintained sidewalks in all areas of the City (C-5.1);
- Ensure that all pedestrian route improvements meet with ADA standards for accessibility (C-5.3) ;
- Encourage parking lot designs that promote pedestrian access and safety (C-5.4);
- Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes (C-5.5)

Transportation Analysis Scope

The TA consists of a California Environmental Quality Act (CEQA) required vehicle-miles-traveled (VMT) analysis and a supplemental traffic operations analysis that demonstrates the project's consistency with the *City of Salinas General Plan* goals and policies. The TA was evaluated following the standards and methodologies set forth in the City of Salinas *Draft SB 743 Implementation Policy* and by the California Environmental Quality Act (CEQA).

CEQA Transportation Analysis Scope

The CEQA transportation analysis for the project consists of a project-level VMT impact analysis using the City's VMT tool. The City's VMT analysis tool was developed to streamline the analysis for development projects with common land uses such as residential, office and industrial uses.

The City of Salinas *Draft SB 743 Implementation Policy* establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The policy also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project meets the City's screening criteria, the project is expected to result in less-than-significant VMT impacts and a detailed CEQA VMT analysis is not required. However, the proposed project will not meet all applicable VMT screening criteria. Therefore, a CEQA-level transportation analysis that evaluates the project's effects on VMT is required and is presented in Chapter 3.

Transportation Operations Analysis Scope

The current General Plan, *City of Salinas General Plan,* adopted in September 2002 uses Level of Service (LOS) as its primary metric for the evaluation of the projected operation of the City's roadway system. Therefore, a traffic operations analysis based upon peak hour intersection level of service analysis is included for consistency with the General Plan goals and policies. The transportation operations analysis supplements the CEQA VMT analysis and identifies transportation and traffic operational issues that may arise due to a development project. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

The transportation operations analysis includes the evaluation of weekday AM and PM peak hour operations at a limited number of intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) at intersections in the general vicinity of the project site. The transportation operations analysis also includes signal warrant analyses and critical gap evaluation at unsignalized intersections. An evaluation of potential project impacts on bicycle, pedestrian, and transit facilities is also included.

The study intersections were selected in coordination with City staff and are listed below and are shown on Figure 1.

<u>Study Intersections</u>

1. North Main Street and Menke Street (unsignalized)
2. North Main Street and Rossi Street
3. Rossi Street and Martell Street (unsignalized)

The effects of the proposed development on traffic operations on the surrounding roadway system were evaluated following the standards and methodologies set forth by the City of Salinas General Plan.

Report Organization

The remainder of this report is divided into four chapters. Chapter 2 describes existing transportation system including the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis, including the VMT analysis methodology, baseline and potential project VMT impacts, and required mitigation measures to reduce any VMT impacts. Chapter 4 describes the transportation operations analysis including the method by which project traffic is estimated, intersection operations analysis methodology, any adverse intersection traffic effects caused by the project, and effects on bicycle, pedestrian, and transit facilities. Chapter 5 presents the conclusions of the transportation analysis.

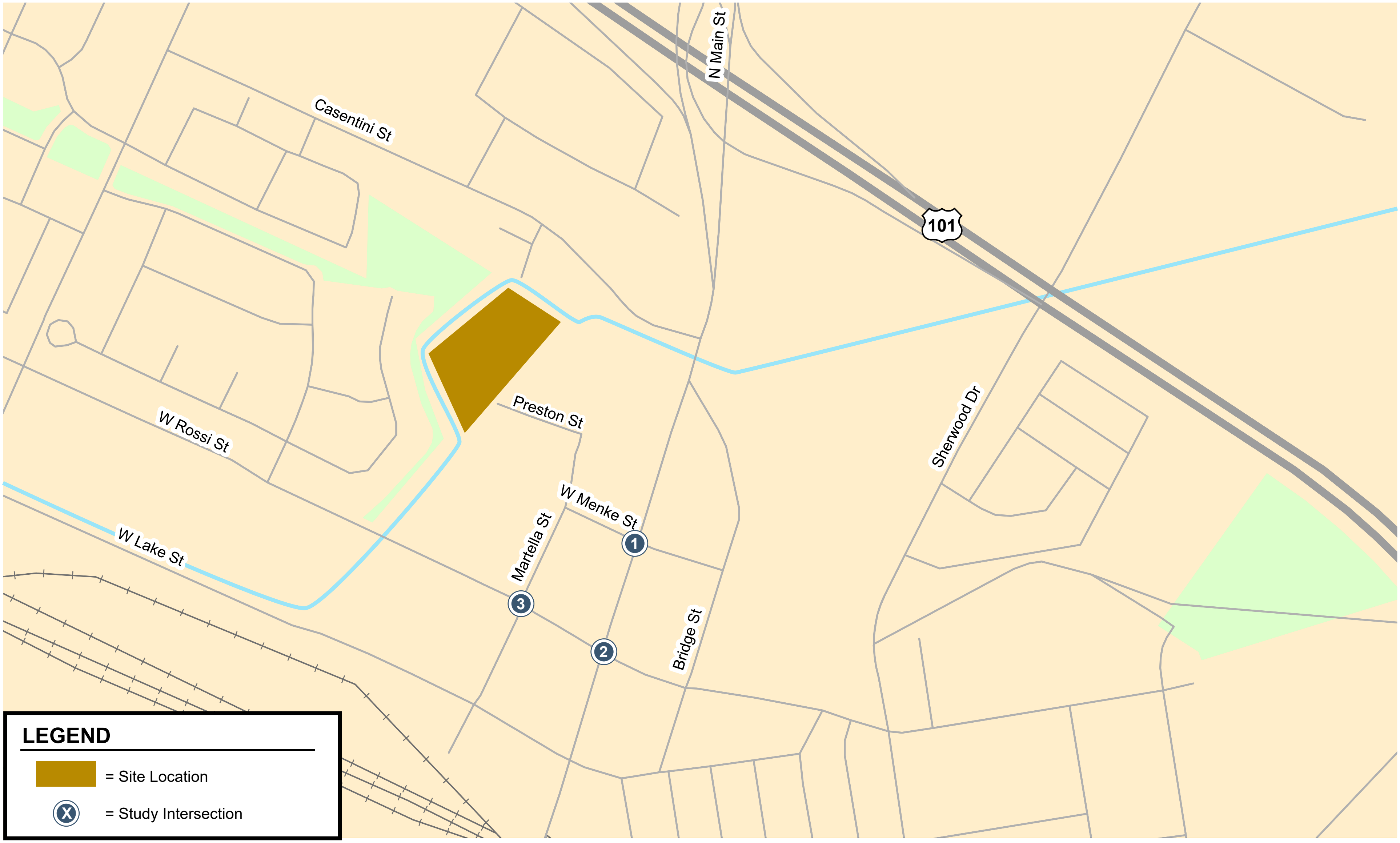

Figure 1
Site Location

NORTH
Not to Scale

2.
Existing Transportation System

This chapter describes the existing transportation system within the study area of the project. It describes transportation facilities in the vicinity of the project site, including the roadway network, transit services, and pedestrian and bicycle facilities.

Existing Roadway Network

Regional access to the project site is provided via US-101, SR-68, and SR 183. These facilities are described below.

US-101 is a four-lane freeway in the vicinity of the site. US 101 extends north to Gilroy and the San Francisco Bay Area and south to King City, central California, and the Los Angeles area. Access to the site is provided via its interchange at Main Street.

SR-68 is a four-lane highway with a two-way left-turn median between Blanco Road and Portola Drive. South of Portola Drive, the roadway narrows to two lanes with a two-way left-turn lane. SR 68 extends north to US-101 in Salinas and south to the Monterey Bay Peninsula. SR-68 runs along South Main Street and John Street in the City of Salinas. Access from SR-68 to the project site is provided via Main Street and North Main Street.

SR-183 is a two-lane highway west of the city of Salinas. SR 183 widens to four lanes and runs along Market Street and North Main Street within the City of Salinas. It extends east to US-101 in Salinas and west to SR-1 near Moss Landing. Access from SR-183 to the project site is provided via Rossi Street and Menke Street.

Local access to the site is provided by North Main Street, West Rossi Street, West Menke Street, Martella Street and Preston Street. These roadways are described below.

North Main Street is a four-lane north-south roadway in the vicinity of the project site. North Main Street is the primary north-south roadway within the city of Salinas and connects North Salinas and US-101 to the downtown area. In the project vicinity, North Main Street has a posted speed limit of 40 mph with sidewalks and on-street parking on both sides of the street and no bike lanes. Access to the project site from North Main Street is provided via Rossi Street and Menke Street.

West Rossi Street is a two-lane east-west roadway in the vicinity of the project site and extends between North Davis Road and Sherwood Drive. Sidewalks and bike lanes are present along both sides of West Rossi Street. In the project vicinity, parking is permitted on the north side of West Rossi Street, west of Martella Street. Access to the project site from West Rossi Street is provided via Martella Street.

West Menke Street is a two-lane east-west roadway that extends between Bridge Street and Martella Street in the vicinity of the project site. A continuous sidewalk is present along the north side of West Menke Street. Parking is permitted on both sides of West Menke Street. Access to the project site from West Menke Street is provided via Martella Street.

Martella Street is a two-lane north-south roadway in the vicinity of the project site extending between West Lake Street and Preston Street. Intermittent sidewalks are present along both sides of Martella Street. Parking is permitted on both sides of Martella Street. Access to the project site from Martella Street is provided via Preston Street.

Preston Street is a two-lane east-west roadway in the vicinity of the project site. A sidewalk is present on the north side of Preston Street. Parking is permitted on both sides of Preston Street. The proposed project site is located at the west end of Preston Street.

Existing Pedestrian, Bicycle and Transit Facilities

The existing bicycle, pedestrian, and transit facilities in the study area are described below.

Existing Pedestrian Facilities

Pedestrian facilities near the project site consist mostly of sidewalks along the streets in the study area. Sidewalks are missing along several property frontages along Preston Street, Martella Street, and Menke Street. However, a continuous sidewalk connects the project site to Main Street, which is the nearest major street in the vicinity. Other pedestrian facilities in the project area include crosswalks and pedestrian push buttons at the signalized study intersection of North Main Street and Rossi Street. At the intersection of North Main Street and Menke Street, marked crosswalks are present along the west and east legs. At the intersection of Martella Street and Rossi Street, marked crosswalks are present along the north and east legs.

Overall, the existing network of sidewalks and crosswalks provides adequate connectivity and provides pedestrians with safe routes to transit services and other points of interest in the area.

Existing Bicycle Facilities

There are several bicycle facilities in the vicinity of the project site. Bicycle facilities are divided into the following three classes of relative significance:

Class I Bikeway (Bike Path). Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. The Rossi Rico Parkway is in the vicinity of the project site and connects Rossi Street to Davis Road. The nearest access to the bike path is along Rossi Street, approximately 1,500 feet from the project site.

Class II Bikeway (Bike Lane). Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Within the vicinity of the project site, striped bike lanes are present on Rossi Street, between Davis Road and Sherwood Drive.

Class III Bikeway (Bike Route). Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations. In the vicinity of the project site, the following roadway segments are designated as bike routes:

- Rice Street, between Rossi Street and Larkin Street
- Casentini Street, between Main Street and Rico Street

The existing bicycle facilities are shown in Figure 2.

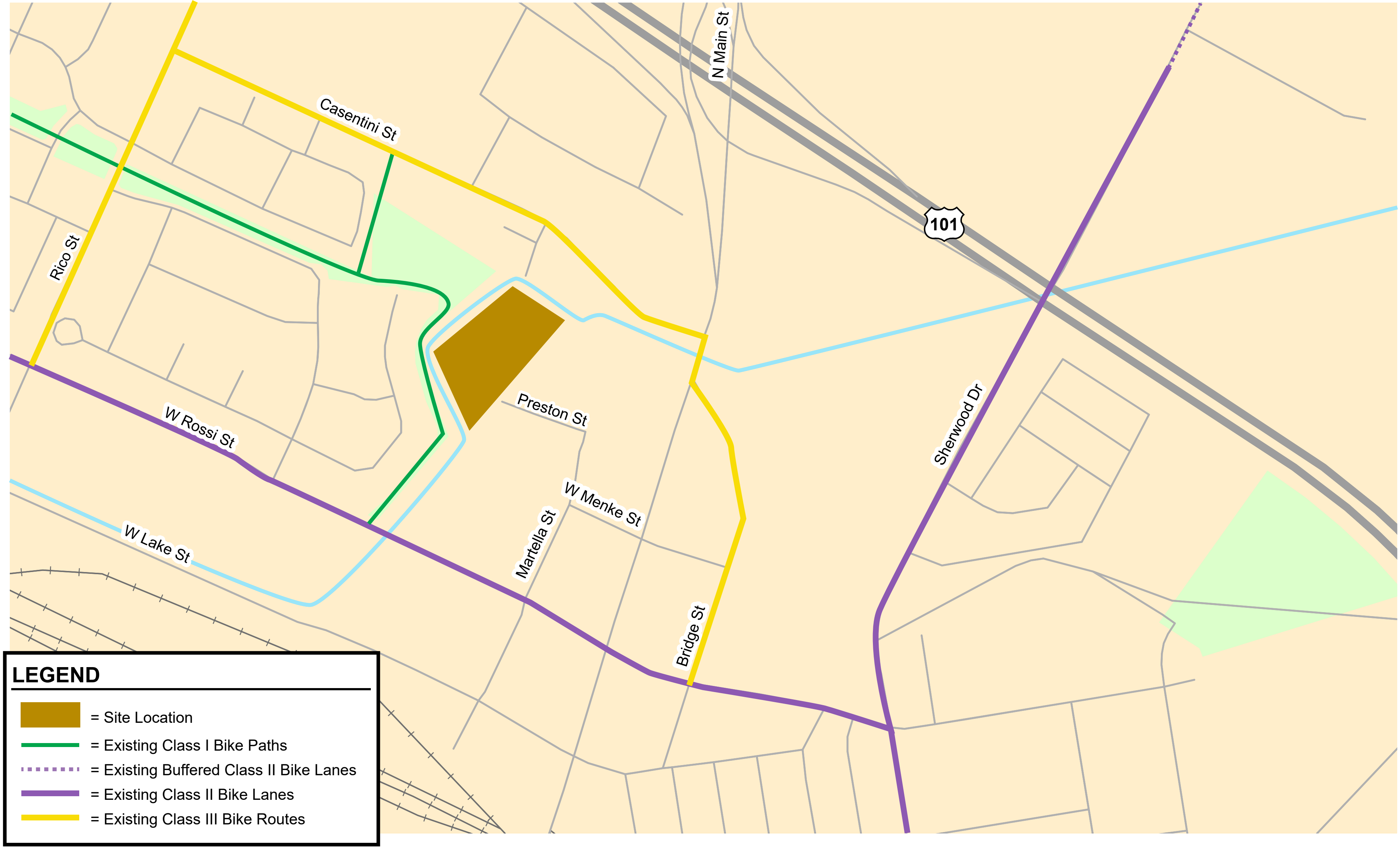

Figure 2
Existing Bicycle Facilities

NORTH
Not to Scale

Existing Transit Services

Existing transit services in the study area are provided by Monterey-Salinas Transit (MST) and are shown on Figure 3. The Salinas Amtrak station is located ½-mile from the project site and provides train and connecting bus services from Amtrak. Amtrak services are limited at Salinas station, providing one daily service in each direction via the Coast Starlight. Amtrak provides connecting bus services to train stations towards the north several times daily.

Monterey-Salinas Transit Bus Service

The project site is primarily served by five MST bus routes (Routes 23, 29, 44, 49 and 95). These bus routes are listed in Table 1, including their terminus points and headways. The nearest bus stops to the project site are located along both sides of Main Street (just south of Rossi Street), approximately ¼-mile from the project site. It should be noted that although headways are long, these routes all run along Main Street in the city of Salinas, connecting the downtown area and project site to areas in the northern part of the city, north of US 101.

Table 1
Existing Transit Services

Transit Route	Route Description	Hours of Operation	Headway [1]
Route 23	Salinas to King City	6:45 am - 10:00 pm	60 mins
Route 29	Watsonville to Salinas via Prunedale	5:45 am - 7:00 pm	120 mins
Route 44	Northridge to Salinas	6:30 am - 6:15 pm	75 mins
Route 49	Santa Rita via Northridge	6:15 am - 10:00 pm	60 mins
Route 95	Williams Ranch to Northridge	9:30 am - 5:15 pm	120 mins

Notes:
[1] Approximate headways during peak commute periods.

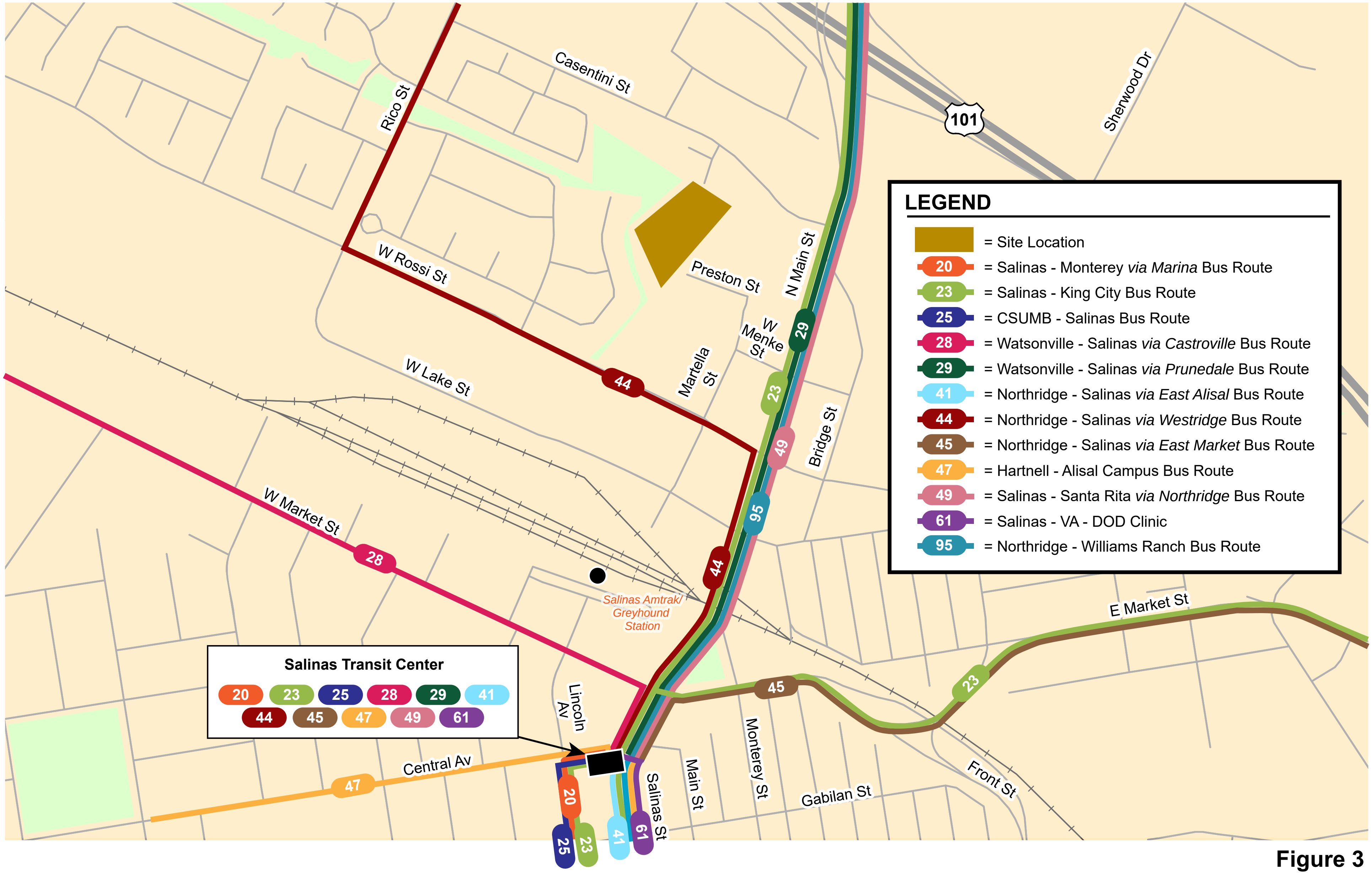

Figure 3
Existing Transit Services

3. CEQA VMT Evaluation

This chapter describes the CEQA transportation analysis, including the VMT analysis methodology and significance criteria, potential project impacts on VMT, and mitigation measures recommended to reduce significant impacts. Pursuant to Senate Bill (SB) 743, the California Environmental Quality Act (CEQA) 2019 Update Guidelines Section 15064.3, subdivision (b) states that VMT will be the metric in analyzing transportation impacts for land use projects for CEQA purposes

VMT Evaluation Methodology and Criteria

The effects of the proposed project on VMT were evaluated using the methodology outlined in the City of Salinas *Draft SB 743 Implementation Policy*.

VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle trips with one end within the project. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity.

VMT Tool

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed a VMT Analysis Tool. The VMT tool identifies the existing average VMT per capita and VMT per employee for an identified project area. Based on the project location, type of development, project description, and proposed trip reduction measures, the VMT analysis tool calculates the project VMT. Projects located in areas where the existing VMT is above the established threshold are referred to as being in “high-VMT areas”. Projects that exceed the City’s thresholds of significance are required to include VMT reduction measures that would reduce the project VMT to the greatest extent possible.

VMT Policies and Impact Criteria

In adherence to SB 743, the City of Salinas has adopted its *Draft SB 743 Implementation Policy*. The policy aligns with the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018.

Per OPR's technical advisory, VMT per resident (capita) is the recommended metric to evaluate CEQA-related transportation impacts for residential land uses. As stated in the technical advisory, OPR recommends an impact threshold of 15% below the existing VMT levels for residential land uses. OPR allows the existing VMT to be measured as regional or citywide VMT per capita. Therefore, the City's policy has established 15% below the county-wide residential VMT per capita as the impact threshold for residential uses in the city. The VMT Evaluation Tool indicates that the countywide average VMT per capita is currently 11.40. Thus, the project will result in a significant impact if it results in project generated VMT of 9.7 VMT per capita or greater.

If a project is found to have a significant impact on VMT, the impact must be reduced by modifying the project to reduce its VMT to an acceptable level (below the established thresholds of significance applicable to the project) and/or mitigating the impact through mitigation measures, which can include implementing a TDM program.

The VMT analysis tool evaluates a list of selected VMT reduction measures that can be applied to a project to reduce the project VMT. The VMT reduction measures include Transportation Demand Management (TDM) strategies in the following categories:

1. Parking
2. Transit
3. Communication and Information
4. Commuting
5. Shared Mobility
6. Bicycle Infrastructure
7. Neighborhood Enhancement
8. Miscellaneous
9. Land Use

Project-Level VMT Impact Analysis

The results of the VMT analysis, using the City's VMT analysis tool, indicate that the proposed project is projected to generate VMT per capita (10.53), which would exceed the impact threshold of 9.7 VMT per capita. Therefore, the proposed project would have an impact on the transportation system based on the City's VMT impact criteria. The VMT Evaluation Tool output is shown in Figure 4 and also can be found in Appendix A.

Project Impacts and Mitigation Measures

Project Impact: Since the VMT generated by the project (10.53 VMT per capita) would exceed the threshold of 9.7 VMT per capita, the project would result in a significant transportation impact on VMT. Therefore, mitigation measures are required to reduce the VMT impact. Per the city's impact thresholds, the project would need to implement VMT reduction measures to achieve an 8 percent reduction (10.53 to 9.7) in its VMT per capita for the proposed residential uses to reduce its impact to less than significant levels.

VMT CALCULATOR

Version 1.0 Build Date 12_10_20

PROJECT INFORMATION

Project Name	1 Preston Street
Address	1 Preston Street
Hex ID	155
Project Context/Setting	Suburban Center

LAND USE INFORMATION

VMT Land Use Type	Residential
Trip Gen Land Use Type	221 | Multifamily Housing (Mid-Rise)
	Accepted: Common Land Use
Number of Dwelling Units	83
Mixed-Use Adjustment	0%

PRESUMPTIONS OF LESS THAN SIGNIFICANT IMPACT

- ☐ **Affordable Housing**
- ☐ **Within a 1/2 mile of Major Transit Stop**
- ☐ **Local Retail (<50,000 Sq Ft)**
- ☐ **Less than 110 Trips per Day**

VMT OUTPUT

This tool is only intended for projects of 2,000 trips or less.

	PROJECT	REDUCTIONS	PROJ. WITH MITIGATION
VMT/Capita	10.53	0.58	9.95
Daily Trips	452	25	427

Average (VMT/Capita)	11.4
Threshold (15% below Average)	9.7
Significant Impact?	Yes

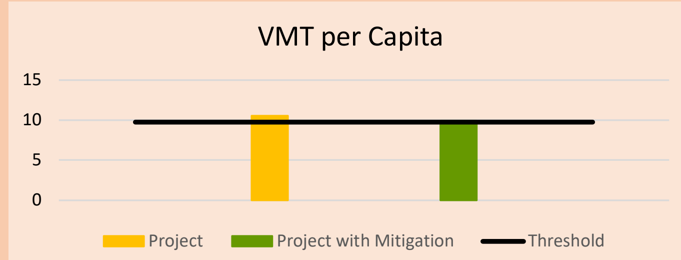

Figure 4
VMT Tool Output Summary

Mitigation Measures: Based on City's VMT policy and analysis tool, the following Travel Demand Management (TDM) strategies could be implemented to reduce the project's impact to a less than significant level. The mitigation measures and the resulting VMT are summarized in Table 2.

Implementation of the following project design measures would reduce the VMT generated by the project to VMT per capita of 9.95:

1. Higher Density: The project proposes to construct residential units at a higher density in an infill location. **and**
2. Pedestrian Network Improvements: The project could construct pedestrian facilities within the project site to connect the project site to existing pedestrian facilities on Preston Street. Creating safe pedestrian connections could encourage future residents to walk instead of drive. **and**
3. Include Bike Parking Per City Code: The project could provide bike parking on-site. Providing bike parking may encourage future residents to utilize bicycles as a mode of transportation instead of driving.

The implementation of the following TDM strategies would be required to further reduce the project impact to VMT to insignificant levels:

4. Reduce On-Site Parking: Reduce to the number of on-site parking spaces for residents to less than that which is required per the municipal code. **or**
5. Implement Unbundled Parking: Separate or unbundle parking costs from leases/property costs requiring those that wish to purchase parking spaces to do so at an additional cost. Unbundled parking also would require the implementation of residential permit parking zones in the project area at the expense of the developer. **or**
6. Affordable Housing: Provide below market-rate housing on-site. **or**
7. Voluntary Travel Behavior Change Program: The project could implement a travel behavior change program by offering incentives to future residents to utilize alternative transportation modes. The program would require 75% participation by residents. **and**
8. Promotions and Marketing: The project could provide future residents with information about alternative transportation and other TDM programs available to them at move in. The program would require 75% participation by residents. **and**
9. School Carpool Program: The project could implement a school carpool program. Residents would be provided information about the school carpool program at move-in. Interested residents would provide their contact information to similar families that have children at the same school.

Table 2
VMT Mitigation Measures and Resulting VMT

Item	Mitigation	Mitigation Description	VMT per Capita	VMT Threshold	VMT Impact?
1	Project	None	10.53	9.7	Yes
2	Higher Density, Pedestrian Network Improvements, and Include Bike Parking Per City Code	The project proposes to construct residential units at a higher density in an infill location, construct pedestrian facilites within the project site that would connect to the existing pedestrian network, and provide bike parking on-site.	9.95	9.7	Yes
3	Item 2 and Reduce On-site Parking	Reducing on-site parking spaces less than what is required per the municipal code	(9.53) varies[1]	9.7	No
4	Item 2 and Implement Unbundled Parking	Unbundle parking costs from leases/property costs.	(9.7) varies[2]	9.7	No
5	Affordable Housing	The project could provide a high percentage of affordable housing units, as defined by the City of Salinas, could result in a less-than significant impact on VMT.	n/a	9.7	No
6	Item 2 and Implement Voluntary Travel Behavior Change Program, Promotions and Marketing, and School Capool Program	Voluntary Travel Behavior Change Program - Implement a travel behavior change program by offering incentives to future residents to utilize alternative transportation modes. Promotions and Marketing - Implement marketing/educational campaigns that promote the use of transit, carpooling, school pools, and travel through active modes. Strategies may include welcome packets for new residents, on-line portal to access information, and event promotions. School Carpool Program - Implement a School Carpool Program. Residents would be provided information upon move-in. Interested residents would provide their contact information to similarly interested families.	9.62	9.7	No

Notes:

[1] Since a breakdown of units and their sizes has not yet been proposed, the number of required spaces is unknown. Based on a requirement of 2 spaces per unit, reducing the parking supply to one space per unit would result in 9.53 VMT per capita.

[2] VMT reduction is varied based on the amount charged for a parking space. Implementing a $20 charge for parking would reduce the VMT per capita to 9.7

4. Transportation Operations Analysis

This chapter describes the transportation operations analysis including the method by which project traffic is estimated, intersection operations analysis for existing and existing plus project scenarios, any adverse effects on study intersections caused by the project, and effects on bicycle, pedestrian, and transit facilities, and parking.

The transportation operations analysis provides supplemental analysis for use by the City of Salinas in identifying adverse effects related to the proposed project and to identify potential improvements to the transportation system. The transportation operations analysis supplements the CEQA VMT analysis and identifies transportation and traffic operational issues that may arise due to a development project. The determination of project impacts per CEQA requirements is based solely on the VMT analysis presented in the previous chapter.

Project Description

There currently is no development proposal for the vacant project site. Therefore, the maximum potential buildout of the site was evaluated as part of this traffic analysis. With full buildout and anticipating a density bonus, future development on the site may include the construction of up to 83 residential units. The lot can be accessed at the west end of Preston Street.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel are estimated. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that indicate the amount of traffic that can be expected to be generated by common land uses. Project trip generation was estimated by applying to the size and uses of the development the appropriate trip generation rates. The average trip generation rates for Multi-Family Housing – Mid Rise (Land Use 221) as published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (2021) were applied to the proposed residential development.

Based on the trip generation rates, it is estimated that the project would generate 377 daily vehicle trips, with 31 trips (7 inbound and 24 outbound) occurring during the AM peak hour and 32 trips (20 inbound and 12 outbound) occurring during the PM peak hour. The project trip generation estimates are presented in Table 3.

Table 3
Project Trip Generation Estimates

			Daily Trips		AM Peak Hour						PM Peak Hour					
						Split		Trip				Split		Trip		
Land Use	Size		Rate	Trip	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Proposed Land Uses																
#221 - Multifamily Housing (Mid-Rise)	**83**	Dwelling Units	4.540	377	0.370	23%	77%	7	24	31	0.390	61%	39%	20	12	32
Source: ITE Trip Generation Manual, 11th Edition 2021.																

Trip Distribution and Trip Assignment

The trip distribution pattern for the project was developed based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak-hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern. Figure 5 shows the trip distribution pattern and net trip assignment of project traffic on the local transportation network.

Intersection Operations Methodology

This section presents the methods used to evaluate traffic operations at the study intersections. It includes descriptions of the data requirements, the analysis methodologies, the applicable level of service standards, and the criteria defining adverse effects at the study intersections.

The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection is not considered a CEQA impact metric.

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour typically occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. These are the peak commute hours during which most weekday traffic congestion occurs on the roadways in the study area. The study includes the analysis of one signalized intersection and two unsignalized intersections within the City of Salinas. The study intersections were selected in coordination with City staff and are listed below and are shown on Figure 6.

Study Intersections

1. North Main Street and Menke Street (unsignalized)
2. North Main Street and Rossi Street
3. Rossi Street and Martell Street (unsignalized)

Study Scenarios

Intersection operations conditions were evaluated for the following scenarios:

- ***Existing Conditions***. Existing conditions represent existing peak-hour traffic volumes on the existing roadway network. Existing AM and PM peak hour traffic volumes at all study intersections were obtained from new traffic counts.

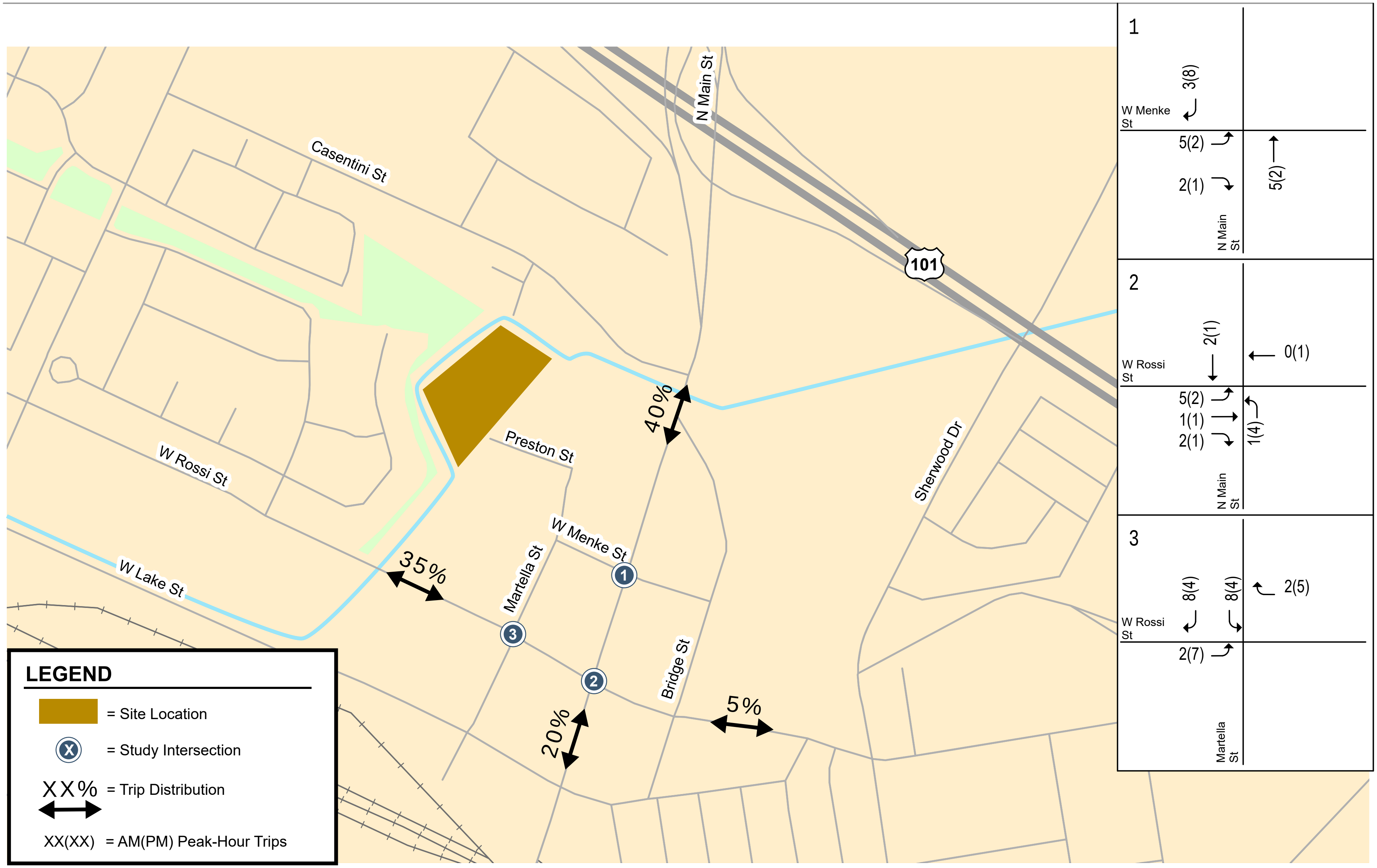

Figure 5
Project Trip Distribution and Assignment

- ***Existing Plus Project Conditions.*** Existing plus project conditions represent existing peak-hour traffic volumes on the existing roadway network with the addition of traffic generated by the proposed project assuming the project was completed and occupied today. Existing plus project conditions were evaluated relative to existing conditions to determine potential project impacts on the existing transportation network attributable to the project only.

Data Requirements

The data required for the analysis were obtained from new traffic counts and field observations. The following data were collected from these sources:

- existing traffic volumes
- existing lane configurations
- signal timing and phasing

Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 7. It is assumed in this analysis that the roadway network and intersection configurations under the existing plus project would be the same as described under existing conditions.

Traffic Volumes

Existing Conditions

Existing peak hour traffic volumes at all signalized study intersections were obtained from new traffic counts collected in January 2022. The existing peak-hour intersection volumes are shown on Figure 8. Intersection turning-movement counts conducted for this analysis are presented in Appendix B.

Existing plus Project Conditions

Project trips were added to existing traffic volumes to obtain existing plus project traffic volumes (see Figure 9).

Intersection Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The analysis methods are described below.

Study intersections were evaluated based on the *2010 Highway Capacity Manual* (HCM) level of service methodology using Synchro software. This method evaluates intersection operations on the basis of average control delay time for all vehicles at the intersection. The correlation between average control delay and level of service at signalized intersections is shown in Table 4. The correlation between control delay and level of service at unsignalized intersections is shown in Table 5.

City of Salinas Intersection Operations Adverse Effects

An adverse effect on signalized intersection operations occurs if for either peak hour:

1. The addition of project traffic causes operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level, or
2. The addition of project traffic adds one vehicle trip to intersections already operating at an unacceptable level (LOS E or F).

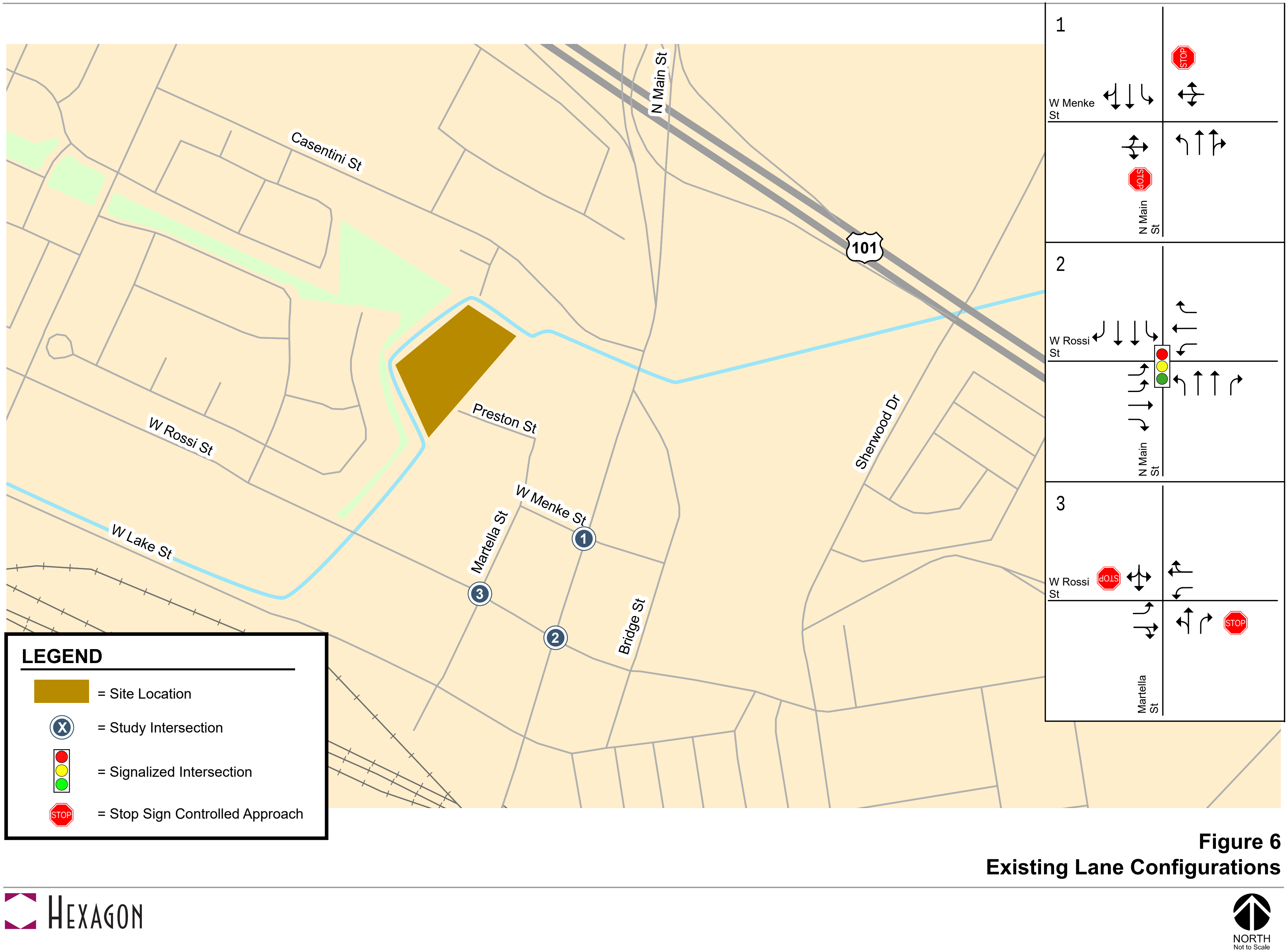

Figure 6
Existing Lane Configurations

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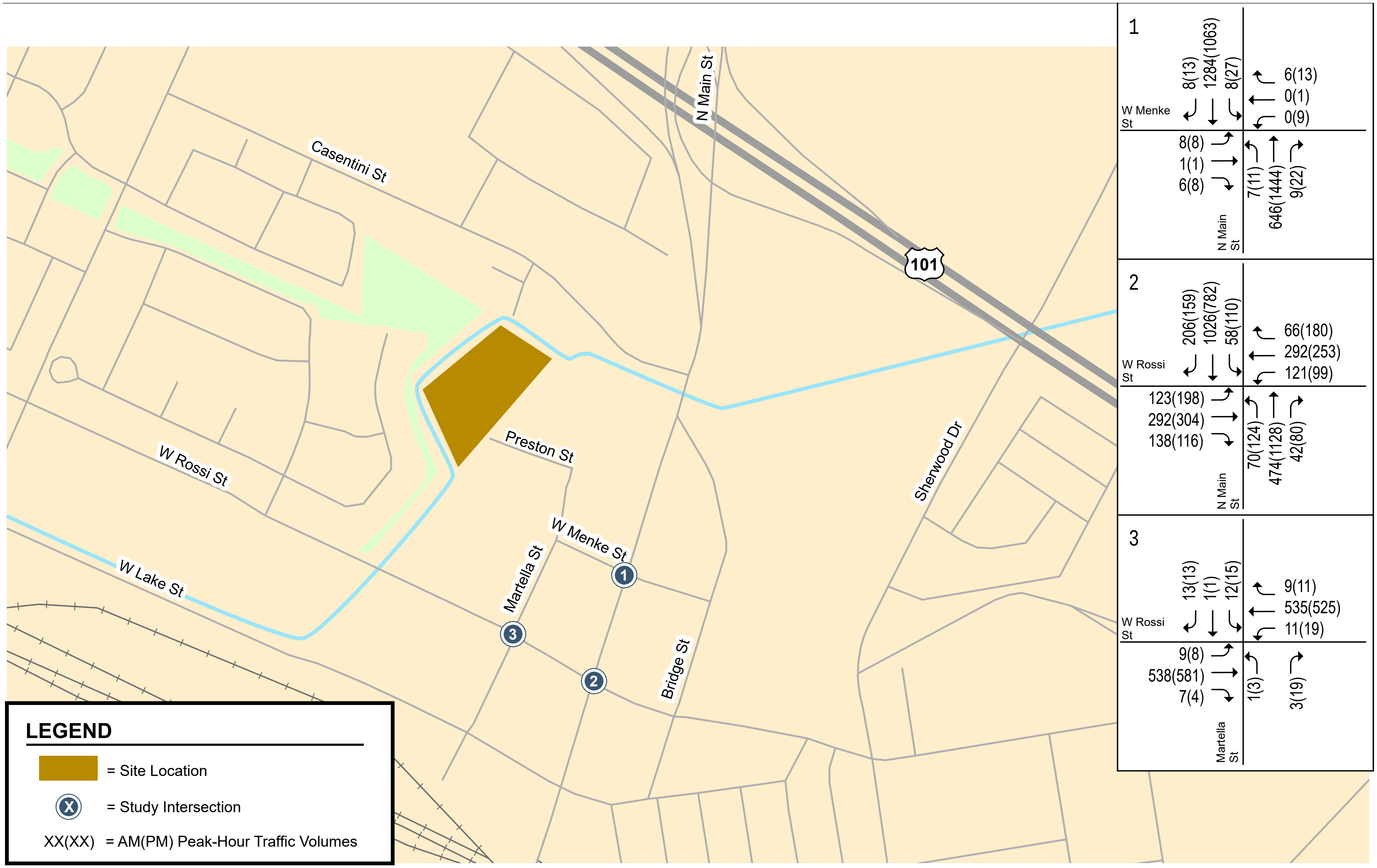


Figure 7
Existing Traffic Volumes

HEXAGON

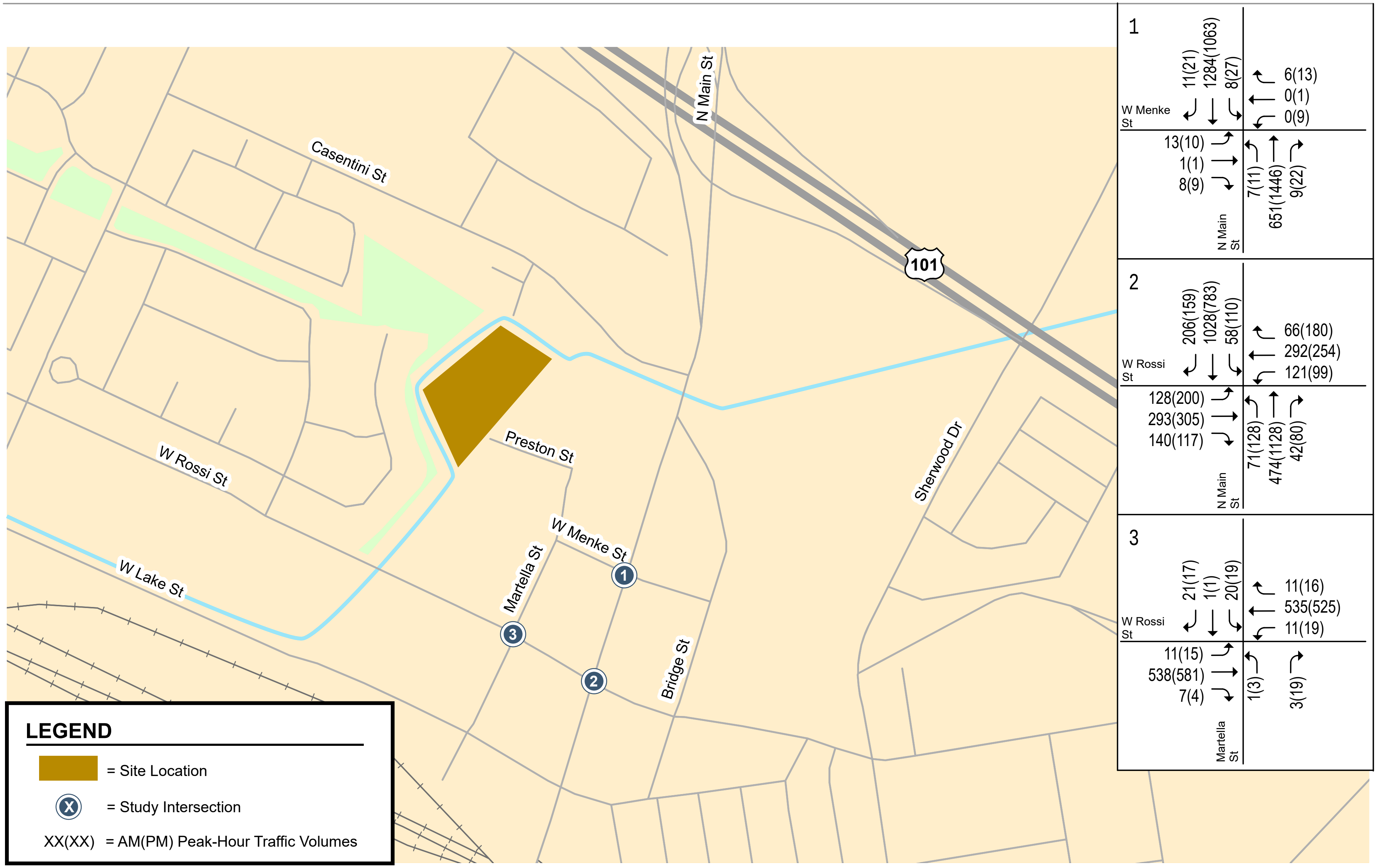


Figure 8
Existing Plus Project Traffic Volumes

Table 4
Signalized Intersection Level of Service Definition Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0
Source: Transportation Research Board, *2010 Highway Capacity Manual* (Washington, D.C., 2010)		

Table 5
Unsignalized Intersection Level of Service Definition Based on Control Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0
Source: Transportation Research Board, *2010 Highway Capacity Manual* (Washington, D.C., 2010)		

An adverse effect at a one- or two-way stop-controlled intersection operations occurs if for either peak hour:

1. The addition of project traffic causes overall operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level, or
2. The addition of project traffic adds one vehicle trip to intersections whose side-street operations are already operating at an unacceptable level (LOS E or F).

An adverse intersection operations effect provides an indication to City staff to determine whether improvements are needed at a study intersection. If adverse effects are found as a result of the addition of project-generated trips on the roadway network, potential improvements that would reduce the project's effect on the roadway network will be identified.

Intersection Operations Analysis Results

The intersection level of service analysis is summarized in Table 6.

Table 6
Intersection Level of Service Results

				Existing Conditions				
				No Project		with Project		
Study #	Intersection	Control	Peak Hour	Avg. Delay[1] (sec)	LOS	Avg. Delay[1] (sec)	LOS	Increase in Crit. Delay (sec)
1	N. Main Street & Menke Street	TWSC	AM	**65.9**	**F**	**79.5**	**F**	13.6
			PM	**183.3**	**F**	**183.3**	**F**	0.0
2	N. Main Street & Rossi Street	Signal	AM	28.9	C	29.1	C	0.2
			PM	31.3	C	31.6	C	0.3
3	Martella Street & Rossi Street	TWSC	AM	22.3	C	24.1	C	1.8
			PM	26.2	D	27.9	D	1.7

Notes:
[1] Average delay is reported for signalized intersections. Delay for the worst approach leg is reported for TWSC intersections.
Bold indicates a substandard level of service.
$\boxed{\textbf{Bold}}$ indicates an adverse effect with the addition of project trips.

Existing Intersection Operation Conditions

The results of the level of service analysis show that the signalized intersection of N. Main Street/Rossi Street and the unsignalized intersection of Martella Street/Rossi Street operate at an acceptable LOS D or better during both the AM and PM peak hours. The unsignalized intersection of N. Main Street/Menke Street currently operates at an unacceptable LOS F during both peak hours. The level of service calculation sheets are included in Appendix C.

Existing plus Project Intersection Operation Conditions

The operations analysis shows that the signalized intersection of N. Main Street/Rossi Street and the unsignalized intersection of Martella Street/Rossi Street would continue to operate at an acceptable LOS D or better during both the AM and PM peak hours with the addition of project-generated trips. The N. Main Street/Menke Street intersection would continue to operate at an unacceptable LOS F during both peak hours. The intersection level of service calculation sheets are included in Appendix C.

The addition of project generated trips to the west leg (eastbound direction) of the N. Main Street/Menke Street intersection would increase the average delay experienced by each vehicle on that approach by 13.6 seconds during the AM peak hour. N. Main Street carries a high volume of traffic during the peak hours and causes side-street traffic to wait for extended periods of time. Field observations show that vehicles were able to make turns from Menke Street once the downstream signal at N. Main Street/Rossi Street approached the end of the green phase for the southbound direction. Due to the small number of vehicles traveling along Menke Street relative to the traffic along N. Main Street, improvements are not recommended as drivers have the option to use Martella Street to access Rossi Street and N. Main Street.

Unsignailzed Intersection Control and Critical Gaps

Both the unsignalized intersections of N. Main Street/Menke Street and Martella Street/Rossi Street are stop-controlled along the minor street approaches. A peak hour signal warrant check and a critical gap analysis were performed at each of the unsignalized study intersections to evaluate the need for a change of control.

Peak Hour Signal Warrant

The need for signalization of the unsignalized intersections was assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the *California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD)*, Part 4, Highway Traffic Signals, 2014. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Intersections that meet the peak hour warrant are subject to further analysis before determining that a traffic signal is necessary. Additional analysis may include operational analysis such as evaluating vehicle queuing and delay. Other options such as traffic control devices, signage, or geometric changes may be preferable based on existing field conditions.

A peak-hour traffic signal warrant check was conducted for unsignalized study intersections that meet the 100 vehicles per hour threshold for minor streets. Since neither of the unsignalized study intersections meet the minimum threshold for minor streets, in can be concluded that the peak hour signal warrant is not met for either intersection.

Critical Gap Observations

Although the minor street threshold is not met for the peak hour signal warrant at either unsignalized intersection, a critical gap analysis was completed to determine whether vehicles would be able to turn from minor streets onto major streets at study intersections.

The critical gap is the time needed for a driver to safely navigate from a minor street approach. The longest critical gap is typically the left turn from a minor street to a major street at two-way stop-controlled intersections. The Highway Capacity Manual (HCM) describes the default values that should be used for these movements based on the number of lanes on the major street. The critical gap is 7.5 seconds and 7.1 seconds for a four-lane major street and two-lane major street, respectively.

Based on the values described in the HCM, vehicles originating at the project site would need a minimum gap of at least 7.5 seconds to turn from Menke Street onto northbound N. Main Street and 7.1 seconds to turn from Martella Street onto eastbound Rossi Street.

Field observations show that gaps in traffic are available during both peak hours at both intersections. For the intersection of N. Main Street and Menke Street, field observations show that during both peak hour, vehicles were easily able to make left turns from Menke Street onto N. Main Street when southbound through green phase began at the N. Main Street/Rossi Street intersection. Since the southbound movement at the N. Main Street/Rossi Street intersection ends with a lagging left turn, very few vehicles approach the unsignalized intersection of N. Main Street/Menke Street towards the end of the signal cycle, allowing for vehicles to locate a gap in traffic to depart from Menke Street. Field observations of the signal timing show that the green+yellow+all red for the southbound left turn movement at N. Main Street/Rossi Street totals 12 seconds in the AM peak hour and 16 seconds in the PM peak hour, which would provide an adequate gap in traffic for vehicles to depart Menke Street.

For the intersection of Martella Street and Rossi Street, vehicles are easily able to find gaps in traffic to make the left turn. During busier cycles at the N. Main Street/Rossi Street intersection, vehicles may occasionally spillback to the Martella Street/Rossi Street intersection. However, vehicles are easily able to depart Martella Street once the signal turns green at the downstream intersection. Field observations of the signal timing show that the green+yellow+all red for the eastbound left turn movement at N. Main Street/Rossi Street totals 12 seconds in the AM peak hour and 14 seconds in the PM peak hour, which would provide an adequate gap in traffic for vehicles to depart Menke Street.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Pedestrian facilities in the study area consist of sidewalks, crosswalks, and pedestrian signals (see Chapter 2 for details).

Pedestrian generators in the project vicinity include commercial areas and bus stops along N. Main Street and Rossi Street. Downtown Salinas is located approximately ½-mile walking distance from the project site.

The sidewalk is discontinuous on the south and west side of Preston Street and Martella Street, respectively. Additionally, a sidewalk and curb ramp are missing at the southeast corner of the Martella Street/Menke Street intersection. Although sidewalks are missing along some property frontages along Preston Street, Martella Street, and Menke Street, a continuous sidewalk connects the project site to N. Main Street, which provides connections to nearby points of interest.

The project proposes a general plan amendment which would allow construction of buildings that would be either row houses, condominiums, or apartments. Since a site plan has not yet been proposed, the final site plan should include sidewalks, pathways, and curb ramps connecting buildings to existing pedestrian facilities on Preston Street.

Bicycle Facilities

There are several bike facilities in the immediate vicinity of the project site (see Chapter 2 for details). The project site is not directly served by any bicycle facilities. Preston Street and Martella Street carry low volume and is conducive to bicyclists. Existing bike lanes along Rossi Street connect the project vicinity to other bicycle facilities and nearby points of interest.

The Monterey County Active Transportation Plan identifies future improvements to bicycle facilities in the project vicinity. A planned Class I share use path is proposed between Market Street and Rossi Street, opposite from Martella Street. This would provide a safe bicycle connection between the project site to the downtown Salinas area without needing to head west to Davis Road. The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities.

Transit Services

The project site is adequately served by existing MST transit services. Within the project vicinity, bus routes run along N. Main Street and Rossi Street. The project site is primarily served by five MST bus routes (Routes 23, 29, 44, 49, and 95). The nearest bus stops to the project site are located along both sides of Main Street (at Rossi Street), approximately ¼-mile from the project site. Additionally, the Salinas Amtrak station and the Salinas Transit Center are located approximately 0.6-mile from the project site. The new transit trips generated by the project are not expected to create demand in excess of the transit service that is currently provided. The project would not remove any transit facilities, nor would it conflict with any adopted plans or policies for new transit facilities.

5. Conclusions

The transportation analysis of the project was evaluated following the standards and methodologies set forth by the California Environmental Quality Act (CEQA) and the City of Salinas.

CEQA VMT Analysis

Project-Level VMT Impact Analysis

The results of the VMT analysis, using the City's VMT analysis tool, indicate that the proposed project is projected to generate 10.53 VMT per capita. Therefore, the proposed project would have an impact on the transportation system based on the City's VMT impact criteria.

Project Impacts and Mitigation Measures

Project Impact: Since the VMT generated by the project (10.53 VMT per capita) would exceed the threshold of 9.7 VMT per capita, the project would result in a significant transportation impact on VMT. Therefore, mitigation measures are required to reduce the VMT impact.

Mitigation Measures: Implementation of the following project design measures would reduce the VMT generated by the project to VMT per capita of 9.95:

1. Higher Density: The project proposes to construct residential units at a higher density in an infill location. **and**
2. Pedestrian Network Improvements: The project could construct pedestrian facilities within the project site to connect the project site to existing pedestrian facilities on Preston Street. Creating safe pedestrian connections could encourage future residents to walk instead of drive. **and**
3. Include Bike Parking Per City Code: The project could provide bike parking on-site. Providing bike parking may encourage future residents to utilize bicycles as a mode of transportation instead of driving.

The implementation of the following TDM strategies would be required to further reduce the project impact to VMT to insignificant levels:

4. Reduce On-Site Parking: Reduce to the number of on-site parking spaces for residents to less than that which is required per the municipal code. **or**
5. Implement Unbundled Parking: Separate or unbundle parking costs from leases/property costs requiring those that wish to purchase parking spaces to do so at an additional cost. Unbundled

parking also would require the implementation of residential permit parking zones in the project area at the expense of the developer. **or**

6. Affordable Housing: Provide below market-rate housing on-site. **or**
7. Voluntary Travel Behavior Change Program: The project could implement a travel behavior change program by offering incentives to future residents to utilize alternative transportation modes. The program would require 75% participation by residents. **and**
8. Promotions and Marketing: The project could provide future residents with information about alternative transportation and other TDM programs available to them at move in. The program would require 75% participation by residents. **and**
9. School Carpool Program: The project could implement a school carpool program. Residents would be provided information about the school carpool program at move-in. Interested residents would provide their contact information to similar families that have children at the same school.

Transportation Operations Analysis

The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection operation is not considered a CEQA impact metric.

The transportation operations analysis includes the analysis of AM and PM peak-hour traffic conditions for one signalized intersection and two unsignalized intersections. The intersections were evaluated using Synchro software, utilizing the Highway Capacity Manual (HCM) 2010 methodology.

Trip Generation

Based on the trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*, it is estimated that the project would generate 377 daily vehicle trips, with 31 trips (7 inbound and 24 outbound) occurring during the AM peak hour and 32 trips (20 inbound and 12 outbound) occurring during the PM peak hour.

Intersection Operation Conditions

The operations analysis shows that the signalized intersection of N. Main Street/Rossi Street and the unsignalized intersection of Martella Street/Rossi Street would continue to operate at an acceptable LOS D or better during both the AM and PM peak hours with and without the project. The N. Main Street/Menke Street intersection would operate at an unacceptable LOS F during both peak hours with and without the project. The addition of project generated trips to the intersection would increase the average delay experienced by each vehicle on the worst-leg approach by 13.6 seconds during the AM peak hour. Due to the small number of vehicles traveling along Menke Street relative to the traffic along N. Main Street, improvements are not recommended as drivers have the option to use Martella Street to access Rossi Street and N. Main Street.

Unsignailzed Intersection Control and Critical Gaps

Both the unsignalized intersections of N. Main Street/Menke Street and Martella Street/Rossi Street are stop-controlled along the minor street approaches. Since neither of the unsignalized study intersections meet the minimum threshold for minor streets, in can be concluded that the peak hour signal warrant is not met for either intersection. Field observations show that gaps in traffic are available during both peak hours at both intersections.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Pedestrian generators in the project vicinity include commercial areas and bus stops along N. Main Street and Rossi Street. Downtown Salinas is located approximately ½-mile walking distance from the project site.

Pedestrian facilities in the project vicinity include sidewalks, crosswalks, and pedestrian signals at the signalized study intersection. The sidewalk is discontinuous on the south and west side of Preston Street and Martella Street, respectively. Additionally, a sidewalk and curb ramp are missing at the southeast corner of the Martella Street/Menke Street intersection. Although sidewalks are missing along some property frontages along Preston Street, Martella Street, and Menke Street, a continuous sidewalk connects the project site to N. Main Street, which provides access to additional pedestrian facilities and to nearby points of interest.

The project proposes a general plan amendment which would allow construction of buildings that would be either row houses, condominiums, or apartments. Since a site plan has not yet been proposed, the final site plan should be designed to include sidewalks, pathways, and curb ramps connecting buildings to existing pedestrian facilities on Preston Street.

Bicycle Facilities

Bicycle facilities in the project vicinity include bike paths, bike lanes, and bike routes. The project site is not directly served by any bicycle facilities. However, Preston Street and Martella Street carry low volume and is conducive to bicyclists. Existing bike lanes along Rossi Street connect the project vicinity to other bicycle facilities and nearby points of interest.

The Monterey County Active Transportation Plan identifies future improvements to bicycle facilities in the project vicinity. A planned Class I share use path is proposed between Market Street and Rossi Street, opposite from Martella Street. This would provide a safe bicycle connection between the project site to the downtown Salinas area without needing to head west to Davis Road. The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities.

Transit Facilities

The project site is adequately served by existing MST transit services. Within the project vicinity, bus routes run along N. Main Street and Rossi Street. The project site is primarily served by five MST bus routes (Routes 23, 29, 44, 49, and 95). The nearest bus stops to the project site are located along both sides of Main Street (at Rossi Street), approximately ¼-mile from the project site. Additionally, the Salinas Amtrak station and the Salinas Transit Center are located approximately 0.6-mile from the project site. The new transit trips generated by the project are not expected to create demand in excess of the transit service that is currently provided. The project would not remove any transit facilities, nor would it conflict with any adopted plans or policies for new transit facilities.

1 Preston Street

Residential Development TA

Technical Appendices

Appendix A

City of Salinas VMT Analysis Tool Summary

VMT CALCULATOR

Version 1.0 Build Date 12_10_20

PROJECT INFORMATION

Project Name	1 Preston Street
Address	1 Preston Street
Hex ID	155
Project Context/Setting	Suburban Center

LAND USE INFORMATION

VMT Land Use Type	Residential
Trip Gen Land Use Type	221 | Multifamily Housing (Mid-Rise)
	Accepted: Common Land Use
Number of Dwelling Units	83
Mixed-Use Adjustment	0%

PRESUMPTIONS OF LESS THAN SIGNIFICANT IMPACT

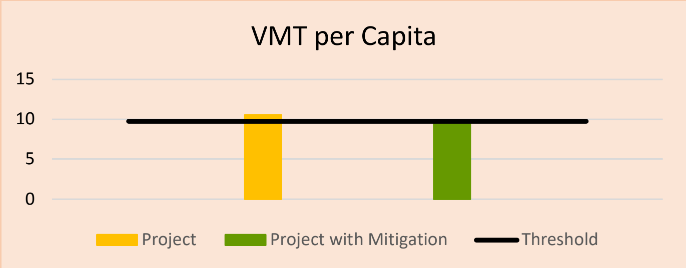
- [ ] **Affordable Housing**
- [ ] **Within a 1/2 mile of Major Transit Stop**
- [ ] **Local Retail (<50,000 Sq Ft)**
- [ ] **Less than 110 Trips per Day**

VMT OUTPUT

This tool is only intended for projects of 2,000 trips or less.

	PROJECT	REDUCTIONS	PROJ. WITH MITIGATION
VMT/Capita	10.53	0.58	9.95
Daily Trips	452	25	427

Average (VMT/Capita)	11.4
Threshold (15% below Average)	9.7
Significant Impact?	Yes



TRANSPORTATION DEMAND MANAGEMENT (TDM) STRATEGIES

Scroll down for all TDM Strategies

PARKING STRATEGIES

#	TDM Measure	Selected Max Value	Input	Description
1	**Reduce Parking Supply**	4%	0	City code parking provision for project site (parking spaces)
			0	Actual parking provision for project site (parking spaces)
2	**Unbundle Parking**	5%	0	monthly parking cost ($) for project site
3	**Parking Cash-out**	4%	0%	percent of employees eligible
4	**Residential Area Parking Permits**	0.25%	No	Yes/No
5	**Price Workplace Parking**	4%	0%	percent of employees eligible
6	**Parking Management Strategies**	1%	No	Yes/No

TRANSIT STRATEGIES

#	TDM Measure		Input	Description
7	**Reduce Transit Headways**	2%	No	Yes/No
8	**Transit Rerouting**	2%	No	Yes/No
9	**Transit Stops near Project Site**	2%	No	Yes/No
10	**Safe and Well-Lit Access to Transit**	1%	No	Yes/No
11	**Transit Subsidies**	4%	0%	percent of employees and residents eligible
			$0.00	amount ($) of transit subsidy per passenger (daily equivalent) ($0.75, $1.49, $2.98 or $5.96. Select highest value if unlimited ride passes are provided.)

COMMUNICATION & INFORMATION STRATEGIES

#	TDM Measure		Input	Description
12	**Voluntary Travel Behavior Change Program**	2%	0%	percent of employees and residents participating
13	**Promotions & Marketing**	2%	0%	percent of employees and residents participating
14	**Multimodal Wayfinding Signage**	1%	No	Yes/No

#	TDM Measure		Input	Description
	COMMUTING STRATEGIES			
#	**TDM Measure**		**Input**	**Description**
15	**Employer Sponsored Vanpool or Shuttle**	2%	None	degree of implementation - High (>30 vans) - Medium (10-30 vans) - Low (<10 vans)
			None	employer size - Large (>500 employees) - Medium (100-500 employees) - Low (<100 employees)
			0%	percent of employees eligible
16	**Preferential Carpool / Vanpool Parking Spaces**	2%	No	Yes/No
17	**On-site Carts or Shuttles**	1%	No	Yes/No
18	**On-site Childcare**	2%	No	Yes/No
	SHARED MOBILITY STRATEGIES			
#	**TDM Measure**		**Input**	**Description**
19	**Ride-Share Program**	5%	0%	percent of employees eligible
20	**Car Share**	1%	None	project setting - urban + comprehensive transit - suburban + commuter rail - all other settings
21	**Designated Parking Spaces for Car Share Vehicles**	1%	No	Yes/No
22	**School Carpool Program**	15%	None	level of implementation
	BICYCLE INFRASTRUCTURE STRATEGIES			
#	**TDM Measure**		**Input**	**Description**
23	**Bike Charging Facility**	1.0%	No	Yes/No
24	**Implement/Improve On-street Bicycle Facility**	0.50%	No	Yes/No
25	**Include Bike Parking Per City Code**	0.50%	Yes	Yes/No
26	**Include Secure Bike Parking and Showers**	0.50%	No	Yes/No
27	**Bicycle Repair Station / Services**	0.50%	No	Yes/No

#	TDM Measure		Input	Description
	NEIGHBORHOOD ENHANCEMENT STRATEGIES			
#	**TDM Measure**		**Input**	**Description**
28	**Traffic Calming Improvements**	1%	0%	percent of streets within project with traffic calming improvements (25%, 50%, 75%, or 100%)
			0%	percent of intersections within project with traffic calming improvements (25%, 50%, 75%, or 100%)
29	**Pedestrian Network Improvements**	2%	ithin Project Or	selection: within project and connecting off-site, within project only
30	**Healthy Food Retail in Underserved Area**	2%	None	selection: within project and connecting off-site, within project only
	MISCELLANEOUS STRATEGIES			
#	**TDM Measure**		**Input**	**Description**
31	**Virtual Care Strategies for Hospitals**	6%	No	Yes/No
32	**On-site Affordable Housing**	20%	No	Yes/No
	LAND USE STRATEGIES			
#	**TDM Measure**		**Input**	**Description**
33	**Transit Oriented Development**	15%	No	Yes/No
34	**Destination Development (Residential Close to work)**	2.5%	No	Yes/No
35	**Transit Service Expansion**	2.5%	No	Yes/No
36	**Higher Density**	4%	Yes	Yes/No
37	**Open Space**	1%	No	Yes/No
38	**Street grid**	4%	No	Yes/No

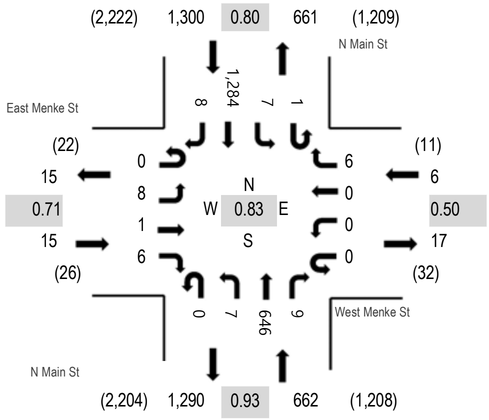
Appendix B

Traffic Counts

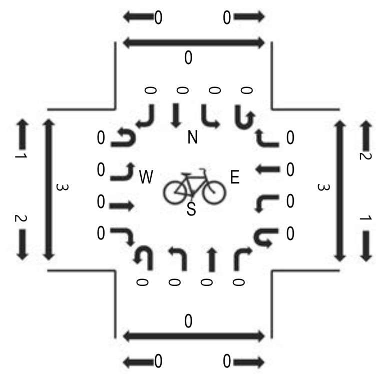
(303) 216-2439
www.alltrafficdata.net

Location: 1 N Main St & West Menke St AM
Date: Wednesday, January 26, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

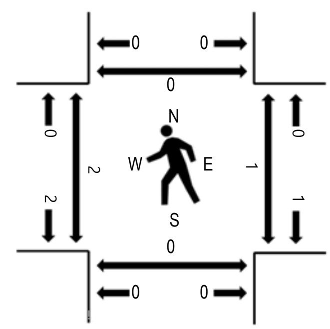
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	East Menke St Eastbound U-Turn	Left	Thru	Right	West Menke St Westbound U-Turn	Left	Thru	Right	N Main St Northbound U-Turn	Left	Thru	Right	N Main St Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	0	0	1	0	0	0	2	0	0	75	1	0	4	201	0	284	1,697	0	0	0	0
7:15 AM	0	1	0	1	0	0	0	1	0	0	114	1	0	0	226	1	345	1,882	0	1	0	0
7:30 AM	0	2	0	1	0	0	0	1	0	1	125	0	0	0	338	0	468	1,983	0	0	0	0
7:45 AM	0	2	0	4	0	0	0	1	0	3	181	2	0	1	405	1	600	1,941	1	0	0	0
8:00 AM	0	1	1	1	0	0	0	3	0	2	173	1	0	2	280	5	469	1,770	0	0	0	0
8:15 AM	0	3	0	0	0	0	0	1	0	1	167	6	1	4	261	2	446		1	1	0	0
8:30 AM	0	3	0	2	0	1	0	0	0	0	162	3	1	1	249	4	426		1	2	0	0
8:45 AM	0	3	0	0	0	0	0	1	0	1	185	4	0	1	233	1	429		0	2	0	0

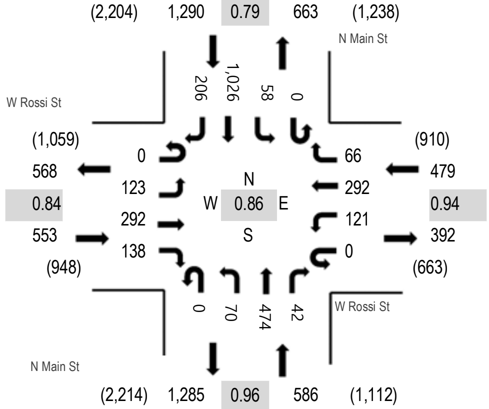
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
Lights	0	8	1	6	0	0	0	6	0	6	624	9	1	7	1,269	8	1,945
Mediums	0	0	0	0	0	0	0	0	0	1	19	0	0	0	15	0	35
Total	0	8	1	6	0	0	0	6	0	7	646	9	1	7	1,284	8	1,983

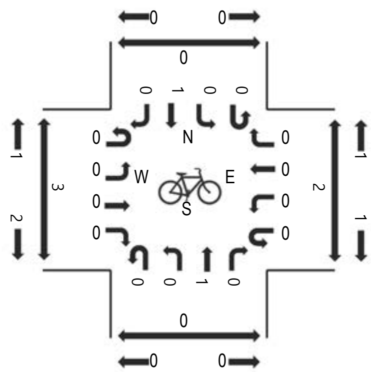
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 N Main St & W Rossi St AM
Date: Wednesday, January 26, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

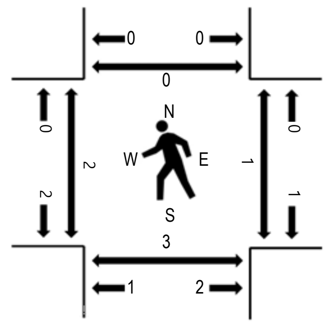
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	W Rossi St Eastbound U-Turn	Left	Thru	Right	W Rossi St Westbound U-Turn	Left	Thru	Right	N Main St Northbound U-Turn	Left	Thru	Right	N Main St Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	12	30	19	0	22	88	7	0	12	65	7	0	10	144	48	464	2,526	1	0	1	0
7:15 AM	0	22	45	24	0	24	72	12	0	9	81	9	0	12	187	28	525	2,769	1	3	2	2
7:30 AM	0	22	61	36	0	30	72	11	0	10	102	11	0	13	279	48	695	2,908	0	0	0	0
7:45 AM	0	43	82	39	0	33	75	20	0	16	115	10	0	25	317	67	842	2,843	1	0	2	0
8:00 AM	0	23	80	35	0	22	78	20	0	22	138	9	0	12	230	38	707	2,648	0	0	0	0
8:15 AM	0	35	69	28	0	36	67	15	0	22	119	12	0	8	200	53	664		1	1	1	0
8:30 AM	0	24	56	32	0	30	47	19	0	19	136	15	0	14	206	32	630		0	3	3	1
8:45 AM	0	44	42	45	0	26	66	18	0	27	135	11	0	20	170	43	647		0	0	1	0

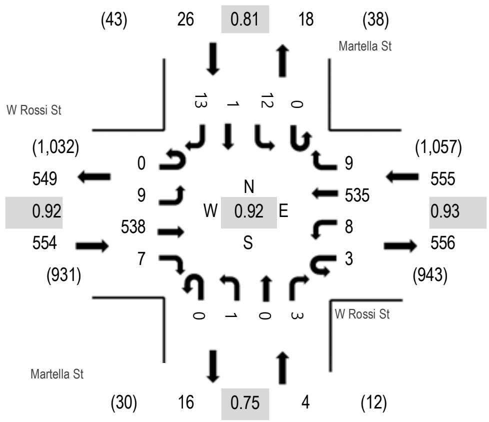
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3
Lights	0	120	283	137	0	119	284	64	0	67	456	41	0	56	1,016	203	2,846
Mediums	0	2	9	1	0	2	8	2	0	3	16	1	0	2	10	3	59
Total	0	123	292	138	0	121	292	66	0	70	474	42	0	58	1,026	206	2,908

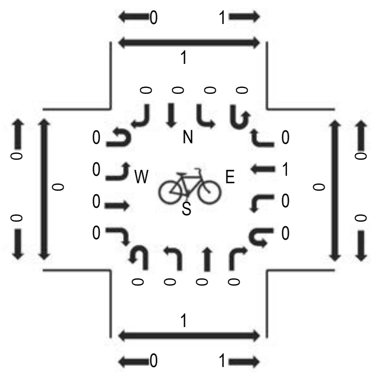
(303) 216-2439
www.alltrafficdata.net

Location: 3 Martella St & W Rossi St AM
Date: Wednesday, January 26, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

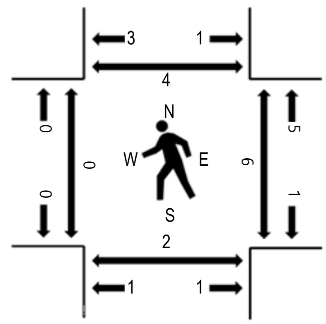
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	W Rossi St Eastbound				W Rossi St Westbound				Martella St Northbound				Martella St Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	1	65	0	0	2	137	3	0	0	1	1	0	2	0	1	213	1,011	0	0	0	0
7:15 AM	0	2	83	0	0	4	131	4	0	0	0	2	0	1	0	2	229	1,105	0	0	1	0
7:30 AM	0	2	126	2	1	1	119	1	0	0	0	1	0	3	0	2	258	1,139	0	0	0	1
7:45 AM	0	4	147	0	2	3	146	1	0	1	0	0	0	1	0	6	311	1,110	0	6	1	3
8:00 AM	0	2	143	1	0	2	148	2	0	0	0	1	0	4	1	3	307	1,032	0	0	0	0
8:15 AM	0	1	122	4	0	2	122	5	0	0	0	1	0	4	0	2	263		0	0	1	0
8:30 AM	0	1	118	1	0	2	98	3	0	1	0	1	0	1	0	3	229		0	1	0	1
8:45 AM	0	0	106	0	0	5	108	5	0	0	0	2	0	5	0	2	233		0	0	1	0

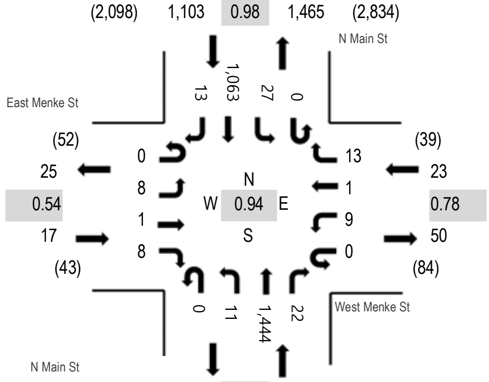
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	9	526	7	3	8	521	8	0	1	0	3	0	12	1	11	1,110
Mediums	0	0	11	0	0	0	14	1	0	0	0	0	0	0	0	2	28
Total	0	9	538	7	3	8	535	9	0	1	0	3	0	12	1	13	1,139

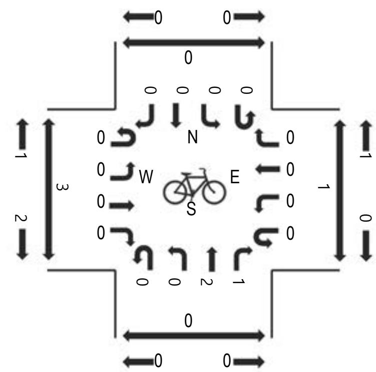
(303) 216-2439
www.alltrafficdata.net

Location: 1 N Main St & West Menke St PM
Date: Wednesday, January 26, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

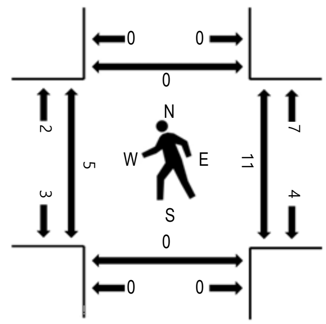
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	East Menke St Eastbound U-Turn	Left	Thru	Right	West Menke St Westbound U-Turn	Left	Thru	Right	N Main St Northbound U-Turn	Left	Thru	Right	N Main St Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	3	0	5	0	3	0	3	0	2	357	9	0	14	263	5	664	2,620	1	1	0	0
4:15 PM	0	0	0	1	0	3	1	4	0	3	405	7	0	6	265	1	696	2,603	2	3	0	0
4:30 PM	0	3	0	2	0	2	0	3	0	3	337	5	0	6	266	4	631	2,566	0	4	0	0
4:45 PM	0	2	1	0	0	1	0	3	0	3	345	1	0	1	269	3	629	2,516	2	3	0	0
5:00 PM	0	3	0	2	0	1	0	7	0	1	380	6	0	2	239	6	647	2,402	1	3	0	0
5:15 PM	0	8	0	4	0	0	0	3	0	1	369	3	0	7	262	2	659		2	2	0	0
5:30 PM	0	3	0	1	0	0	0	5	0	3	323	3	0	4	236	3	581		1	2	0	0
5:45 PM	0	1	1	3	0	0	0	0	1	2	267	6	0	2	223	9	515		6	3	0	0

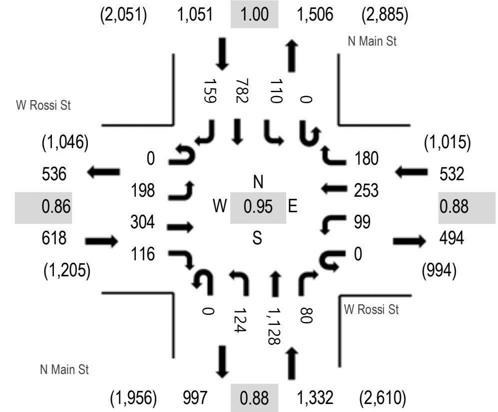
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	4
Lights	0	8	1	7	0	9	1	13	0	10	1,433	22	0	26	1,045	13	2,588
Mediums	0	0	0	1	0	0	0	0	0	1	10	0	0	0	16	0	28
Total	0	8	1	8	0	9	1	13	0	11	1,444	22	0	27	1,063	13	2,620

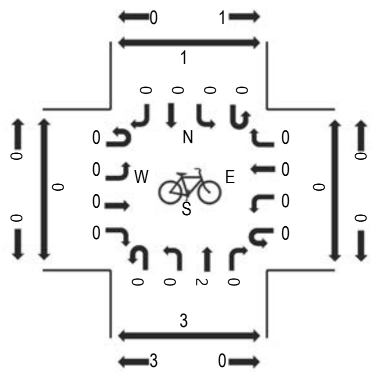
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 N Main St & W Rossi St PM
Date: Wednesday, January 26, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

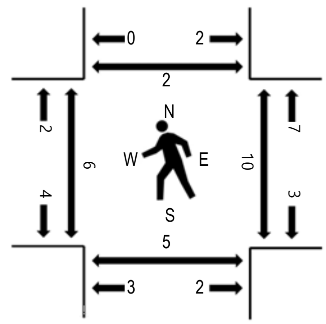
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	W Rossi St Eastbound U-Turn	Left	Thru	Right	W Rossi St Westbound U-Turn	Left	Thru	Right	N Main St Northbound U-Turn	Left	Thru	Right	N Main St Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	46	70	37	0	19	58	61	0	39	299	24	0	32	202	37	924	3,524	1	1	2	1
4:15 PM	0	58	77	26	0	23	63	70	0	26	277	11	0	26	192	51	900	3,533	3	4	3	0
4:30 PM	0	50	71	22	0	22	66	31	0	33	261	15	0	30	202	38	841	3,500	0	2	0	0
4:45 PM	0	35	75	25	0	27	70	36	0	29	269	23	0	24	192	54	859	3,461	2	2	2	0
5:00 PM	0	55	81	43	0	27	54	43	0	36	321	31	0	30	196	16	933	3,357	1	2	0	2
5:15 PM	0	44	72	25	0	32	54	42	0	33	271	28	0	40	174	52	867		3	3	6	1
5:30 PM	0	43	76	23	0	21	56	29	0	34	261	22	0	19	200	18	802		1	2	2	1
5:45 PM	0	50	75	26	0	17	71	23	0	30	210	27	0	15	183	28	755		4	2	10	0

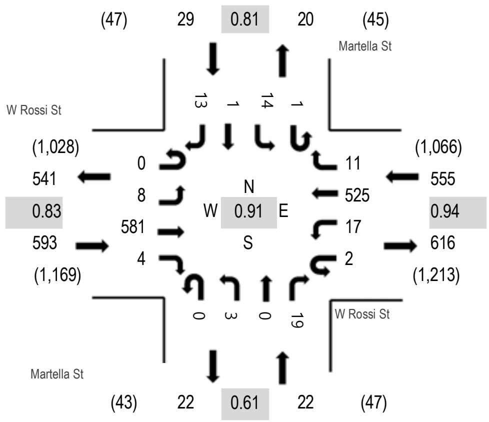
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	4
Lights	0	197	302	115	0	98	251	178	0	121	1,117	80	0	107	776	153	3,495
Mediums	0	1	2	1	0	0	2	2	0	2	10	0	0	2	6	6	34
Total	0	198	304	116	0	99	253	180	0	124	1,128	80	0	110	782	159	3,533

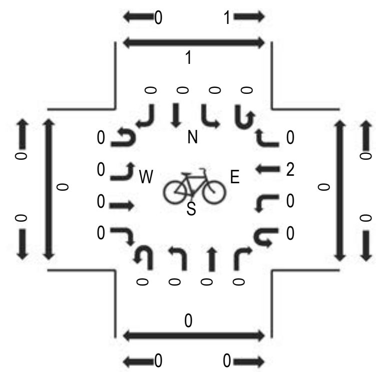
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 Martella St & W Rossi St PM
Date: Wednesday, January 26, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

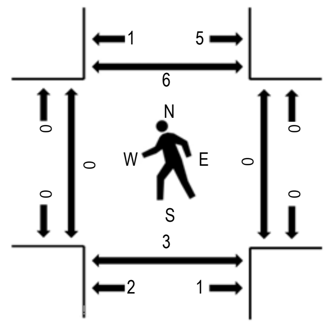
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	W Rossi St Eastbound U-Turn	Left	Thru	Right	W Rossi St Westbound U-Turn	Left	Thru	Right	Martella St Northbound U-Turn	Left	Thru	Right	Martella St Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	1	158	0	0	9	129	7	0	0	0	6	0	3	0	3	316	1,186	0	0	1	0
4:15 PM	0	3	153	1	2	2	125	2	0	2	0	7	0	1	0	2	300	1,199	0	0	2	0
4:30 PM	0	2	137	1	0	9	138	4	0	1	0	3	0	4	1	3	303	1,154	0	0	1	0
4:45 PM	0	2	114	0	0	2	137	2	0	0	0	1	1	5	0	3	267	1,126	0	0	0	1
5:00 PM	0	1	177	2	0	4	125	3	0	0	0	8	0	4	0	5	329	1,143	0	0	0	5
5:15 PM	0	0	123	0	0	3	119	3	0	1	0	4	0	2	0	0	255		0	0	0	1
5:30 PM	0	2	135	0	0	6	115	1	0	0	0	11	0	2	0	3	275		0	0	1	0
5:45 PM	0	9	148	0	0	2	115	2	0	0	0	3	0	2	1	2	284		0	1	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Lights	0	8	578	3	2	15	516	11	0	3	0	19	1	14	1	11	1,182
Mediums	0	0	3	1	0	1	9	0	0	0	0	0	0	0	0	2	16
Total	0	8	581	4	2	17	525	11	0	3	0	19	1	14	1	13	1,199

Appendix C

Level of Service Calculations

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1	6	0	0	6	7	646	9	8	1284	8
Future Vol, veh/h	8	1	6	0	0	6	7	646	9	8	1284	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	1	7	0	0	7	8	702	10	9	1396	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1786	2147	703	1440	2146	356	1405	0	0	712	0	0
Stage 1	1419	1419	-	723	723	-	-	-	-	-	-	-
Stage 2	367	728	-	717	1423	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	51	48	380	93	48	640	482	-	-	884	-	-
Stage 1	144	201	-	384	429	-	-	-	-	-	-	-
Stage 2	625	427	-	387	200	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	49	47	380	88	47	640	482	-	-	884	-	-
Mov Cap-2 Maneuver	49	47	-	88	47	-	-	-	-	-	-	-
Stage 1	142	199	-	377	422	-	-	-	-	-	-	-
Stage 2	608	420	-	374	198	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65.9	10.7	0.1	0.1
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	482	-	-	75	640	884	-	-
HCM Lane V/C Ratio	0.016	-	-	0.217	0.01	0.01	-	-
HCM Control Delay (s)	12.6	-	-	65.9	10.7	9.1	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	292	138	121	292	66	70	474	42	58	1026	206
Future Volume (veh/h)	123	292	138	121	292	66	70	474	42	58	1026	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	134	317	150	132	317	0	76	515	46	63	1115	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	379	322	165	438	372	98	753	337	456	1466	656
Arrive On Green	0.06	0.20	0.20	0.09	0.23	0.00	0.06	0.21	0.21	0.26	0.41	0.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	134	317	150	132	317	0	76	515	46	63	1115	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	2.9	12.6	6.4	5.6	12.1	0.0	3.3	10.3	1.3	2.1	20.7	0.0
Cycle Q Clear(g_c), s	2.9	12.6	6.4	5.6	12.1	0.0	3.3	10.3	1.3	2.1	20.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	379	322	165	438	372	98	753	337	456	1466	656
V/C Ratio(X)	0.63	0.84	0.47	0.80	0.72	0.00	0.77	0.68	0.14	0.14	0.76	0.00
Avail Cap(c_a), veh/h	335	472	401	173	472	401	265	2368	1059	456	2184	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	29.4	27.0	34.2	27.2	0.0	35.9	27.9	13.2	22.0	19.3	0.0
Incr Delay (d2), s/veh	3.1	10.4	1.0	22.1	5.0	0.0	12.0	1.1	0.2	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.5	2.9	3.8	6.8	0.0	1.9	5.1	0.8	1.0	10.2	0.0
LnGrp Delay(d),s/veh	38.4	39.8	28.0	56.3	32.2	0.0	47.8	29.0	13.4	22.2	20.2	0.0
LnGrp LOS	D	D	C	E	C		D	C	B	C	C	
Approach Vol, veh/h		601			449			637			1178	
Approach Delay, s/veh		36.6			39.3			30.1			20.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	20.9	11.7	20.2	8.8	36.4	9.2	22.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	51.5	7.5	19.5	11.5	47.5	7.5	19.5
Max Q Clear Time (g_c+I1), s	4.1	12.3	7.6	14.6	5.3	22.7	4.9	14.1
Green Ext Time (p_c), s	0.0	4.1	0.0	1.1	0.1	9.2	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.9
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	538	7	11	535	9	1	0	3	12	1	13
Future Vol, veh/h	9	538	7	11	535	9	1	0	3	12	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	585	8	12	582	10	1	0	3	13	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	592	0	0	593	0	0	1228	1225	589	1222	1224	587
Stage 1	-	-	-	-	-	-	609	609	-	611	611	-
Stage 2	-	-	-	-	-	-	619	616	-	611	613	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	984	-	-	983	-	-	155	179	508	156	179	510
Stage 1	-	-	-	-	-	-	482	485	-	481	484	-
Stage 2	-	-	-	-	-	-	476	482	-	481	483	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	984	-	-	983	-	-	147	175	508	152	175	510
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	175	-	152	175	-
Stage 1	-	-	-	-	-	-	477	480	-	476	478	-
Stage 2	-	-	-	-	-	-	456	476	-	473	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	16.6	22.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	315	984	-	-	983	-	-	236
HCM Lane V/C Ratio	0.014	0.01	-	-	0.012	-	-	0.12
HCM Control Delay (s)	16.6	8.7	-	-	8.7	-	-	22.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1	8	9	1	13	11	1444	22	27	1063	13
Future Vol, veh/h	8	1	8	9	1	13	11	1444	22	27	1063	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	1	9	10	1	14	12	1570	24	29	1155	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2030	2838	585	2242	2833	797	1169	0	0	1594	0	0
Stage 1	1220	1220	-	1606	1606	-	-	-	-	-	-	-
Stage 2	810	1618	-	636	1227	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	34	17	454	23	17	329	593	-	-	407	-	-
Stage 1	191	251	-	110	163	-	-	-	-	-	-	-
Stage 2	340	161	-	433	249	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	29	15	454	20	15	329	593	-	-	407	-	-
Mov Cap-2 Maneuver	29	15	-	20	15	-	-	-	-	-	-	-
Stage 1	187	233	-	108	160	-	-	-	-	-	-	-
Stage 2	317	158	-	393	231	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	124.5	183.3	0.1	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	593	-	-	47	41	407	-	-
HCM Lane V/C Ratio	0.02	-	-	0.393	0.61	0.072	-	-
HCM Control Delay (s)	11.2	-	-	124.5	183.3	14.5	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.4	2.2	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	304	116	99	253	180	124	1128	80	110	782	159
Future Volume (veh/h)	198	304	116	99	253	180	124	1128	80	110	782	159
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	215	330	126	108	275	0	135	1226	87	120	850	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	378	321	136	365	310	168	1553	695	151	1519	680
Arrive On Green	0.08	0.20	0.20	0.08	0.20	0.00	0.09	0.44	0.44	0.08	0.43	0.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	215	330	126	108	275	0	135	1226	87	120	850	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	15.7	6.3	5.5	12.8	0.0	6.8	27.3	3.0	6.1	16.5	0.0
Cycle Q Clear(g_c), s	5.6	15.7	6.3	5.5	12.8	0.0	6.8	27.3	3.0	6.1	16.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	378	321	136	365	310	168	1553	695	151	1519	680
V/C Ratio(X)	0.74	0.87	0.39	0.79	0.75	0.00	0.80	0.79	0.13	0.80	0.56	0.00
Avail Cap(c_a), veh/h	357	437	371	184	437	371	261	2143	959	223	2066	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.0	35.4	31.6	41.6	34.8	0.0	40.7	22.1	15.3	41.2	19.7	0.0
Incr Delay (d2), s/veh	6.5	15.8	0.8	15.2	6.0	0.0	9.6	1.4	0.1	11.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	9.7	2.8	3.3	7.2	0.0	3.8	13.6	1.3	3.4	8.1	0.0
LnGrp Delay(d),s/veh	47.5	51.2	32.4	56.8	40.8	0.0	50.3	23.5	15.3	52.7	20.0	0.0
LnGrp LOS	D	D	C	E	D		D	C	B	D	B	
Approach Vol, veh/h		671			383			1448			970	
Approach Delay, s/veh		46.5			45.3			25.5			24.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	44.7	11.5	23.1	13.2	43.8	12.2	22.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	55.5	9.5	21.5	13.5	53.5	9.5	21.5
Max Q Clear Time (g_c+I1), s	8.1	29.3	7.5	17.7	8.8	18.5	7.6	14.8
Green Ext Time (p_c), s	0.1	11.0	0.0	0.9	0.1	7.1	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	581	4	19	525	11	3	0	19	15	1	13
Future Vol, veh/h	8	581	4	19	525	11	3	0	19	15	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	632	4	21	571	12	3	0	21	16	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	583	0	0	636	0	0	1279	1277	634	1282	1273	577
Stage 1	-	-	-	-	-	-	652	652	-	619	619	-
Stage 2	-	-	-	-	-	-	627	625	-	663	654	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	991	-	-	947	-	-	143	166	479	142	167	516
Stage 1	-	-	-	-	-	-	457	464	-	476	480	-
Stage 2	-	-	-	-	-	-	471	477	-	450	463	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	947	-	-	135	161	479	133	162	516
Mov Cap-2 Maneuver	-	-	-	-	-	-	135	161	-	133	162	-
Stage 1	-	-	-	-	-	-	453	460	-	472	469	-
Stage 2	-	-	-	-	-	-	447	467	-	427	459	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	15.9	26.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	355	991	-	-	947	-	-	201
HCM Lane V/C Ratio	0.067	0.009	-	-	0.022	-	-	0.157
HCM Control Delay (s)	15.9	8.7	-	-	8.9	-	-	26.2
HCM Lane LOS	C	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.5

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	1	8	0	0	6	7	651	9	8	1284	11
Future Vol, veh/h	13	1	8	0	0	6	7	651	9	8	1284	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1	9	0	0	7	8	708	10	9	1396	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1790	2154	704	1446	2155	359	1408	0	0	718	0	0
Stage 1	1420	1420	-	729	729	-	-	-	-	-	-	-
Stage 2	370	734	-	717	1426	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	51	47	379	92	47	638	481	-	-	879	-	-
Stage 1	143	201	-	380	426	-	-	-	-	-	-	-
Stage 2	622	424	-	387	199	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	49	46	379	86	46	638	481	-	-	879	-	-
Mov Cap-2 Maneuver	49	46	-	86	46	-	-	-	-	-	-	-
Stage 1	141	199	-	374	419	-	-	-	-	-	-	-
Stage 2	605	417	-	372	197	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	79.5	10.7	0.1	0.1
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	481	-	-	71	638	879	-	-
HCM Lane V/C Ratio	0.016	-	-	0.337	0.01	0.01	-	-
HCM Control Delay (s)	12.6	-	-	79.5	10.7	9.1	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	293	140	121	292	66	71	474	42	58	1028	206
Future Volume (veh/h)	128	293	140	121	292	66	71	474	42	58	1028	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	139	318	152	132	317	0	77	515	46	63	1117	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	379	322	165	435	370	100	752	336	458	1466	656
Arrive On Green	0.06	0.20	0.20	0.09	0.23	0.00	0.06	0.21	0.21	0.26	0.41	0.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	139	318	152	132	317	0	77	515	46	63	1117	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	3.0	12.7	6.5	5.6	12.2	0.0	3.3	10.4	1.3	2.1	20.9	0.0
Cycle Q Clear(g_c), s	3.0	12.7	6.5	5.6	12.2	0.0	3.3	10.4	1.3	2.1	20.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	379	322	165	435	370	100	752	336	458	1466	656
V/C Ratio(X)	0.64	0.84	0.47	0.80	0.73	0.00	0.77	0.68	0.14	0.14	0.76	0.00
Avail Cap(c_a), veh/h	334	470	399	172	470	399	264	2357	1055	458	2174	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.4	29.6	27.1	34.4	27.4	0.0	36.0	28.1	13.3	22.1	19.4	0.0
Incr Delay (d2), s/veh	3.1	10.6	1.1	22.2	5.2	0.0	11.8	1.1	0.2	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.7	2.9	3.8	6.9	0.0	2.0	5.2	0.8	1.0	10.3	0.0
LnGrp Delay(d),s/veh	38.5	40.2	28.2	56.6	32.6	0.0	47.8	29.2	13.5	22.2	20.3	0.0
LnGrp LOS	D	D	C	E	C		D	C	B	C	C	
Approach Vol, veh/h		609			449			638			1180	
Approach Delay, s/veh		36.8			39.7			30.3			20.4	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.5	20.9	11.7	20.2	8.8	36.5	9.4	22.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	51.5	7.5	19.5	11.5	47.5	7.5	19.5
Max Q Clear Time (g_c+I1), s	4.1	12.4	7.6	14.7	5.3	22.9	5.0	14.2
Green Ext Time (p_c), s	0.0	4.1	0.0	1.1	0.1	9.2	0.1	0.8

Intersection Summary			
HCM 2010 Ctrl Delay			29.1
HCM 2010 LOS			C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	538	7	11	535	11	1	0	3	20	1	21
Future Vol, veh/h	11	538	7	11	535	11	1	0	3	20	1	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	585	8	12	582	12	1	0	3	22	1	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	594	0	0	593	0	0	1237	1231	589	1227	1229	588
Stage 1	-	-	-	-	-	-	613	613	-	612	612	-
Stage 2	-	-	-	-	-	-	624	618	-	615	617	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	982	-	-	983	-	-	153	177	508	155	178	509
Stage 1	-	-	-	-	-	-	480	483	-	480	484	-
Stage 2	-	-	-	-	-	-	473	481	-	479	481	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	982	-	-	983	-	-	143	173	508	151	174	509
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	173	-	151	174	-
Stage 1	-	-	-	-	-	-	474	477	-	474	478	-
Stage 2	-	-	-	-	-	-	445	475	-	470	475	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	16.8	24.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	310	982	-	-	983	-	-	234
HCM Lane V/C Ratio	0.014	0.012	-	-	0.012	-	-	0.195
HCM Control Delay (s)	16.8	8.7	-	-	8.7	-	-	24.1
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	9	9	1	13	11	1446	22	27	1063	21
Future Vol, veh/h	10	1	9	9	1	13	11	1446	22	27	1063	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1	10	10	1	14	12	1572	24	29	1155	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2036	2845	589	2244	2844	798	1178	0	0	1596	0	0
Stage 1	1225	1225	-	1608	1608	-	-	-	-	-	-	-
Stage 2	811	1620	-	636	1236	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	33	17	452	23	17	329	589	-	-	407	-	-
Stage 1	190	249	-	109	162	-	-	-	-	-	-	-
Stage 2	339	160	-	433	246	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	28	15	452	20	15	329	589	-	-	407	-	-
Mov Cap-2 Maneuver	28	15	-	20	15	-	-	-	-	-	-	-
Stage 1	186	231	-	107	159	-	-	-	-	-	-	-
Stage 2	316	157	-	392	229	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	144.5	183.3	0.1	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	589	-	-	45	41	407	-	-
HCM Lane V/C Ratio	0.02	-	-	0.483	0.61	0.072	-	-
HCM Control Delay (s)	11.2	-	-	144.5	183.3	14.5	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	2.2	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	305	117	99	254	180	128	1128	80	110	783	159
Future Volume (veh/h)	200	305	117	99	254	180	128	1128	80	110	783	159
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	217	332	127	108	276	0	139	1226	87	120	851	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	379	323	136	365	311	172	1552	694	151	1509	675
Arrive On Green	0.08	0.20	0.20	0.08	0.20	0.00	0.10	0.44	0.44	0.08	0.43	0.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	217	332	127	108	276	0	139	1226	87	120	851	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.7	15.9	6.4	5.5	12.8	0.0	7.1	27.3	3.0	6.1	16.7	0.0
Cycle Q Clear(g_c), s	5.7	15.9	6.4	5.5	12.8	0.0	7.1	27.3	3.0	6.1	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	379	323	136	365	311	172	1552	694	151	1509	675
V/C Ratio(X)	0.75	0.87	0.39	0.79	0.76	0.00	0.81	0.79	0.13	0.80	0.56	0.00
Avail Cap(c_a), veh/h	356	436	371	183	436	371	261	2138	957	222	2061	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	35.4	31.7	41.7	34.8	0.0	40.6	22.1	15.3	41.3	19.9	0.0
Incr Delay (d2), s/veh	6.7	16.1	0.8	15.3	6.1	0.0	10.5	1.4	0.1	11.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	9.8	2.9	3.3	7.2	0.0	3.9	13.6	1.3	3.5	8.2	0.0
LnGrp Delay(d),s/veh	47.8	51.6	32.4	57.0	41.0	0.0	51.1	23.6	15.4	52.9	20.2	0.0
LnGrp LOS	D	D	C	E	D		D	C	B	D	C	
Approach Vol, veh/h		676			384			1452			971	
Approach Delay, s/veh		46.8			45.5			25.7			24.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	44.8	11.6	23.2	13.4	43.7	12.3	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	55.5	9.5	21.5	13.5	53.5	9.5	21.5
Max Q Clear Time (g_c+I1), s	8.1	29.3	7.5	17.9	9.1	18.7	7.7	14.8
Green Ext Time (p_c), s	0.1	11.0	0.0	0.8	0.1	7.1	0.1	0.8

Intersection Summary		
HCM 2010 Ctrl Delay		31.6
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	581	4	19	525	16	3	0	19	19	1	17
Future Vol, veh/h	15	581	4	19	525	16	3	0	19	19	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	632	4	21	571	17	3	0	21	21	1	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	588	0	0	636	0	0	1297	1296	634	1299	1290	580
Stage 1	-	-	-	-	-	-	666	666	-	622	622	-
Stage 2	-	-	-	-	-	-	631	630	-	677	668	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	987	-	-	947	-	-	139	162	479	138	163	514
Stage 1	-	-	-	-	-	-	449	457	-	474	479	-
Stage 2	-	-	-	-	-	-	469	475	-	443	456	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	987	-	-	947	-	-	129	156	479	128	157	514
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	156	-	128	157	-
Stage 1	-	-	-	-	-	-	442	450	-	466	468	-
Stage 2	-	-	-	-	-	-	441	465	-	417	449	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	16	27.9
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	350	987	-	-	947	-	-	197
HCM Lane V/C Ratio	0.068	0.017	-	-	0.022	-	-	0.204
HCM Control Delay (s)	16	8.7	-	-	8.9	-	-	27.9
HCM Lane LOS	C	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	-	0.7