City of Morro Bay

Morro Creek Multi-Use Trail and Bridge Project

Initial Study-Mitigated Negative Declaration

October 2013

rincon

Environmental Scientists Planners Engineers

MORRO CREEK MULTI-USE TRAIL AND BRIDGE PROJECT

Initial Study – Mitigated Negative Declaration

Prepared by:

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October 2013

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1.0 INTRODUCTION

1.1 LEGAL AUTHORITY

This Initial Study-Mitigated Negative Declaration (IS-MND) has been prepared in accordance with the *CEQA Guidelines* and relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended.

Initial Study. Section 15063(c) of the *CEQA Guidelines* defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. The purposes of an Initial Study are:

> *(1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Mitigated Negative Declaration;*
> *(2) To enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR; and*
> *(3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment based on the record as a whole, that the environmental effects of a project have been adequately mitigated.*

1.2 IMPACT ANALYSIS AND SIGNIFICANCE CLASSIFICATION

The following sections of this IS-MND provide discussions of the possible environmental effects of the proposed project for specific issue areas that have been identified in the CEQA Initial Study Checklist. For each issue area, potential effects are isolated.

A "significant effect" is defined by Section 15382 of the *CEQA Guidelines* as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." According to the *CEQA Guidelines*, "an economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

2.0 PROJECT DESCRIPTION

2.1 PROJECT TITLE

Morro Creek Multi-Use Trail and Bridge Project

2.2 LEAD AGENCY and CONTACT PERSON

City of Morro Bay Public Services Department
Rob Livick, Public Services Director
955 Shasta Avenue
Morro Bay, CA 93442

2.3 PROJECT APPLICANT

City of Morro Bay Public Services Department
955 Shasta Avenue
Morro Bay, CA 93442

2.4 PROJECT LOCATION

The project is located at 1500 Embarcadero within Morro Bay and along the northern portion of the Morro Bay Embarcadero, adjacent to the existing Morro Bay Power Plant (MBPP). The City of Morro Bay is located along Highway 1 in central San Luis Obispo County, approximately 15 miles west of the City of San Luis Obispo. The City of Morro Bay has a mix of residential, commercial, and marine commercial and industrial uses. In addition, the City has several notable coastal resource areas including sandy beaches, coastal bluffs, an estuary, sand spit and the prominent Morro Rock. As of 2013, Morro Bay has an estimated population of 10,317 (California Department of Finance, 2013). Figure 2-1 shows the regional lcoation of the proposed project. Figure 2-2 shows the project site in its local context.

The project site is designated by the City of Morro Bay General Plan as Open-Space, Commercial/ Recreational Fishing and Planned Development (QA-2/CF/ PD). The Morro Bay Waterfront Plan identifies the project site as "Area 1: Morro Rock/Coleman Park" (Morro Bay Waterfront Plan, adopted 1996). Portions of the project site are located on property owned by Dynegy, but with an easement for public access.

2.5 PROJECT BACKGROUND

Morro Bay's waterfront area includes a working commercial fishing waterfront with visitor serving uses, recreational uses, and natural resource preservation. The waterfront provides views of Morro Rock and the Morro Bay sandspit, and serves both residents and tourists.

The Waterfront Master Plan adopted in 1996 envisaged a number of projects to enhance access and enjoyment of Morro Bay's waterfront. In 2008 the City of Morro Bay completed one of these projects: the Morro Bay Harborwalk. This project consisted of a continuous off-roadway bike

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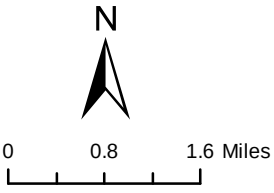

Regional Location

Figure 2-1

Imagery provided by ESRI and its licensors © 2013.

Project Site Location

Figure 2-2

path and separate pedestrian boardwalk constructed along the shoreline with a terminus at the beach access located at the north end of the Morro Rock parking area. This development required the realignment of Coleman Drive, a two lane road that leads to the public parking area at Morro Rock, and dune scrub habitat restoration related to the realignment. There is currently a gap in the existing pedestrian and bicycle trail network between Morro Rock and downtown Morro Bay from the north. An extension of this project to the north, connecting the two sections of the Embarcadero separated by Morro Creek with a multi-use trail and bridge, is the subject of this proposed project.

2.6 PROJECT OBJECTIVES

The objectives of the proposed project are as follows:

- *Improve the local trail network to benefit the youth, residents and visitors to the Morro Bay Waterfront;*
- *Develop new educational interpretive facilities for pedestrians and cyclists in Morro Bay;*
- *Create opportunities for additional dune restoration adjacent to pedestrian and bicycle facilities;*
- *Facilitate safe bicycle and pedestrian crossing of Morro Creek;*
- *Create and additional route for emergency vehicle access and disaster evacuation; and*
- *Assist SLOCOG and the City of Morro Bay complete the local priority connection of the North Coast Scenic Byway and California Coastal Trail.*

2.7 PROJECT DESCRIPTION

The proposed project would extend the existing Morro Bay Harborwalk with a pedestrian boardwalk and separated Class I bike path to provide a connection between the Morro Bay waterfront and north Morro Bay. A 12-foot wide paved separated Class I bike path would extend from the Morro Bay Power Plant entry way to the intersection of Embarcadero Road and Coleman Drive. The pedestrian boardwalk and separated Class I bike path would extend from the existing Morro Bay Harborwalk, south of the parking area at Embarcadero Road and Coleman Drive, and continue northward adjacent to the unpaved portion of Embarcadero Road, to Morro Creek. Along this segment, the boardwalk improvements would include an 8-foot wide pedestrian boardwalk, a 2-foot bioswale, a 12-foot wide Class I bicycle path, and a 2-foot shoulder. Bicycle and surrey parking would be located toward the end of the northward pathway extension along the south side of Morro Creek. The total extension of pedestrian boardwalk and separated Class I bike path for the proposed project would be approximately 1,500 and 2,200 linear feet, respectively. An approximately 130-foot long, 13-foot wide, clear span, pedestrian and bicycle bridge would extend the pedestrian boardwalk and bike path across Morro Creek to connect to north Morro Bay on Atascadero Road (State Route 41). The clear-span bridge would be pre-fabricated and pre-engineered and would not include any support structures within the creek bed. For design specifications and visual simulations of the proposed improvements, including the bridge, refer to Appendix A. The bridge would be designed to bear sufficient load and provide adequate clear width to handle emergency vehicles, consistent with Caltrans requirements. The northern bridge abutment will require excavation within the top of Morro Creek bank. Pile driving would not be required.

The project will require a Conditional Use Permit (CUP Number UP0-371) for construction of a bridge project within a stream corridor.

Project construction would be staged at a disturbed area adjacent to the Dynegy parking lot, east of Embarcadero Road. The area is currently used for overflow parking.
The project would also include two educational interpretive facilities: one located along the pedestrian path overlooking the dune scrub habitat, Morro Rock, and beach vistas; and a second located at the terminus of the northward pedestrian path along the south side of Morro Creek overlooking Morro Creek and the beach. The interpretive materials would consist of stone seat walls and interpretive panels, and would be consistent with the Route 1, SLO North Coast Scenic Byway, interpretive plan and implementation strategies (NSBP grant 2006). In addition, Embarcadero Road at Coleman Drive would be upgraded to paved roadway for approximately 100 feet to allow for the installation of a new crosswalk.

The project would connect with existing unpaved parking areas along Embarcadero Road on the north and south sides of Morro Creek, facilitating the use of those parking areas for users of the proposed trail; however, the project does not include development of any new parking areas.

To meet water quality and habitat protection goals for the City of Morro Bay and the Morro Bay Estuary, new waterfront facilities would be designed to reduce and/or eliminate surface runoff and pollution. The project would utilize low impact development (LID) to minimize potential impacts to hydrology and water quality and allow for percolation alongside the expanded bicycle and pedestrian facilities. The small amount of surface area of the paved pathways, and available permeable ground surface adjacent to the multi-use pathways, would maintain the pre-project hydrological runoff patterns of the project site. The project would include Americans with Disabilities Act (ADA) approved access throughout the project features. Non-irrigated native and drought-tolerant shrubs and groundcover landscaping would be provided adjacent to the multi-use bicycle and pedestrian pathways.

Construction of the proposed project would require grading and excavation. Based on the design of the project, excavated material would be balanced on site and importation of fill would not be required. No underground utilities would be required.

Construction is anticipated to begin in August 2014 and is expected to take approximately 6 months to complete.

2.8 RESPONSIBLE/TRUSTEE AGENCIES

Section 15381 of the State CEQA Guidelines defines a Responsible Agency as a "public agency, which proposes to carry out or approve a project for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration." For the purposes of CEQA, the term Responsible Agency" includes all public agencies other than the Lead Agency, which have a discretionary approval power over the project. Trustee Agencies are listed in the State CEQA Guidelines Section 15386 and defined as a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of California.

The following agencies could be expected to use this document for future permits or approvals for the project:

- Central Coast Regional Water Quality Control Board - General construction National Pollution Discharge Elimination System (NPDES);
- U.S. Fish and Wildlife Service – Biological Opinion;
- California Department of Fish & Wildlife – Streambed Alteration Agreement pursuant to Section 1600 et seq. of the California Fish and Game Code; and
- California Coastal Commission – Coastal Development Permit.

2.9 ENVIRONMENTAL FACTORS AFFECTED

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

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

2.10 DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

City of Morro Bay

10-25-2013

Date

3.0 ENVIRONMENTAL CHECKLIST

I. AESTHETICS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting

The City of Morro Bay General Plan and Local Coastal Plan, Visual Resources and Scenic Highways Element, describes Morro Bay as an area with "spectacular visual qualities." The bay itself is an estuary comprised of a confluence of creeks, wetlands, salt marshes, mudflats, sand dunes, and open water that attracts a variety of wildlife. The aesthetic and visual resources of the bay include Morro Rock, which stands over 500 feet high and dominates the entrance to Morro Bay. Morro Bay also has an abundance of wildlife including a variety of birds that contribute to the visual resources of the area.

The City of Morro Bay has established Scenic View Areas as places of important visual and aesthetic quality as contained within the Visual Resources Element of the General Plan. Visual resources near the project area identified as "Significant Scenic Resources" by the Visual Resource Element include the following:

- Morro Rock. Located 0.3 miles west of the project site, Morro Rock is the most prominent visual feature of the area as it can be seen from almost any location within the City, particularly from the project site;
- Morro Rock City Beach. Located immediately north of the project site, Morro Rock City Beach is a sandy beach that spans from Morro Rock to Cayucos and provides unobstructed views of the coastline;
- Morro Bay Sand Spit. Located to the south of the project site, Morro Bay sand spit is an ecologically intact, windblown dune peninsula visible from the project site; and

- Harbor and Navigable Ways. Located to the west and south of the project site, views overlooking the harbor are regarded for their natural beauty and include the mudflats, wildlife and low-growing vegetation, the sand spit and Morro Rock.

The portion of Highway 1 that travels through Morro Bay is designated by the California Department of Transportation as a scenic highway. However, the project site is approximately 0.4 miles from Highway 1 and is not visible from the highway due to existing structures and vegetation as well as topography.

a) The proposed project includes a pedestrian boardwalk and separate bike path with a span over Morro Creek, bicycle parking, educational interpretive facilities, and a paved crosswalk at the intersection of Coleman Drive and Embarcadero Road. The proposed clear span bridge design would have a maximum height of four feet, six inches, and would be designed in compliance the Embarcadero design criteria outlined in the Morro Bay General Plan Visual Resources Element program VR-2.1. This program states, "Permitted development shall be sited and designed to protect views to and along the coast and designated scenic areas and shall be visually compatible with the surrounding areas." The proposed facilities would be low-profile and would provide additional opportunities to view the scenic resources of the area by providing a multi-use recreational path, interpretive education areas, and bicycle parking area.

The proposed facilities would be low-profile and would not interfere with the existing views of Morro Rock, Morro Rock City Beach, the Morro Bay sand spit, or the harbor and navigable ways. Refer to the visual simulations provided in Appendix A. Rather, the proposed facilities would accommodate additional visitors and provide additional opportunities to view the scenic resources of the area by providing a multi-use recreational path, interpretive education areas, and bicycle parking area. **Therefore, no impacts to scenic vistas would result.**

b) The portion of Highway 1 that travels through the City is a State-designated scenic highway. However, the project would be located approximately 0.4 miles from Highway 1, and would not visible due to existing structures, vegetation, and topography. Morro Rock is located 0.3 miles west of the project site. The project would not damage Morro Rock, or disturb views of Morro Rock. There are no significant historic buildings located on or adjacent to the project site. The City of Morro Bay does not contain any historical resources that are identified in the National or State Registers, or that are designated as State Landmarks or Points of Historical Interest (State Office of Historic Preservation, 2013/ National Register of Historic Places, 2013), and there are no existing buildings or structures located on the project site. **Therefore, no impacts to scenic resources would result.**

c) Currently, the project site is undeveloped and primarily comprised of informal dirt/gravel roadways and parking areas, as well as coastal vegetation. The proposed development would be an extension of similar existing adjacent facilities, which would include a multi-use recreational path, low profile pedestrian and bicycle bridge across Morro Creek, bicycle parking area and two educational interpretive facilities, thereby resulting in minimal changes to the character of the area. As described above, the proposed clear span bridge design would be low-profile, and would be designed in compliance the Embarcadero design criteria outlined in the Morro Bay General Plan Visual Resources Element. The proposed facilities would provide additional opportunities to view the scenic resources of the area by providing a multi-use

recreational path, interpretive education areas, and bicycle parking area. **Therefore, potential impacts to the existing visual character of the area and quality of the site would be less than significant.**

d) The project does not propose the installation of any lighting fixtures. **Therefore, potential light and glare impacts would be less than significant**.

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

II. AGRICULTURE AND FORESTRY RESOURCES: Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

II. AGRICULTURE AND FORESTRY RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Setting

The project site does not have existing agricultural operations or forest resources. The project site is not zoned for agricultural use or under a Williamson Act Contract.

a-c) The project site is designated by the City of Morro Bay General Plan as Open-Space, Commercial/ Recreational Fishing and Planned Development (QA-2/CF/ PD), and is comprised primarily of ruderal/developed land, coastal dune scrub, and ice plant. The project site is not used for agricultural operations and is not under a Williamson Act Contract (State of California Department of Conservation, 2010). **As such, no impacts to agricultural resources would result.**

d-e) There is no forested land present on the project site (U.S. Fish and Wildlife Service National Wetlands Inventory, 2013). The project will not result in the loss of forest land, or the conversion of forest land to non-forest land. The project site is currently comprised primarily of ruderal/developed land, coastal dune scrub, and ice plant. **Therefore no impacts to forested land or farmland would result.**

Mitigation

No mitigation measures are required.

Findings

No impacts would result.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Setting

Airflow plays an important role in the movement and dispersion of air pollutants in the San Luis Obispo region. The speed and direction of local winds are controlled by: 1) the location and strength of the Pacific High pressure system and other global patterns, 2) topographical factors, and 3) circulation patterns resulting from temperature differences between the land and sea. The coolest months are December and January with an average monthly low temperature of 42 F; the warmest month is October with an average monthly high temperature of 69 F.

The City of Morro Bay falls within the jurisdiction of the San Luis Obispo Air Pollution Control District (SLOAPCD). SLOAPCD is located within the South Central Coast Air Basin. SLOAPCD monitors air pollutant levels to assure that air quality standards 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 air basin is classified as being in "attainment" or as "non-attainment." SLOAPCD is in non-attainment for the 24-hour and annual state standards for particulate matter less than ten microns in diameter (PM_{10}) and the one-hour state standard for ozone (O_3), and the eight-hour state and federal standards for ozone (SLOAPCD, 2012).

The primary pollutants of concern in San Luis Obispo County are ozone and PM_{10}. The major local sources for PM_{10} are agricultural operations, vehicle dust, grading, and dust produced by high winds. Ozone is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between nitrogen oxides (NO_X) and reactive organic gases (ROGs) in the

presence of sunlight. Reductions in ozone concentrations are dependent on reducing the amount of these precursors. In San Luis Obispo County, the major sources of ROGs are motor vehicles, organic solvents, the petroleum industry, and pesticides. The major sources of NO_X are motor vehicles, public utility power generation, and fuel combustion by various industrial sources (SLOAPCD, 2001).

Sources of air pollutants associated with the existing marina include motor vehicles (marina tenants, service vehicles and State Park visitors), marine vessel engines and maintenance-related activities (coating solvents, sanding dust, etc.). Other sources nearby include commercial (fishing) vessel operations, marine vessel fueling operations, periodic harbor dredging operations, the wastewater treatment plant, and the Morro Bay Power Plant (MMPP).

Pollutant emissions quantification for the project was conducted using the California Emissions Estimator Model (CalEEMod) version 2013.2.1. For CalEEMod results, refer to Appendix B.

a) The regional 2001 Clean Air Plan (CAP) prepared by the San Luis Obispo Air Pollution Control District (SLOAPCD) addresses the attainment and maintenance of state and federal ambient air quality standards within the South Central Coast Air Basin (SCCAB). The consistency of a proposed project with the CAP is based on the following criteria:

1. Are the population projections used in the plan or project equal to or less than those used in the most recent CAP for the same area?
2. Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?
3. Have all applicable land use and transportation control measures and strategies from the CAP been included in the plan or project to the maximum extent feasible?

The proposed project would not increase the population of the area as the project does not propose or otherwise involve residential uses. In addition, the project would primarily serve existing residents, visitors, and other trail users, and would not generate a substantial number of new vehicle trips (refer to the discussion of this issue under *Traffic and Circulation*). Finally, none of the SLOAPCD's Transportation Control Measures (TCMs) or Land Use Planning Strategies are directly applicable to the proposed project; however, the proposed recreational path would be consistent with TCM T-3 (Bicycling and Bikeway Enhancements), the goal of which is to achieve a county-wide average bicycle mode share of 5% within seven years. Therefore, the project would be consistent with the 2001 CAP. **Impacts would be less than significant.**

b-c) *Construction Emissions*. The use of construction vehicles and equipment during project construction would generate temporary increases in air pollutant emissions. These impacts would primarily be associated with diesel equipment emissions and dust generated by on-site grading. The project would not import or export material. The SLOAPCD has adopted daily and quarterly construction emissions thresholds, which are contained in the District's publication, *CEQA Air Quality Handbook* (April 2012), shown in Table 3-1, below. Construction emissions were estimated based on an assumed maximum area of disturbance of 4.8 acres. Maximum daily and quarterly emissions are shown in Table 3-1 (see Appendix B for full CalEEMod results).

Table 3-1. Construction Emissions

Pollutant	ROG + NO_X (combined)	Diesel Particulate Matter (DPM)	Fugitive Particulate Matter (PM_{10})[1], Dust
Daily [2]	63.59 lbs	3.14 lbs	18.24 lbs
Quarterly [3]	0.18 tons	0.02 tons	0.04 tons
SLOAPCD Construction Emission Thresholds			
Daily [4]	137 lbs	7 lbs	-
Threshold Exceeded?	*NO*	*NO*	*n/a*
Quarterly Tier 1 [4]	2.5 tons	0.13 tons	2.5 tons
Threshold Exceeded?	*NO*	*NO*	*NO*
Quarterly Tier 2 [4]	6.3 tons	0.32 tons	-
Threshold Exceeded?	*NO*	*NO*	*n/a*

1. Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5 ton PM_{10} quarterly threshold.
2. Daily emissions based on winter CalEEMod results, which are considered by SLOAPCD to be worst-case.
3. Quarterly emissions calculated by dividing annual emissions by two (to account for anticipated six-month duration of project construction.
4. Daily and quarterly emission thresholds are based on the California Health & Safety Code and the CARB Carl Moyer Guidelines.

As shown in Table 3-1, construction emissions would be below both daily and quarterly thresholds set by SLOAPCD.

SLOAPCD requires that projects with grading areas that are greater than 4-acres or are within 1,000 feet of any sensitive receptor implement dust control measures to minimize nuisance impacts and to reduce fugitive dust emissions. Due to the project's proximity to the Morro Dunes R.V. Park, the project would be required to implement the applicable SLOAPCD dust control measures:

a. Reduce the amount of the disturbed area where possible;

b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;

c. All dirt stock pile areas should be sprayed daily as needed;

d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;

e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;

f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;

g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;

h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;

i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;

j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;

k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;

l. All of these fugitive dust mitigation measures shall be shown on grading and building plans; and

m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

In addition, SLOAPCD requires the following idle restricting measures for the construction phase of projects:

a. Idling Restrictions Near Sensitive Receptors for Both On and off-Road Equipment

   1. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
   2. Diesel idling within 1,000 feet of sensitive receptors is not permitted;
   3. Use of alternative fueled equipment is recommended whenever possible; and
   4. Signs that specify the no idling requirements must be posted and enforced at the construction site.

b. Idling Restrictions for On-road Vehicles

   Section 2485 of Title 13, the California Code of Regulations limits diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

   1. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and
   2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when

within 100 feet of a restricted area, except as noted in Subsection (d) of the regulation.

Signs must be posted in the designated queuing areas and job sites to remind drivers of the 5-minute idling limit. The specific requirements and exceptions in the regulation can be reviewed at the following web site: www.arb.ca.gov/msprog/truck-idling/2485.pdf.

c. Idling Restrictions for off-Road Equipment

Off-road diesel equipment shall comply with the 5 minute idling restriction identified in Section 2449(d)(3) of the California Air Resources Board's In-Use off-Road Diesel regulation:

www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.

Signs shall be posted in the designated queuing areas and job sites to remind off-road equipment operators of the 5 minute idling limit.

Therefore, with implementation of applicable SLOACPD dust control measures, **the proposed project would have a less than significant impact to air quality from project construction.**

Operational Emissions. SLOAPCD has adopted significance thresholds for emissions from development projects, which are contained in the District's publication, *CEQA Air Quality Handbook* (April 2012). However, the proposed project does not involve new land uses that would result in long-term emissions of criteria air pollutants. The proposed pedestrian boardwalk and bike path and paved crosswalk would provide improved connectivity for pedestrian and bicycle travel. The proposed pedestrian and bicycle facilities, in combination with the proposed interpretive educational facilities, would attract new users, but would not result in a substantial increase in vehicle trips that would generate new criteria pollutant emissions. In addition, by encouraging bicycle and pedestrian travel, the project may reduce motor vehicle trips to the area. **Impacts to air quality from project operations would therefore be less than significant.**

d) The proposed development would not result in new long-term emissions of hazardous air pollutants. Similarly, the project would not result in a substantial number of new vehicle trips that could create or contribute to CO hotspots. Therefore, the proposed project would not contribute substantial construction, vehicle, or operation emissions that would significantly affect sensitive receptors. Nearby receptors as well as adjoining uses generate a moderate level of vehicle traffic from personal, employee, and beach visitor trips; however, this traffic is the only existing source of vehicle emissions in the project area; therefore, the project would not expose sensitive receptors to substantial hazardous air pollutant concentrations. **Impacts would be less than significant.**

e) The proposed project does not include uses that would result in any objectionable odors. Impacts would be less than significant.

Mitigation

As described above, the project would be required to implement all applicable SLOACPD dust control measures. No additional mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Setting

The project site is located between Morro Bay and Morro Creek; north of the Embarcadero Waterfront in the City of Morro Bay, south of and including a lower reach of Morro Creek, east of Morro Rock, and west of the Morro Bay Power Plant (MBPP). In October 2013 Rincon Consultants, Inc. completed a Natural Environment Study (NES) for the Morro Creek Multi-Use Trail and Bridge Project, including a field survey of the project site conducted on September 5, 2013. The Biological Study Area (BSA) for the NES begins at the driveway entrance for the Dynegy Electric Utility Morro Bay Power Plant along Embarcadero and extends west along Embarcadero to Coleman City Park. The BSA includes a small portion of Coleman Park, located east of the public restroom facilities, on the south side of Embarcadero. It extends north along the unpaved portion of Embarcadero Road and widens where it meets Morro Creek to include the existing unpaved parking area for coastal access to the west and a small portion of the driveway into an existing industrial storage yard to the east. The BSA continues along Embarcadero Road for a short distance to the north. It widens slightly on this side of Morro Creek to include a second existing unpaved parking area for coastal access to the west and a small peripheral area behind the Morro Dunes Mobile Home and RV Park. The BSA encompasses approximately 4.79 acres. It consists of the minimum area needed in order to complete the proposed project and includes the locations of the proposed pedestrian boardwalk and bike path, the bridge over Morro Creek, two interpretive areas, road alignment and improvements, potential staging areas, and non-irrigated native landscape areas. The BSA includes the banks and channel of Morro Creek and road shoulders.

Vegetation Communities. Five vegetation communities were identified within the BSA during the field survey including: central dune scrub, ice plant, arroyo willow woodland/riparian, bulrush/cattail wetland, and ruderal/developed.

Central Dune Scrub. Central dune scrub habitat occurs along the western side of Embarcadero and on both sides of the intersection where Embarcadero extends north and becomes Coleman Drive to the west. Approximately 1.35 acres of the BSA are composed of central dune scrub habitat.

Ice Plant. Ice plant habitat occurs in several locations within the BSA. This vegetation community type was observed within the curbed median in front of the Dynegy Electric Utility Morro Bay Power Plant administrative building, along the north side of Embarcadero, within

Coleman City Park, and along the upper limits of the banks of Morro Creek. Approximately 0.52 acre of the BSA is composed of ice plant habitat.

Arroyo Willow Woodland/Riparian. Only a small portion of the BSA supports the arroyo willow woodland/riparian vegetation community type. This habitat occurs along relatively narrow margins along both the northern and southern banks of Morro Creek. Approximately 0.10 acre of the BSA is composed of arroyo willow woodland/riparian habitat.

Bulrush/Cattail Wetland. Bulrush/cattail wetland habitat is restricted to the channel of Morro Creek within the BSA. Approximately 0.07 acre of the BSA is composed of bulrush/cattail wetland habitat.

Ruderal/Developed. The last vegetation community type identified within the BSA is ruderal/developed, which is the most abundant habitat observed onsite. Approximately 3.01 acres of the BSA are composed of ruderal/developed habitat.

Species of Concern. Regional species of concern include taxa that are afforded protection by the FESA, or the California Endangered Species Act (CESA), those that are considered to be species of special concern by other resource agencies, and additional taxa that are provided protections or otherwise considered sensitive. Regional habitats of concern include those that are regulated or considered sensitive by federal, state, and/or other regional agencies, or meet these criteria under CEQA. Species that are simply tracked by resource agencies (such as CDFW) or those that do not meet criteria for formal listing status (e.g., CRPR List 3 and List 4 plant species) were reported if observed onsite during the field survey, but are not otherwise included in this analysis.

The project site contains suitable habitat for 12 regional species of concern, including seven special status plant species and five special status wildlife species. These species have all been previously documented by the CNDDB within a five-mile radius of the site. The regional species of concern with potential to occur onsite include:

- California red-legged frog (*Rana draytonii*)
- black legless lizard (*Anniella pulchra nigra*)
- silvery legless lizard (*Anniella pulchra pulchra*)
- steelhead – south/central California coast DPS (*Onchorhynchus mykiss irideus*)
- Morro shoulderband snail (*Helminthoglypta walkeriana*)
- Morro manzanita (*Arctostaphylos morroensis*)
- marsh sandwort (*Arenaria paludicola*)
- salt marsh bird's-beak (*Chloropyron maritimum ssp. maritimum*)
- beach spectaclepod (*Dithyrea maritima*)
- Blochman's leafy daisy (*Erigeron blochmaniae*)
- coast woolly-heads (*Nemacaulis denudata var. denudata*)
- California seablite (*Suaeda californica*)

In addition to regional species of concern, sensitive habitat types are also considered biological resources of regional concern that are afforded protections. Two of the regional habitats of concern that have been previously documented within a five-mile radius of the project site were

observed within the BSA. These include central dune scrub and coastal brackish marsh. The bulrush/cattail wetland habitat within the BSA meets the criteria of coastal brackish marsh and is treated as such in several vegetation classification systems.

The arroyo willow woodland/riparian is also considered a sensitive habitat type by CDFW because it is a riparian vegetation community that is associated with a perennial or intermittent stream course. Streams, including Morro Creek and its surrounding riparian vegetation, fall under CDFW jurisdiction. Similarly, Morro Creek is also considered a sensitive habitat resource because it is afforded protections by the USACE and is assumed to be within this agency's jurisdiction as "other waters" of the United States.

In addition, the project site was reviewed for its potential to contain federally designated critical habitats for plant and wildlife species. The BSA contains federally designated critical habitat for two wildlife species: the south/central California Coast distinct population segment (DPS) of steelhead and western snowy plover. Morro Creek has been designated as federal critical habitat for steelhead – south/central California Coast DPS and almost the entire area west of Embarcadero (including the parking areas) has been federally designated as critical habitat for western snowy plover (USFWS, 2013a). However, aside from the existing parking areas within the BSA, the project area does not fall within the critical habitat designation for western snowy plover. Similarly, the BSA does not have suitable habitat for this species. Beach strand habitat that is suitable for western snowy plover occurs in the vicinity of the BSA, but it does not occur within it.

Waters of the United States. Waters of the United States occur in the form of wetlands on-site and are defined in the Code of Federal Regulations (CFR) as: "Those areas that are inundated or saturated by surface of groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33 CFR 328.3(b)). Wetlands are considered a special aquatic site and are subject to Section 404 of the federal Clean Water Act (CWA), as administered by the U.S. Environmental Protection Agency (USEPA) and U.S. Army Corps of Engineers (USACE). The USACE is responsible to approve the use of Department of the Army permits for the discharge of dredged or fill material into wetlands. Furthermore, the Regional Water Quality Control Board (RWQCB) is responsible for the issuance of water quality certifications for impacts to wetlands pursuant to Section 401 of the CWA.

The California Coastal Commission (CCC) defines wetlands as: "… lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to vegetated wetlands or deepwater habitats" (Section 13577(b) of the California Coastal Act). The CDFG does not regulate wetlands; however, CDFG jurisdiction pursuant to California Fish and Game Code 1600 et seq. includes riparian vegetation adjacent to rivers,

streams and lakes, and extends to the outer dripline of such vegetation (State of California 2006).

A *Delineation of Potentially Jurisdictional Wetlands and Waters for Morro Bay Pedestrian Bridge* report was prepared by Althouse and Meade, Inc. (2013a). The delineation was performed to determine the location, type, and aerial extent of waters, including wetlands, within the BSA that would likely be subject to USACE and RWQCB jurisdiction. The area below the Ordinary High Water Mark (OHWM) of Morro Creek is considered an "other waters" feature and is subject to USACE and RWQCB jurisdiction. It is a Relatively Permanent Water (RPW) and is hydrologically connected to a Traditional Navigable Waterway (TNW), the Pacific Ocean. Approximately 0.16 acre of jurisdictional wetlands and waters were delineated below the OHWM of Morro Creek within the BSA. Morro Creek also falls under the jurisdiction of CDFW, as it has a clear bed and bank, and provides habitat for various aquatic, semi-aquatic, and terrestrial wildlife species. The approximate area within CDFW jurisdiction is approximately 0.22 acre. The final jurisdictional determinations of the boundaries of waters and riparian habitats are made by each agency.

a, d) Special Status Plant Species. No state or federally listed, proposed, or candidate plant species were observed within the BSA during the field survey.

The central dune scrub and/or bulrush/cattail wetland habitats within the BSA are considered to be suitable for the following sensitive plant species and these species have been previously documented within a five-mile radius of the project site by the CNDDB (refer to Figure 5 and Table 1): Morro manzanita (*Arctostaphylos morroensis*), marsh sandwort (Arenaria paludicola), salt marsh bird's-beak (*Chloropyron maritimum ssp. maritimum*), beach spectaclepod (*Dithyrea maritima*), Blochman's leafy daisy (*Erigeron blochmaniae*), coast woolly-heads (*Nemacaulis denudata* var. *denudata*), and California seablite (*Suaeda californica*). None of these sensitive plant species were observed within the BSA during the field survey.

The reconnaissance field survey Rincon performed was conducted within the appropriate blooming period for salt marsh bird's-beak, coast woolly-heads, and California seablite. This field survey effort was not conducted within the appropriate blooming periods for Morro manzanita, marsh sandwort, beach spectaclepod, or Blochman's leafy daisy. However, Althouse and Meade, Inc., conducted determinant-level botanical surveys within most of the BSA. These survey efforts were performed within the appropriate blooming periods for marsh sandwort, beach spectaclepod, and Blochman's leafy daisy; specifically the surveys were conducted during May, June, and July of 2013 (Althouse and Meade, Inc., 2013b). The biologists/botanists that conducted these surveys also encountered red-sand verbena and Blochman's ragwort within the BSA. However, both of these plant species are CRPR List 4 species, which are not regarded as rare, threatened, or endangered pursuant to CEQA. No other sensitive plant species were observed within the BSA during the botanical surveys that Althouse and Meade, Inc. conducted.

The BSA contains a relatively small linear area that is adjacent to the north side of Embarcadero Road, and east of the intersection of Embarcadero and Coleman Drive, that was not included in the Althouse and Meade, Inc., botanical survey efforts. This area is composed of central dune scrub, ice plant, and ruderal/developed habitats. In general, central dune scrub is considered

suitable habitat for beach spectaclepod and Blochman's leafy daisy. However, the central dune scrub habitat within this portion of the BSA is not likely to support beach spectaclepod. All of the previously documented occurrences of this species within the CNDDB in the vicinity of the project site are located on the Morro Bay sandspit, south of the project site across the mouth of Morro Bay. The closest previous documented CNDDB occurrence of beach spectaclepod is located approximately two miles south of the project site on the sandspit (CDFW, 2003). There are no CNDDB documented occurrences of beach spectaclepod on the north side of the mouth of Morro Bay. In addition, the central dune scrub habitat in this region of the BSA is heavily invaded by non-native and invasive plant species that frequently occur in proximity to roads and roadside corridors. Beach spectaclepod is considered highly unlikely to occur in this portion of the BSA. However, Blochman's leafy daisy does have potential to occur within the central dune scrub habitat within this portion of the BSA.

All manzanita species are readily identified to the genus level of taxonomy regardless of the time of year surveys are conducted because manzanitas are evergreen shrubs that have distinctive bark and growth habits. No manzanita species were observed within the BSA or immediate vicinity during any of the field survey efforts.

Therefore, impacts to sensitive plant species (Blochman's leafy daisy) would be potentially significant and mitigation would be required to reduce these potential impacts to a less than significant level.

Special Status Animal Species. No state or federally listed or otherwise sensitive animal species were observed within the BSA during the field survey. However, several of the habitat types within the BSA are suitable for the following sensitive animal species and these species have been previously documented within a five-mile radius of the project site by the CNDDB: California red-legged frog (*Rana draytonii*), south/central California coast DPS steelhead (*Oncorhynchus mykiss irideus*), Morro shoulderband snail (*Helminthoglypta walkeriana*), black legless lizard (*Anniella pulchra nigra*), and silvery legless lizard (*Anniella pulchra pulchra*). The potential project-related impacts to each of these sensitive wildlife species are discussed below.

In addition to these sensitive wildlife species, the project site has suitable habitat for a variety of more common nesting bird species that are afforded protection under the California Fish and Game Code and the Migratory Bird Treaty Act (MBTA). The potential project-related impacts to nesting birds are discussed below.

California Red-Legged Frog. California red-legged frog (CRLF) is a federally threatened and CDFW species of special concern that requires ponds and streams with adequate plant cover that occur within forest, woodland, grassland, and coastal scrub communities. No CRLF were observed within the BSA during the reconnaissance field survey; however, protocol-level surveys were not conducted. The BSA was assessed for the potential to support this species in accordance with the most recent USFWS Guidance (USFWS, 2005). Suitable habitats for CRLF that were observed within the BSA consist of the Morro Creek stream channel (although brackish) and any of the multiple small mammal burrows that were observed along the banks of this feature, which could be utilized by this species during the dry season. Adjacent habitats that are within approximately one mile of the BSA include ruderal/developed, agriculture, grassland, coastal dune scrub, chaparral, ephemeral and intermittent drainages, riparian woodland, beach strand, and ocean open water. A similar review of aerial imagery of areas that

surround the BSA was conducted and reveals a single agricultural pond that is located approximately 1.15 miles north of the BSA. The BSA is not within the designated critical habitat for CRLF. However, the BSA is approximately 0.9 mile west of the nearest CRLF designated critical habitat unit.

To the maximum extent feasible, the project has been designed to avoid disturbing Morro Creek which provides aquatic habitat for CRLF. However, CRLF could potentially be present within the upland habitat areas of the BSA during implementation of the project. Therefore, **impacts to CRLF would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level**.

South/Central California Coast Steelhead DPS. The south/central California Coast DPS of steelhead (steelhead) is a federally threatened and CDFW species of special concern that requires shaded pools within cool low-flow streams and warm water habitats below some dams or pipeline outfalls where summer releases provide high flows and fast-waters. No steelhead were observed within the BSA during the reconnaissance field survey; however, determinant-level surveys were not conducted. The BSA was assessed for the potential to support this species in accordance with the most recent guidance provided by the National Marine Fisheries Service (NMFS). Suitable habitat for steelhead within the BSA includes the Morro Creek stream channel. Morro Creek is considered suitable spawning habitat for steelhead because it supports overhanging vegetation in certain regions, has a suitable gravel substrate, and sufficient water quality. As previously mentioned, most of the area surveyed within the stream channel was dry, except for a single remaining pool within the BSA that was inundated and contained several threespine stickleback. The BSA is located within the designated critical habitat for steelhead.

To the maximum extent feasible, the project has been designed to avoid disturbing Morro Creek where steelhead may be present by utilizing a free-span bridge that avoids disturbance within steelhead habitat. Further the bridge abutments are design to avoid pile-driving construction techniques, which result in vibrations that have the potential to impact steelhead. However, steelhead could potentially be present within the BSA and therefore the project may have indirect impacts to steelhead during implementation of the project. Therefore, **impacts to steelhead would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level**.

Morro Shoulderband Snail. Morro shoulderband snail (MSS) is a federally endangered species that occurs in a variety of native and non-native habitat types. It requires coastal scrub, coastal dune scrub, and maritime chaparral communities that are typically underlain by Baywood fine sands substrates. It will also utilize non-native stands that are dominated by ice plant and/or perennial veldt grass (*Ehrharta calycina*) within its range. No MSS were observed within the BSA during the reconnaissance field survey; however, determinant-level surveys were not conducted. The BSA was assessed for the potential to support this species in accordance with guidance provided by USFWS. Suitable habitat for MSS within the BSA includes the central dune scrub and ice plant communities.

The central dune scrub habitat within the BSA is considered suitable habitat for MSS because it contains sandy soils, occurs on slopes that are less than 10 percent, and is comprised of several

of the characteristic plant species associated with central dune scrub vegetation. The understanding of suitable habitat for this species have expanded since the critical habitat designation and now include non-native communities. The BSA does not occur within the designated critical habitat for MSS. The BSA is approximately 0.25 mile north, across the mouth of Morro Bay, from the nearest MSS designated critical habitat unit.

To the maximum extent feasible, the project has been designed to avoid disturbing areas where MSS may be present by reducing the project footprint within ice plant and central dune scrub habitat to the minimum area necessary to construct the project. However, MSS could potentially be present within the BSA during implementation of the project. Therefore, **impacts to this species and its habitat would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level.**

Legless Lizard. Both black and silvery legless lizard are CDFW species of special concern that require moist, warm, loose soils and adequate cover within beach dune, chaparral, pine and oak woodland, desert scrub, sandy wash, and stream terrace habitats. These species will utilize leaf litter, rocks, cover boards, driftwood, and downed logs for cover and refugia. However, the two subspecies are no longer recognized as genetically distinct and are now referred to as a single species (*Anniella pulchra*) in more modern taxonomic treatments (Papenfuss and Parham, 2013). No legless lizards were observed within the BSA during the reconnaissance field survey; however, determinant-level surveys were not conducted. Suitable habitat for legless lizard within the BSA includes the central dune scrub habitat.
To the maximum extent feasible, the project has been designed to avoid disturbing areas where legless lizard may be present by reducing the project footprint within central dune scrub habitat to the minimum area necessary to construct the project. However, legless lizards could potentially be present within the BSA during implementation of the project. Therefore, **impacts to this species and its habitat would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level.**

Migratory Birds. Nesting and migratory birds are protected by the California Fish and Game Code provisions and under the MBTA. No nesting birds or other evidence of nesting activities were observed within the BSA or immediate vicinity during the field survey; however, comprehensive nesting bird surveys were not conducted. The arroyo willow woodland/riparian, central dune scrub, and bulrush/cattail wetland habitats within the BSA have potential to support nesting bird species. In addition, other trees within the immediate vicinity of the BSA could have birds nesting within them.

To the maximum extent feasible, the project has been designed to avoid disturbing areas where nesting birds may be present. The proposed bridge was designed to avoid impacts to arroyo willow woodland/riparian habitat, which provides habitat for nesting birds. In addition, the bridge was designed to avoid pile driving construction methods, which result in noise levels that have the potential to impact nesting birds. However, nesting bird species could potentially be present within the BSA during implementation of the project, **impacts to these species and the habitats they are utilizing would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level.**

Implementation of the project is not expected to result in any significant loss or fragmentation of habitat for any of the above-described species. Instead this project would enhance the

existing habitat by reducing the amount of human disturbance within the stream channel because once installed, the proposed bridge would enable pedestrians to cross over the creek without entering it. Trash and debris within the channel are also likely to be reduced with project implementation. Aside from the above-described species-specific potential impacts, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

b) *Arroyo Willow Woodland/Riparian Habitat*. The arroyo willow woodland/riparian habitat is considered a sensitive natural community by the CDFW and is typically afforded protection pursuant to CEQA. It occurs in the northern portion of the BSA and is adjacent to and associated with Morro Creek. Approximately 0.10 acre of arroyo willow woodland/riparian habitat is located within the BSA. It is considered a sensitive natural community type by CDFW and also falls under this agency's jurisdiction because of its association with Morro Creek.

The project has been designed to avoid the arroyo willow woodland/riparian habitat within the BSA; therefore, **impacts to arroyo willow woodland/riparian habitat would be less than significant**.

Central Dune Scrub Habitat. The central dune scrub habitat is also considered a sensitive natural community by the CDFW and is typically afforded protection pursuant to CEQA. It occurs in the central portion of the BSA along Embarcadero to the west. Approximately 1.35 acres of central dune scrub habitat was mapped within the BSA. It is considered a sensitive natural community type by CDFW.

To the maximum extent feasible, the bike path and the boardwalk have been designed to be constructed within the ruderal/developed habitat to avoid the central dune scrub habitat within the BSA; **however, due to the proximity of project development activities, impacts to this natural community would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level**.

Invasive Plant Species. The California Invasive Plant Council (Cal-IPC) maintains an Inventory of invasive plant species that have been documented to occur within the state and provides information on the distributions and overall status of invasive plants that threaten to displace native plant species (Cal-IPC, 2013). Several plant species that are listed within the Cal-IPC Inventory were observed within the BSA during the field reconnaissance survey. These include: sea fig, ice plant, New Zealand spinach (*Tetragonia tetragonioides*), fennel (*Foeniculum vulgare*), snakeroot (*Ageratina adenophora*), brass buttons, bristly ox-tongue, perennial mustard, radish, California burclover, loosestrife (*Lythrum hyssopifolia*), blue gum (*Eucalyptus globulus*), European beachgrass (*Ammophila arenaria*), wild oat, false brome, ripgut grass, soft chess brome, pampas grass (*Cortaderia jubata*), wall barley, kikuyu grass (*Pennisetum clandestinum*), annual beardgrass, curly dock (*Rumex cripsus*), and myoporum (*Myoporum laetum*). **Impacts associated with the spread of invasive weeds during project development would be potentially significant, and mitigation would be required to reduce impacts to a less than significant level**.

Jurisdictional Waters. As described above, the project site contains approximately 0.22 acres that are within CDFW jurisdiction, including the area below the OHWM of Morro Creek and Morro Creek itself. The final jurisdictional determinations of the boundaries of waters and

riparian habitats are made by each agency, which typically occurs at the time the authorizations to impact such features is requested. To the maximum extent feasible, the project has been designed to avoid jurisdictional waters; therefore, the project has a limited potential to result in impacts to state and federal jurisdictional waters. The proposed bridge was designed to avoid impacts to jurisdictional waters by spanning Morro Creek. The proposed bridge was also designed to avoid temporary impacts to Morro Creek by utilized a pre-fabricated/pre-engineered bridge that will not require temporary disturbance, such as grading or excavation to construct the bridge abutments. As designed no direct impacts to jurisdictional waters would occur; however, **mitigation measures are recommended to ensure that indirect impacts to jurisdictional waters would not result from the project**.

c) The project is not anticipated to require a Section 404 Permit pursuant to the Clean Water Act from the U.S. Army Corps of Engineers (USACE) because all work associated with the proposed bridge would be conducted well outside the Morro Creek channel limits. Likewise, a Section 401 Water Quality Certification from the Central Coast Regional Water Quality Control Board (RWQCB) is not anticipated to be required. The proposed project is expected to require a Streambed Alteration Agreement, which is issued from the California Department of Fish and Wildlife (CDFW) because a portion of work associated with installation of the proposed bridge would be conducted within the top of the creek bank on the northern side. The BSA occurs within the Coastal Zone and would therefore require a Coastal Development Permit, which is issued from the Central Coast District of the California Coastal Commission. However, compliance with all applicable policies and regulations associated with the Coastal California Coastal Commission would ensure that **impacts would be less than significant**.

e, f) The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or any local regional or state plans. No habitat conservation plans have been established for the project area. The project, through the implementation of the recommended mitigation measures, would either avoid impacts to special status species and sensitive habitats completely or reduce all identified impacts to less than significant levels. **This impact would be less than significant.**

Mitigation

BIO-1 The following measures are required to avoid and minimize impacts to California red-legged frogs. These measures have been approved by the FHWA in a Programmatic Biological Opinion that was created to address projects that are FHWA funded and approved (USFWS, 2011a):

a. Only City-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

b. Ground disturbance shall not begin until the lead agency receives written approval from the USFWS/Caltrans that the biologist is qualified to conduct the work, unless the individual(s) has/have been approved previously and the USFWS has not revoked that approval.

c. A City-approved biologist shall survey the project site no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the work site before work begins. The USFWS-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with the proposed project. The relocation site shall be in the same drainage to the extent practicable. The lead agency will coordinate with Caltrans on the relocation site prior to the capture of any California red-legged frogs.

d. Before any activities begin on a project, a City-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training will include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

e. A City-approved biologist shall be present at the work site until all known California red-legged frogs have been relocated pursuant to BIOL-1(c), workers have been instructed, and disturbance of habitat has been completed. After this time, the lead agency shall designate a person to monitor on-site compliance with all minimization measures. The City-approved biologist will ensure that the monitor receives the training outlined in measure BIO-1(d) above and in the identification of California red-legged frogs. If the monitor or the City-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not anticipated by Caltrans and the USFWS during the review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the adverse effect immediately or require that all actions causing these effects be halted. If work is stopped, the USFWS shall be notified as soon as possible.

f. During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

g. All refueling, maintenance, and staging equipment and vehicles shall occur at least 60 feet from riparian habitat or water bodies and in a location from where a spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water). The monitor (designated pursuant to BIOL-1-(e)) will ensure contamination of habitat does not occur during such operations. Prior to the onset of work, Caltrans will ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

h. Habitat contours shall be returned to their original configuration at the end of project activities. This measure shall be implemented in all areas disturbed by activities associated with the project, unless the lead agency, USFWS, and Caltrans determine that it is not feasible or modification of original contours would enhance habitat or otherwise benefit the California red-legged frog.

i. The lead agency shall limit the number of access routes, size of staging areas, and the total area of activity to the minimum necessary to achieve the project goals. Environmentally Sensitive Areas will be delineated to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

j. The lead agency shall schedule work activities for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding shall be avoided during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year shall be avoided during the late summer and early fall. Habitat assessments, surveys, and coordination between the lead agency, Caltrans, and the USFWS during project planning will be used to assist in scheduling work activities to avoid sensitive habitats during key times of the year.

k. To control sedimentation during and after project implementation, Caltrans, and the lead agency shall implement all Best Management Practices (BMPs) outlined in any authorizations or permits issued under the authorities of the Clean Water Act that it receives for the specific project. If BMPs are not effective, the lead agency will attempt to remedy the situation immediately by implementing additional BMPs, in coordination with Caltrans and the USFWS.

l. If a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh no larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the stream bed shall be avoided, and any imported material shall be removed from the stream bed upon completion of the project.

m. Unless approved by the City, water shall not be impounded in a manner that may attract California red-legged frogs.

n. A City-approved biologist shall permanently remove any identified individuals of non-native species, such as bullfrogs (*Rana catesbeiana*), signal and red swamp crayfish (*Pacifasticus leniusculus; Procambarus clarkii*), and centrarchid fishes from the project area. The City-approved biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

o. To ensure that diseases are not conveyed between work sites by the City-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times.

p. Project sites shall be re-vegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials shall be used, and invasive, exotic plants shall be controlled to the maximum extent practicable. This measure will be implemented in all areas disturbed by activities associated with the project, unless the lead agency, USFWS, and Caltrans determine that it is not feasible or practicable.

q. Herbicides shall not be used as the primary method used to control invasive, exotic plants, if avoidable. If Caltrans determines the use of herbicides is the only feasible method for controlling invasive plants at a specific site, herbicides shall be applied in accordance with the FHWA-approved Programmatic Biological Opinion for the project.

BIO-2 The following measures are required to avoid and minimize indirect impacts to steelhead:

a. Before any activities begin on a project, a City-approved qualified biologist shall conduct a training session for all construction personnel. At a minimum, the training will include a description of the steelhead and its habitat, the specific measures that are being

implemented to conserve this species for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

b. During the duration of project activities, all trash that may attract predators shall be properly contained and secured, promptly removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work areas.

c. All refueling, maintenance, and staging of equipment and vehicles shall occur at least 60 feet from riparian habitat or bodies of water and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). The monitor (designated pursuant to BIOL-1-(e)) shall ensure that contamination of suitable habitat does not occur during such operations. Prior to the onset of work activities, a plan must be in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should an accidental spill occur.

d. The number of access routes, size of staging areas, and the total area used for construction activities shall be limited to the minimum area necessary to achieve the project goals.

e. The City shall schedule work for times of the year when potential impacts to steelhead would be minimal, to the maximum extent practicable. If work occurs during the wet season (November through May), Best Management Practices (BMPs) shall be implemented to avoid indirect water quality impacts to steelhead habitat.

f. To control sedimentation during and after project implementation, the City shall implement any and all BMPs outlined in all authorizations or permits issued under the authorities of the Clean Water Act that it obtains for this specific project. If the BMPs are somehow ineffective, the City will attempt to remedy the situation immediately.

g. No pets shall be allowed at the project site.

h. The monitor (designated pursuant to BIOL-1-(e)) shall inspect construction activities, in-stream habitat, and overall performance of BMPs and sediment controls for the purpose of identifying and reconciling any condition that could adversely affect steelhead or their habitat. The monitor shall halt work if necessary and will

recommend site-specific measures to avoid adverse effects to steelhead and their habitat.

i. The monitor shall check equipment daily for leaks prior to the initiation of construction activities. A spill kit will be placed near the creek and will remain readily available during construction in the event that any contaminant is accidentally released.

BIO-3 The following measures would ensure that impacts to Morro shoulderband snail (MSS) from the project are reduced to a less than significant level. These measures have been developed in coordination with USFWS and include the following:

a. Only City-approved biologists shall participate in activities associated with the capture, handling, and monitoring of MSS.

b. Environmental training sessions for all project-related personnel shall be conducted by a City-authorized biologist prior to the start of vegetation removal, grading, and ground-disturbing construction-related activities. These trainings shall continue for the duration the project and be initiated whenever new personnel come on-board.

c. Construction areas shall be clearly marked with high visibility flagging or barrier fencing. Construction equipment and personnel shall be restricted to the identified work areas only. The delineation of construction areas is ongoing and shall continue for the duration of project implementation.

d. Pre-construction MSS surveys shall be conducted in the coastal dune scrub and ice plant habitat to be removed in association with site preparation and construction activities will be conducted by a City-approved biologist. Surveys will include cutting coastal dune scrub shrubs off at ground-level and careful examination of the lower branches and litter beneath each shrub for the presence of this species.. Prior to any disturbance, all ice plant shall be carefully examined for MSS individuals and egg masses. Once coastal dune scrub and ice plant areas have been cleared and all surveys have been completed, vegetation removal may commence and can be removed by mechanical means. As vegetation is removed, it will not be stockpiled onsite but rather moved to a location offsite where it there is no chance of re-occupation by MSS.

e. The City-approved biologist will be retained to monitor all vegetation removal, grading, and ground-disturbing construction-related activities that will take place within habitat suitable for MSS. Monitoring activities shall be required daily until completion of initial disturbance at each location and to ensure appropriate minimization

measures are implemented during construction. The monitoring biologist will be granted full authority to stop work at his or her discretion and will stop work if project-related activities occur outside the demarcated boundaries of the construction footprint. The monitoring biologist will stop work if MSS is detected within the proposed construction footprint and will capture and relocate them to suitable habitat out of harm's way prior to construction activities resuming. If no suitable habitat opportunities are available in the immediate vicinity of the construction footprint, captured individuals may be transported to an off-site location in accordance with a capture and relocation methodology approved by USFWS prior to the initiation of any surveys for the species.

f. The City-approved biologist shall provide a summary report to the lead agency, Caltrans, and USFWS that documents the results of all monitoring activities throughout the duration of the project. The report will document the number of MSS captured and relocated from the project area, the locations of all MSS relocations, and the number of MSS known to have been be killed or injured. The report will contain a brief discussion of any problems encountered in implementing minimization measures, results of biological surveys, observations, and any other pertinent information. The City-approved biologist shall provide a comprehensive final report that summarizes the information provided in the annual reports to the lead agency, Caltrans and USFWS within 90 days following the completion of the proposed project.

BIO-4 The following measures would ensure that potential impacts to legless lizard from the project are reduced to a less than significant level:

a. Prior to the onset of construction activities, a City-approved qualified biologist shall conduct focused surveys for legless lizard within all potentially suitable habitat onsite during the appropriate active periods for these species. If no legless lizards are observed, no further efforts are required.

b. If legless lizard is observed onsite, the wildlife biologist shall map the locations on an aerial photograph of the project site at a scale no less than 1"=200'. A legless lizard technical report (or memorandum) shall be submitted to the City that documents the survey results prior to the onset of construction activities. Mapped locations of sensitive reptile species shall be integrated into the grading plans.

c. To avoid potential indirect impacts to legless lizard, identified locations that are not within the immediate disturbance footprint, but are located within 50 feet of disturbance limits shall have highly visible orange protective fencing and drift fencing installed at least 30

feet beyond their extent to protect them from harm during the construction phase.

d. If it is determined that complete avoidance of an identified legless lizard population(s) is not feasible, then a City-approved qualified biologist shall carefully rake or use an equivalent method to scarify the ground surface within the reptile habitat to encourage the reptiles to vacate the area prior to construction initiation. This shall occur at least 48 hours prior to the construction activities and shall be repeated if construction is halted for more than 48 hours. Alternatively, the qualified biologist can facilitate the installation of drift fencing around the occupied habitat, before construction begins, to exclude the reptiles from the work areas.

e. A City-approved qualified biologist shall physically relocate any legless lizard to equivalent suitable habitat adjacent to the BSA or on other areas within its vicinity that occur beyond the limits of construction activities. If this method is utilized, the reptiles shall be hand-captured and relocated to a designated location of suitable habitat as described above.

f. A City-approved qualified biologist shall monitor construction activities onsite if they occur within legless lizard habitat that is determined to be occupied during all vegetation clearing and immediately after vegetation clearing. The qualified biologist shall relocate the reptiles out of harm's way and into an equivalent habitat within the project site or immediate vicinity. The qualified biologist shall monitor the area(s) on a weekly basis after initial sufficient clearing of legless lizard has occurred throughout the duration of construction activities in order to inspect exclusionary fencing if it is used and to physically relocate legless lizard that have re-entered the construction zones during subsequent brush clearing or vegetation removal.

BIO-5 The following measures would ensure that potential impacts to nesting bird species from implementation of the project are reduced to a less than significant level:

a. If feasible, removal of vegetation within suitable nesting bird habitats shall be scheduled to occur in the fall and winter (between September 1 and February 14), after fledging and before the initiation of the nesting season.

b. If construction activities are scheduled to occur during the nesting season (February 15 through August 31), a pre-construction nesting bird survey shall be conducted by a City-approved qualified biologist throughout all areas of potentially suitable and accessible habitats

within 200 feet of any proposed construction activities. The pre-construction nesting bird survey will be performed no more than two weeks prior to construction to determine the presence/absence of nesting birds within the project area.

c. The City and Caltrans shall be immediately notified if any nesting bird species protected under federal law (including the MBTA) are observed during surveys. Caltrans shall coordinate with USFWS regarding appropriate avoidance measures and the City shall coordinate with CDFW regarding appropriate avoidance measures. Work activities shall be avoided within 100 feet of active passerine nests and 200 feet of active raptor nests until young birds have fledged and left the nest(s). This buffer may be reduced if determined appropriate by a qualified biologist. Readily visible exclusion zones shall be established in areas where nests must be avoided. Nests, eggs, or young of birds covered by the MBTA and California Fish and Game Code would not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.

BIO-6 The following measures would ensure that potential project-related impacts to central dune scrub habitat and jurisdictional waters would be less than significant:

a. Prior to the initiation of construction activities, high-visibility orange construction fencing shall be installed outside of the tops of the banks of Morro Creek (and outside of the arroyo willow woodland riparian vegetation) along the limits of the existing development to ensure avoidance of these sensitive resources. Specifically, the fencing would be installed within the limits of the existing ruderal/developed areas. These avoidance setbacks are suitable and appropriate because of this portion of the BSA is already developed (i.e., roadways and parking areas) and subject to high levels of traffic, pedestrians, and passive recreational use. A qualified biological monitor will facilitate installation of the avoidance fencing and will conduct periodic site visits to ensure that the fencing remains intact for the duration of project development.

b. Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to jurisdictional wetlands/waters including locating access routes and construction areas outside of jurisdictional areas to the maximum extent feasible.

c. To control sedimentation during and after project implementation, appropriate Best Management Practices (BMP) shall be implemented

to minimize adverse effects on jurisdictional areas in the vicinity of the project.

d. During construction, the City shall not dump and/or permit any litter or construction debris to enter the limits of Morro Creek. All such debris and waste shall be disposed of in closed, secure containers and will be picked up daily and properly disposed of at an appropriate refuse site.

e. All project-generated debris, building materials, and rubbish shall be removed from Morro Creek and from areas where such materials could be washed into the creek.

f. Raw cement, concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish or wildlife resulting from project-related activities, shall be prevented from contaminating the soil and/or entering Morro Creek.

g. All refueling, maintenance, and staging of equipment and vehicles shall occur at least 60 feet from riparian habitat or bodies of water and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). The biological monitor and/or construction foreman shall ensure that contamination of these habitats does not occur during such operations. Prior to the onset of work activities, an acceptable plan must be in place for prompt and effective response to any accidental spills. All project workers and other project personnel shall be informed of the importance of preventing spills and of the appropriate measures to take should an accidental spill occur.

BIO-7 The following measures would reduce potential project-related impacts to central dune scrub habitat to a less than significant level:

a. To minimize impacts to central dune scrub habitat, any and all removal of this vegetation community type shall be limited to the minimum amount necessary to complete construction of the project.

b. Prior to the onset of construction, a comprehensive Habitat Mitigation and Monitoring Plan (HMMP) will be prepared that provides for a 3:1 mitigation ratio (3 acres of mitigation for every 1 acre of impacts) for all permanently impacted areas of central dune scrub habitat, unless otherwise approved by USFWS. All mitigation activities associated with replacement of central dune scrub habitat shall occur in the immediate vicinity of the project site, and shall not inadvertently result in additional impacts to sensitive plant or wildlife species. The final HMMP will identify the exact location(s) for the required central

dune scrub habitat mitigation and the HMMP will be implemented immediately after project completion.

Mitigation areas pursuant to the HMMP would require disturbance outside of the BSA. Mitigation efforts in these areas would predominantly involve foot traffic and hydroseeding, but would also require ice plant removal, which may result in residual impacts to Morro shoulderband snail. These mitigation efforts would be subject to Mitigation Measure BIO-3, which would reduce residual impacts to Morro shoulderband snail to a less than significant level.

c. Access routes, staging, and all construction areas shall be limited to the minimum amount necessary to achieve the project goals and shall minimize impacts to this sensitive community including locating all access routes and construction areas outside of and offset from the central dune scrub habitat to the maximum extent feasible.

d. When practicable, invasive and exotic plant species on the project site shall be removed and properly disposed of in an acceptable refuse site.

BIO-8 The following measures would reduce impacts associated with invasive weeds to a less than significant level:

a. Any and all invasive plant species that have been identified within the project footprint shall be removed during construction activities and will not be replanted.

b. Appropriate Best Management Practices (BMPs) that are intended and designed to curtail the spread of invasive plant species shall also be implemented throughout the construction phase of the project and likely to include the following:

- No fill shall be imported and soils currently existing on-site shall be used for fill material. If the use of imported fill material is necessary, the imported material must be obtained from a source that is known to be free of invasive plant species; or the material must consist of purchased clean material such as crushed aggregate, sorted rock, or other similar substances.
- To avoid the spread of invasive species, the contractor shall:
  - Stockpile topsoil and redeposit the stockpiled soil on the slopes after construction of the new bridge is complete; or
  - Transport the topsoil to a certified landfill for disposal.
- The HMMP shall emphasize the use of native species that are expected to occur in the area.

- The City shall ensure that all erosion control materials including straw bales, straw wattles, or mulch used on-site are free of invasive species seed to the maximum extent practicable.

c. Exotic and invasive plant species shall be excluded from any erosion control seed mixes and/or landscaping plant palettes associated with the proposed project.

BIO-9 The following measures would reduce potential impacts to sensitive plant species (Blochman's leafy daisy) to a less than significant level:

a. Prior to initiation of construction activities (any vegetation removal, grubbing, or grading) a pre-construction botanical survey shall be conducted within the central dune scrub habitat onsite that was not surveyed by Althouse and Meade, Inc. This survey shall be conducted within the appropriate bloom period for Blochman's leafy daisy; June through August. The botanical survey shall be conducted by a qualified botanist. The purpose of the survey is to document the presence or absence, and number of individuals (if any), of sensitive plant species within this portion of the construction footprint. All sensitive plant species identified onsite shall be mapped onto a site-specific aerial photograph at a scale no less than 1"= 200'.

b. If Blochman's leafy daisy or any other sensitive plant species are observed during the botanical survey required above, the applicant shall reconfigure and redesign the proposed development footprint to avoid impacts to sensitive plants to the maximum extent feasible. Avoidance shall be accomplished by installation of high-visibility fencing around areas that are occupied by sensitive plant species. A qualified botanist shall oversee, direct, and generally facilitate fence installation and he or she will monitor the fencing periodically to ensure that it remains intact and is effective for the intended avoidance throughout the duration of construction activities within this location. After construction within this area is complete, the fencing may be removed by construction personnel under the supervision of the qualified botanist.

c. If Blochman's leafy daisy or any other sensitive plant species cannot be avoided, a qualified botanist shall oversee, direct, and generally facilitate transplantation of these individuals into an area of suitable and equivalent habitat within the central dune scrub mitigation area onsite. If transplantation of sensitive plant species is necessary, these activities shall be completed prior to initiation of any construction activities.

Findings

Implementation of Mitigation Measures BIO-1(a) through BIO-9(c) would reduce potential impacts to biological resources to a less than significant level.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Setting

Prehistoric settlements have been found throughout Morro Bay. The area's proximity to the ocean and creeks, abundant food sources and raw materials, and the mild climate made it a perfect location for prehistoric people to settle. Throughout the year, the bay offered hunting, fishing, fowling and harvesting opportunities, which allowed the Native Americans to grow into a complex society. Based on archaeological evidence, Native Americans are believed to have settled in the central coast of California over 9,000 years ago. Evidence of these people are found in the grinding stone mortars in Morro Bay State Park and on "Turtle Rock" in Chorro Willows. Middens or trash heaps of shells and other debris is evident on the sand spit (Morro Bay, 2006)

European discovery of the bay occurred in 1542, and the area was further explored in 1769. By the time the town of Morro Bay was formed in the mid 1800's, the Embarcadero was already established as a prominent location for trade. In the early 1900's the majority of development was located on the tops of the bluffs. The Embarcadero remained relatively undeveloped until World War II, when the Navy initiated a national defense project to construct an amphibious training base in the bay. In 1949, the County of San Luis Obispo purchased the old Navy base and waterfront facilities. Shortly thereafter, buildings were constructed along the Embarcadero and the docks and piers were utilized by the growing fishing fleet. In the early 1950's, Pacific Gas & Electric (PG&E) purchased a portion of the base, which would eventually become the MBPP (Morro Bay, 2006).

a) The project site is undeveloped and does not contain any structures that would be eligible for listing as historical resources. Furthermore, the City of Morro Bay does not contain any historical resources that are identified in the National or State Registers, or that are designated as State Landmarks or Points of Historical Interest (State Office of Historic Preservation, 2013/ National Register of Historic Places, 2013). **No impacts to historic resources would result.**

b) At the request of Rincon Consultants, the Central Coast Information Center (CCIC), located at the University of California, Santa Barbara, conducted a search of the California Historical Resources Information System (CHRIS) on September 25, 2013. The search was conducted to identify previously conducted cultural resource studies as well as previously recorded cultural resources in the project area and within a 0.5-mile radius of the project area. The search also included a review of the State Historic Property Data Files, National Register of Historic Places, California Historical Landmarks, California Points of Historic Interest, California OHP Archaeological Determinations of Eligibility, and the Caltrans State and Local Bridge Surveys. These inventories yielded no property evaluations within the search area. The records search also included a review of all available historic USGS 7.5- and 15-minute quadrangle maps.

The CCIC records search identified eleven previously recorded cultural resources within a 0.5-mile radius of the area of potential effect (APE) of the project. One of these resources is recorded within the APE. The CCIC provided two reports that discuss this resource. A report by Dills (1977; Report SL-00085) indicates that the area may have been previously bulldozed. A second report by Singer and Atwood (1991; Report SL-01729) indicates that the resource site was visited as part of a survey for the City of San Luis Obispo Desalination Project in 1991. Singer and Atwood found no surface evidence of the site, and state that it is possible the deposit may have been used to fill in the Morro Creek channel. CEQA provides guidelines for mitigating impacts to archaeological resources in *Section 15126.4*. According to the CEQA Guidelines, public agencies should, whenever feasible, seek to avoid damaging effects on any archaeological resource. The following factors shall be considered to prevent significant impacts to such an archaeological site:

> *(A) Preservation in place (avoidance) is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.*
>
> *(B) Preservation in place may be accomplished by, but is not limited to, the following:*
> - *Planning construction to avoid archaeological sites;*
> - *Incorporation of sites within parks, greenspace, or other open space;*
> - *Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.*
> - *Deeding the site into a permanent conservation easement.*
>
> *(C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center.*

Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.

(D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented and that the studies are deposited with the California Historical Resources Regional Information Center.

Therefore, due to the potential location of an identified cultural resource on the project site, impacts to archaeological resources would be potentially significant. Avoidance of the resource as part of project construction may not be feasible. If this resource cannot be avoided, Mitigation Measures CUL-1 and CUL-2 would be required. In addition, due to the location of the project site within a region with a substantial number of identified cultural resources, Mitigation Measures CUL-3 and CUL-4, which relates to discovery of previously unidentified cultural resources, is also required.

c) The site is predominantly Quaternary alluvium, landslide and dune deposits with outcrops of Mesozoic metavolcanic rocks. None of these types of soils and rock have a high likelihood of carrying fossil deposits (Hall, 1973). **Therefore, potential impacts to a unique paleontological resource or site or unique geologic feature would be less than significant.**

d) Given the presence of identified prehistoric archaeological sites in the vicinity of the project site, there is potential to encounter human remains during construction activities.

State Health and Safety Code Section 7050.5 requires that, in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission must identify the person or persons it believes to be most likely descended from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public resources Code Section 5097.98.

If the Native American Heritage Commission is unable to identify a most likely descendent; or if the most likely descendent fails to make a recommendation within 48 hours after being notified by the commission; or if the landowner or his authorized representative rejects the recommendation of the descendent, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner, then the landowner or his authorized representatives shall reinter the Native American human remains and associated grave items with appropriate dignity on the property in a location not subject to further subsurface disturbance. However, any such activity shall be supervised by a Native American representative knowledgeable in both Salinan and Chumash culture if a most likely descendent

is either not identified or fails to respond to notification. **Compliance with these existing regulations would ensure that impacts to human remains are less than significant.**

Mitigation

CUL-1 **Extended Phase I (XPI) Archaeological Study**. An extended phase I (XPI) study shall be conducted by a qualified archaeologist prior to issuance of a project grading permit and in accordance with Caltrans guidelines. The XPI study shall comprise subsurface testing designed to establish the presence or absence and extent of intact archaeological deposits within the area of potential effect (APE) of the project. The XPI testing shall be observed by a Native American representative.

CUL-2 **Phase II Subsurface Archaeological Testing**. If avoidance of a potential archaeological site(s) identified pursuant to Mitigation Measure CUL-1 is not possible, a Phase II subsurface testing program shall be completed to assess the site's integrity, (i.e., how intact the site and/or feature is) and evaluate of the site's significance through a study of its features and artifacts. The subsurface archaeological testing shall be conducted prior to issuance of a project grading permit and shall be observed by a Native American representative.

The Phase II program shall be performed by a qualified archaeologist, and shall include:

- Mapping the location of the surface remains within the proposed impact area;
- Surface collection of artifacts;
- Excavation of a sample of the cultural deposit to characterize the nature of the buried portions of the site within the proposed impact area;
- Monitoring of excavations containing Native American Indian resources by a Native American representative;
- Repatriation of Native American Indian cultural resources at the recommendation of a Native American representative;
- Analysis of all remains, submission of a final report detailing the results of the investigations, and curation of all artifacts and records detailing the results of the investigations at a county approved curation facility.

If the site is determined significant, prior to issuance of a grading permit, the applicant may choose to cap the resource or have a qualified archaeologist conduct Phase III Data Recovery Excavation. Capping shall be conducted using culturally sterile and chemically neutral fill material and shall include open space accommodations and interpretive displays for the site to ensure its protection from development. An archaeologist

and Native American consultant knowledgeable in both Salinan and Chumash culture shall be retained to monitor the placement of fill upon the site and to make open space and interpretive recommendations. If a significant site will not be capped, the Phase III Data Recovery Excavation shall be implemented to exhaust the significant data potential of the resource under observation by a Native American consultant. Archaeological and Native American monitoring shall be conducted for ground disturbing construction activities.

If the site is determined insignificant, no capping and or further archaeological investigation shall be required. The results and recommendations of the Phase II study shall determine the need for construction monitoring, which shall be implemented as identified.

In addition, the following mitigation is required to prevent impacts to unidentified cultural resources that may be encountered during construction activities:

CUL-3 **Archaeological and Native American Construction Monitoring.** Archaeological resource monitoring shall accompany any construction trenching and excavation within the project area. A Cultural Resource Monitoring Plan shall be developed and approved by the City of Morro Bay which will include the following elements:

a. A pre-construction archaeological workshop shall be conducted by a qualified archaeologist in order to educate construction personnel as to the type of cultural material that may be encountered;
b. Provision of an opportunity for review of and comment on the contents and implementation of the Prehistoric Cultural Resource monitoring plan by a Native American representative(s); and
c. Implementation of a restriction that results of all surveys, construction or shared information related to the Native American community shall be kept in strict confidentiality.

CUL-4 **Stop Work.** If buried cultural materials are encountered during construction, work in the area shall stop until a City-approved archaeologist can evaluate the nature and significance of the find.

Findings

Implementation of Mitigation Measures CUL-1 and CUL-2, including all recommended measures identified as part of the Phase II subsurface archaeological testing program or subsequent reports, and compliance with the provisions of State Health and Safety Code 7050.5, would reduce potential impacts to cultural resources to a less than significant level.

VI. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Setting

The project site is generally located within the southernmost portion of the Coast Range Geomorphic Province of California. It is regionally dominated by the Franciscan formation, a heterogeneous assemblage of oceanic and terrigenous rock units that form the core complex of the Coast Range. The Franciscan complex consists of mainly marine sandstone that is interbedded with chert.

The project site is located in the northwestern portion of the City of Morro Bay, adjacent to the harbor. In the immediate vicinity of the project site, alluvium has been deposited in tidal flats at the mouth of Morro Creek where it enters Morro Bay. To the west, the prominent geologic feature is Morro Rock, a volcanic unit composed of dacite. Dune deposits comprise the project site and can be found along the beaches and the sand spit where the transportation of sand is an ongoing process. According to the Morro Bay State Park Marina Renovation and Enhancement Project Environmental Impact Report (2008), littoral transport of beach sand primarily circles throughout the bay with predominantly onshore and offshore movement supplemented by sand transport parallel to the shoreline in both the north and south directions.

A soil survey, prepared by the U.S. Department of Agriculture, Natural Resource Conservation Service, shows that dune land soil underlies over 98 percent of the project site (NRCS, 2008). Dune land soil consists of hummocks, mounds, and hills of loose, wind deposited quartzitic marine sand. The project site has low shrink-swell potential and good drainage and permeability. It is highly susceptible to wind erosion and slightly susceptible to sheet and rill erosion by water. In addition, dune land soil creates moderate to high potential for liquefaction activity during an earthquake (NRCS, 2008).

In general, the project site is situated within a region of complexly-faulted and folded basement rocks. While there are faults in the region, no active faults are known to pass beneath the project site or exist in the immediate vicinity. The closest active fault of local extent is the Los Osos Fault, located about five miles south of the project site. In addition to this fault, large faults that could reasonably cause ground shaking below the project site include the San Andreas, Hosgri, Nacimiento, and Rinconada faults. In addition to ground shaking, potential secondary seismic hazards that could result from the interaction of ground shaking with existing soil and bedrock conditions include liquefaction, settlement, and tsunamis or "tidal waves."

a. i) The City of Morro Bay is not underlain by any known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map (California Department of Conservation, 1990). It is also not identified among the cities or counties affected by Earthquake Fault Zones as of August 16, 2007 (California Department of Conservation, 2012). **Therefore, potential impacts would be less than significant.**

a. ii-iii) While there are no known active faults within or adjacent to the project site, it is located in a seismically active area (City of Morro Bay General Plan Safety Element, 1988). As such, potential threats to life and property from earthquakes are ground shaking and liquefaction. The primary seismic hazard within the project area would be ground shaking. Fault modeling conducted for the *Application for Certification* for the Morro Bay Power Plant (October, 2000) suggests conservative peak site horizontal ground accelerations as high as 0.33g; however, this

is less than California Building Code (CBC) 0.4g seismic design coefficient for Seismic Zone 4, in which the project would be located.

Secondary seismic hazards result from the interaction of ground shaking with existing soil conditions, and include liquefaction, settlement, and landslides. The presence of a high water table and unconsolidated sediments in the project vicinity could amplify ground shaking and result in liquefaction and settlement. According to the City's General Plan Safety Element (1988), the project site is located in an area that would be subject to moderate to high liquefaction potential in the event of a major earthquake. The Safety Element does not report the site at being at risk of landslides due to its relatively flat topography.

A seismic hazard cannot be completely avoided. However, its effect can be minimized by implementing seismic requirements specified by the California Building Code (incorporates the Uniform Building Code) and the California Division of Mines and Geology Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117 (revised 2008), which includes design and construction requirements related to fire and life safety and structural safety. **Compliance with the requirements of the California Building Code and the California Division of Mines and Geology Guidelines for Evaluating and Mitigating Seismic Hazards in California would ensure that impacts associated with seismic ground shaking, seismic-related ground failure, and liquefaction would remain less than significant.**

a.iv) According to the City's General Plan Safety Element (2001), the project site is not located in an area that would be subject to landslides due to its relatively flat topography. **This impact would be less than significant.**

b, c) The project site would be graded; however project construction would not require import or export of soil. The proposed project includes the development of a multi-use trail and clear span bridge across Morro Creek. The span would be installed from the top of the bank of either side of the creek and would not include support structures within the creek bed. In addition, the susceptibility of the surface soils to erosion from surface runoff is considered to be minimal due to the high permeability of the surface soils.

Development of the proposed project site would cumulatively disturb more than one acre. This would trigger the need for completion of a Stormwater Pollution Prevention Plan (SWPPP), in conformance with the National Pollutant Discharge Elimination System (NPDES), as part of standard regulatory compliance. **Implementation of this requirement would ensure that impacts remain less than significant.**

d) Soils subject to shrink-swell potential could cause damage to structures and/or pose a safety hazard during a seismic event or due to elevation changes over time. The NRCS soil survey (2008) for the project site indicates that the soil (Dune land soil) is characterized by low shrink-swell potential. **The relative stability of on-site soil, and compliance with the California Building Code, would result in less than significant impacts related to unstable and expansive soils.**

e) The project scope does not include development of facilities that would generate wastewater. **Therefore, no impacts would result.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

VII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Setting

Greenhouse gases (GHGs) are emitted by both natural processes and human activities. Of these gases, carbon dioxide (CO_2) and methane (CH_4) are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills.

Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. According to the Air Resources Board (ARB), some of the potential impacts in California of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (ARB, October 2007). While these potential impacts identify the possible effects of climate change at a global and potentially statewide level, in general, scientific modeling tools are currently unable to predict what impacts would occur locally.

The City of Morro Bay has not yet adopted GHG emissions thresholds for use in CEQA documents. In March 2012, the SLOAPCD adopted GHG thresholds in order to achieve goals outlined in the San Luis Obispo County EnergyWise Plan. There are three thresholds that can be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects. The three thresholds are described below:

- *Qualified GHG Reductions Strategies. A project would have a significant impact if it is not consistent with a qualified GHG reduction strategy that meets the requirements of*

the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,

- *Bright-Line Threshold. A project would have a significant impact if it exceeds the "bright-line threshold" of 1,150 metric tons CO2E/year; OR,*
- *"Efficiency" Threshold. A project would have a significant impact if the efficiency threshold exceeds 4.9 metric tons of CO2E/service population/year. The service population is defined as the number of residents plus employees for a given project.*

The Lead Agency may choose the threshold that is most applicable to the proposed project. Because the City of Motto Bay does not have an adopted GHG reduction strategy, and the project would not generate a service population, the threshold most appropriate for the proposed project is the bright-line threshold of 1,150 metric tons CO_2E per year.

Pollutant emissions quantification for the project was conducted using the California Emissions Estimator Model (CalEEMod) version 2013.2.1. For CalEEMod results, refer to Appendix B.

a) The use of construction vehicles and equipment during project construction would generate short-term GHG emissions. Potential GHG emissions from the project construction phase were estimated using the URBEMIS 2007 v9.2.4 model and an estimated based on an assumed maximum area of disturbance of 4.8 acres. Short-term GHG emissions are shown in Table 3-2 (see Appendix B for full CalEEMod results).

Table 3-2. GHG Emissions

	CO_2	CH_4	N_2O	CO_2E
Project Construction Phase	21.83 metric tons	<0.01 metric tons	<0.01 metric tons	21.96 metric tons
Amortized Construction Emissions [1]				0.73 metric tons/year

1. Project construction emissions are amortized over the estimated lifetime of the project (30 years), consistent with SLOAPCD recommended methodology for short-term GHG emissions.

Operation of the proposed project would not result in substantial GHG emissions. The project does not involve new land uses that would result in long-term on-site GHG emissions. The proposed pedestrian and bicycle facilities, in combination with the proposed interpretive educational facilities, would attract new users, but would not result in a substantial increase in vehicle trips that would generate new GHG emissions. In addition, by encouraging bicycle and pedestrian travel, the project may reduce motor vehicle trips to the area, and associated GHG emissions.

As shown in Table 3-2, project GHG emissions would be below the applicable SLOAPCD emissions threshold of 1,150 metric tons CO_2E. **Therefore, the proposed project would have a less than significant impact associated with GHG emissions.**

b) Assembly Bill (AB) 32, signed in September 2006, requires the State's global warming emissions to be reduced to 1990 levels by 2020. After completing a comprehensive review and update process, the ARB has approved a 1990 statewide GHG level and 2020 limit of 427 MMT

CO_2E (ARB, October 2007). Furthermore, AB 32 requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline.

Senate Bill (SB) 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing ARB to develop regional greenhouse gas emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP).

CalEPA's Climate Action Team (CAT) published the 2006 CAT Report which includes GHG emissions reduction strategies intended for projects emitting less than 10,000 tons CO_2E/year. In addition, the California Attorney General's Office has developed Global Warming Measures (2010) and OPR's CEQA and Climate Change (California Air Pollution Control Officers Association, 2008) document includes GHG reduction measures intended to reduce GHG emissions in order to achieve statewide emissions reduction goals. All of these measures aim to curb the GHG emissions through suggestions pertaining to land use, transportation, renewable energy, and energy efficiency. Several of these actions are already required by California regulations, such as:

- AB 1493 (Pavley) requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks.
- In 2004, ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.
- The Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989) established a 50% waste diversion mandate for California.
- Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).
- California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 33 percent of retail electricity sales from renewable energy sources by 2020, within certain cost constraints.
- Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.

The proposed project would be required to comply with State and local regulations intended to reduce GHG emissions from new development. Consistency with applicable State regulations and goals illustrates that the project would not conflict with the State's GHG-related legislation and would not contribute to the inability to meet reduction goals. In addition, the City of Morro Bay is currently in the process of developing a Climate Action Plan; however, this plan has not yet been adopted. **Therefore, the project would not conflict with any applicable plan, policy or regulation intended to reduce GHG emissions, and impacts would be less than significant.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Setting

Natural hazards, such as earthquakes, landslides, and flooding, have played an essential role in shaping the topography and landscape of Morro Bay, and become "hazards" when they disrupt or otherwise affect the lives and property of people. Human-caused hazards often occur as a result of modern activities and technologies. These potential hazards can include the use of hazardous materials and buildings that may be unsafe during a strong earthquake.

A number of federal and state agencies are responsible for the regulation of hazardous materials. The County of San Luis Obispo is responsible for enforcing state regulations, both in the City of Morro Bay and the County, governing hazardous substance generators, hazardous substance storage, and underground storage tanks (including inspections, enforcement, and removals). The San Luis Obispo County Environmental Health Department regulates the use, storage, and disposal of hazardous substances in the County by issuing permits, monitoring regulatory compliance, investigating complaints, and other enforcement activities.

a) The proposed project includes a pedestrian boardwalk and separate bike path with a span over Morro Creek, bicycle parking, educational interpretive facilities, a paved crosswalk at the intersection of Embarcadero Road and Coleman Drive, and non-irrigated planting areas. These uses would not create a significant hazard to the public/environment involving hazardous materials. Construction materials, including fuels and oils, may be transported during construction, in compliance with existing regulations. **Therefore, impacts would be less than significant.**

b) The proposed project does not involves any uses that would create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Although a limited amount of hazardous materials would be present at the project site (namely oil and gas for construction equipment and vehicles) during normal construction conditions, hazardous materials would not pose a substantial risk. However, there is the potential for spills to occur at the project site, which would potentially

affect sensitive areas, such as Morro Creek. **Therefore, impacts would be potentially significant. Mitigation Measure HAZ-1 would reduce the potential for incidental exposure to a less than significant level.**

c) The proposed project would be located within approximately 0.3 mile of Morro Bay High School. However, the project uses and activities would not generate hazardous materials, substances, or waste. Proposed uses include a pedestrian boardwalk and separate bike path with a span over Morro Creek, bicycle parking, educational interpretive facilities, a paved crosswalk at the intersection of Embarcadero Road and Coleman Drive, and non-irrigated planting areas. **Therefore, impacts would be less than significant.**

d) The project site has been used historically for open space, paved and dirt parking, and roadway (Embarcadero Road). These historic uses would not result in residual contamination at the project site. The project site is not included on or eligible for Department of Toxic Substances Control (DTSC) listing pursuant to 65962.5, and proposed uses on the project site would not create a significant hazard to the public or the environment. **Project impacts related to hazardous materials would be less than significant.**

e, f) The proposed project is not located within the vicinity of an airport, airport land use plan, or private airstrip. Therefore, the project would not result in exposure of project occupants to hazards from such facilities. **No impacts would occur.**

g) Construction of the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. **No impacts would occur.**

h) The fire hazard potential of an area is determined by the relative amount of fuel loading, fire weather, and slope. The project site is not located within a high fire hazard area, as the project site is relatively flat, and consists of sandy, unvegetated near-shore areas, and lightly vegetated dunes. **Impacts would be less than significant.**

Mitigation

HAZ-1 **Spill Prevention and Countermeasure Plan**. Prior to issuance of a grading permit, the contractor shall prepare a Spill Prevention and Countermeasure Plan (SPCP) for the project. The SPCP will include information on the nature of all hazardous materials, such as oil and gas, solvents, cleaning agents, etc., that will be used on-site, and identify proper handling, storage, collection, and disposal measures for such materials. The SPCP will also identify clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic cleanup will be provided in the SPCP.

Findings

Implementation of Mitigation Measure HAZ-1 would reduce impacts to a less than significant level.

IX. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐

IX. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Setting

Morro Bay contains approximately 2,100 acres of water surface at low tide and approximately 6,500 acres at high tide, resulting in approximately 980 acres of tidal mud flat and approximately 470 acres of salt marsh. At low tide, most of the water in the Bay is found in the Main, Navy, and Morro channels, three relatively contiguous channels that extend approximately two nautical miles into the Bay from the terminal ends of the breakwaters, which form the entrance to Morro Bay Harbor (Morro Bay State Park Marina Renovation and Enhancement Project EIR, 2008).

The water quality of Morro Bay is affected by presence of nutrients, toxic substances, hydrocarbons, bacteria, heavy metals, suspended sediment, and turbidity. Elevated levels of bacteria present a potential health threat to those who utilize the Bay for recreational purposes, can impact commercially-harvested oyster beds, and may affect groundwater wells in the upper and lower aquifers beneath Los Osos. Nutrient enrichment, primarily nitrogen and occasionally phosphorus, is of concern in the estuary and the watershed. Resulting algal blooms, which are often the result of excessive nutrients in the water body, have been a problem in Morro Bay. Reduction in freshwater flows during dry seasons disrupts the balance of salt water and freshwater, and decreases in summer flow reduces the flushing (increases flushing time), thereby contributing to the build-up of pollutants. Increased temperatures and reduced dissolved oxygen also may be associated with the loss of freshwater flow (Morro Bay State Park Marina Renovation and Enhancement Project EIR, 2008).

Studies by various authors over the past 25 years suggest that Morro Bay is subjected to a relatively rapid increase in sedimentation. These studies provide estimates of sediment loadings and accumulations to the bay. One of these studies estimated that Morro Bay has lost more than one quarter of its tidal volume in the last 100 years. In that study, it was estimated that under "normal" circumstances, the Bay would naturally fill in with sediment in several thousand years but, if the recent accelerated rates continue, that period would be reduced to 300 years. Other studies have reached similar conclusions regarding sediment yields, and it is likely that structural changes to the mouth of the estuary in addition to the dynamics of outgoing tidal velocity and incoming sediment transport are factors resulting in this phenomenon. Morro Bay, Los Osos and Chorro Creek are listed as "impaired waters" under the federal Clean Water Act, Section 303(d). These water areas, and the Morro Bay Estuary, are also listed as waters impaired by sedimentation/siltation, and are the subject of a Total Maximum Daily Load (TMDL), which is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. The maximum annual input allowed under the TDML for Morro Bay is 34,885 tons per year (Morro Bay State Park Marina Renovation and Enhancement Project EIR, 2008).

The majority of the project site is designated by the Federal Emergency Management Agency (FEMA) as a "Zone X" flood zone. This zone has a 2% annual chance of flooding and a 1% chance of annual flooding to depths less than one foot. The Morro Creek section of the project site is designated by FEMA as "Zone AE." This zone has a 1% annual chance of flooding (100-year flood) in a given year, and is contained within the banks of Morro Creek.

a) The project would not violate water quality standards or waste discharge requirements. To meet water quality and habitat protection goals for the City of Morro Bay and the Morro Bay Estuary, the proposed facilities would be designed to allow for percolation alongside the expanded bicycle and pedestrian facilities, reducing surface runoff and minimizing stormwater runoff into Morro Bay. In addition, the project would be subject to the requirements of the City's Stormwater Management Plan, which would further reduce potential impacts to water quality. The project would not generate wastewater. **Therefore, potential impacts would be less than significant.**

b) The proposed project includes a pedestrian boardwalk and separate bike path with a span over Morro Creek, bicycle parking, educational interpretive facilities, a paved crosswalk at the intersection of Embarcadero Road and Coleman Drive, and non-irrigated planting areas. None of these proposed uses would consume water or increase water demand. **Therefore, no impact would occur.**

c, d) To meet water quality and habitat protection goals for the City of Morro Bay and the Morro Bay Estuary, the proposed facilities would be designed to allow for percolation alongside the expanded bicycle and pedestrian facilities, reducing surface runoff and minimizing stormwater runoff into Morro Bay. The small amount of surface area of the paved pathways, and available permeable ground surface adjacent to the multi-use pathways, would maintain the pre-project hydrological runoff patterns of the project site. Therefore, the project would not significantly alter the drainage patterns of the site or result in substantial erosion or flooding. In addition, the project features a clear span bridge and would not alter the course of an existing stream or river. The proposed bridge would reduce unauthorized crossings of the creek,

reducing erosion and sedimentation associated with unauthorized crossings. **Therefore, potential impacts would be less than significant.**

e) The proposed project would not result in an increase in stormwater runoff or a substantial change in stormwater flow; therefore, the project would not over-capacitate existing stormwater infrastructure. The small amount of surface area of the paved pathways, and available ground surface adjacent to the pathways, would maintain the pre-project hydrological runoff patterns of the project site. In addition, the project would be subject to the requirements of the City's Stormwater Management Plan, which would further reduce potential impacts to water quality.

Development of the proposed project site would cumulatively disturb more than one acre. This would trigger the need for completion of a Stormwater Pollution Prevention Plan (SWPPP), in conformance with the National Pollutant Discharge Elimination System (NPDES), as part of standard regulatory compliance. **Implementation of this requirement, and the low impact development standards, would ensure that impacts remain less than significant.**

f) The proposed project would not provide new motor vehicle parking or other uses that could potentially deposit toxic substances that would be washed into Morro Creek, the bay or ocean, during a rain event. The project would connect with existing unpaved parking areas along Embarcadero Road on the north and south sides of Morro Cree, facilitating the use of those parking areas for users of the proposed trail; however, the project would not result in a substantial increase in existing traffic volumes in the local street system, nor would the project attract new unique vehicle trips to the project area, as compared to the existing trail system. In addition, by encouraging bicycle and pedestrian travel, the project may reduce motor vehicle trips to the area. The proposed project also does not have any in-water activities. **Therefore, potential impacts would be less than significant.**

g) The proposed project does not include the development of new housing; therefore, the project would not place housing within a 100-year flood zone. **No impacts would result.**

h) The majority of the project site is designated by the Federal Emergency Management Agency (FEMA) as a "Zone X" flood zone. This zone has a 2% annual chance of flooding and a 1% chance of annual flooding to depths less than one foot. The proposed project would place a clear span bridge across Morro Creek, which is designated by FEMA as Zone AE, a 100-year flood zone. The proposed bridge would provide 10.4 feet of clearance from the creek bed, and would not involve the construction of any support structures within the creek bed. The 100-year flood elevation at the bridge is 15.8 feet, and up to 16.1 feet, accounting for predicted sea level rise. As such, the proposed bridge, with a lower chord of 17.5 feet (refer to Appendix A), would not impede the flow of water during a 100-year flood event. The width of the flood path for a 100-year flood with sea level rise is approximately 101 feet. The bridge span would be approximately 130 feet, which would allow its footing to remain in un-submerged areas. The rest of the proposed project would place interpretative educational structures and bicycle/pedestrian facilities within a designated Zone X, which has a 2% annual chance of flooding and a 1% chance of annual flooding to depths less than one foot. Due to the small size of the educational structures, their potential to redirect flood flows would be negligible. **Impacts from development of the project would be less than significant.**

i) According to the San Luis Obispo County Dam Inundation Map, the City of Morro Bay is not at inundation risk in the event of dam failure (San Luis Obispo County, Dam Inundation Map, 1999). In addition, there are no levees within the project area. **Therefore, no impacts would occur.**

j) According to the City's Safety Element, the City is at risk in the event of a tsunami due to its direct proximity to the ocean and bay. As discussed therein, the most feasible protection in the event of a tsunami is a warning system and evacuation plan. Warning is handled by the United States Weather Service, while the Safety Element outlines safety preparedness measures. Additionally, the proposed bridge will be designed to support a 40,000 pound vehicle and will provide additional emergency access between North and South Morro Bay. The proposed project is not subject to a seiche, as it is not within close proximity to a fully, or semi-enclosed body of water, that is distinct from the Morro Bay ocean front or bay. **Therefore, impacts are less than significant.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

X. LAND USE AND PLANNING: Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Setting

The proposed project is located within the City of Morro Bay. The project site is designated by the City of Morro Bay General Plan as Open-Space. The site is adjacent to the existing MBPP to the east, Morro Creek to the north, Morro Bay to the south, and a dune restoration area designated as open space to the west.

a) The proposed project would function as a recreational and educational area, and would provide pedestrian and bicycle connectivity from north Morro Bay to the existing boardwalk along Embarcadero Road and Coleman Drive. The project would not physically divide an established community. **Therefore, no impact would occur.**

b) The proposed project is a multi-use trail and bridge that would consist of a multi-use paved path, pedestrian boardwalk, an approximately 130 foot long clear span pre-engineered/pre-fabricated bike and pedestrian bridge, interpretive educational facilities, bicycle parking and non-irrigated native planning areas. As such, the project development is consistent with the City of Morro Bay land use designations for the parcel of Open-Space, Commercial/ Recreational Fishing and Planned Development (QA-2/CF/ PD).

This area is also designated by in the City of Morro Bay Coastal Land Use Plan as mixed use area H (Local Coastal Plan [LCP], Chapter II). The mixed use area H designation supports current City zoning designations as it states, "Within this area, uses allowable under any of the applicable land use and zoning designations are encouraged as primary uses of the area. Open space uses or commercial fishing support facilities may be proposed either singly or in a mixed use pattern." Therefore, the proposed development is also consistent with the City Coastal Land Use Plan. In addition, the project would require a Coastal Development Permit (CDP), which would ensure that the project is consistent with the California Coastal Act (Public Resources Code Division 21).

LCP in Section XII of the Morro Bay Coastal Land Use Plan. And specifically Policies 11.14 and 11.15 require buffers surrounding wetlands and non-urban streams to be a minimum of 100 feet, and buffers surrounding urban streams to be 50 feet, and prohibit structures within the stream corridor and environmentally sensitive habitat, with an exception for bridges when support structures are located outside the critical habitat areas and no alternative route/location is feasible. In addition, the City of Morro Bay Municipal Zoning Ordinance, Section 17.40.040, requires a Conditional Use Permit (CUP) for bridge projects within a stream corridor where no alternative route/location is feasible and support structures are sited outside of the environmentally sensitive habitat.

The project would include a CUP for the proposed bridge, and is not in conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The project is designed to improve connectivity between existing recreational resources, and encourage users to stay in designated areas and discourage unauthorized crossings of Morro Creek that adversely affect stream and wetlands resources. Accordingly, the project is less environmentally damaging to these resources when compared to the existing condition without the bridge, and

no less damaging alternative creek crossing location is available. **Therefore, potential impacts would be less than significant.**

c) The proposed project is not located within an area subject to a Habitat Conservation Plan or Natural Community Conservation Plan. The project site is not within any environmentally sensitive habitat area, as defined by the Land Use Element of the City's General Plan (1993). **No related impacts would occur.**

Mitigation

Impacts to land use would be less than significant. No mitigation is required.

Findings

Impacts would be less than significant without mitigation.

XI. MINERAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Setting

The landscape of San Luis Obispo County contains a variety of mineral resources. Mining of copper and coal has occurred in the County since the mid-1800's, and chromite, manganese and mercury were mined in the early 1900's. Quarrying on Morro Rock provided the materials for construction of a jetty closing the north entrance of the harbor and a breakwater protecting the south entrance. In recent years, the principal developed mineral resources of San Luis Obispo County have been gypsum, clay, natural gas, petroleum, mercury, construction stone, sand, and gravel. Of these resources, sand and gravel remains a principal mineral resource in the county to this day. In addition to providing necessary raw materials, mineral extraction significantly contributes to the regional economy.

a) Mineral or petroleum extraction does not occur, and is not proposed to occur, on the project site. Furthermore, the State geologist has not designated a mineral resource area of statewide or regional significance pursuant to Sections 2710 et seq. of the Public Resources Code (the Surface Mining and Reclamation Act) in the vicinity of the proposed project. **No impacts would result.**

b) Based on a review of San Luis Obispo County GIS data and the Mineral Land Classification Map prepared by the State of California Division of Mines and Geology, there are no existing or historical mineral extraction operations in or adjacent to the project site. **Therefore, no impacts would result.**

Mitigation

No mitigation measures are required.

Findings

No impacts to mineral resources would occur as a result of the proposed project.

XII. NOISE: Would the project result in:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity due to construction activities above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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?	☐	☐	☐	☒

XII. NOISE: Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting

Community noise levels are typically measured in terms of A-weighted decibel (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. Equivalent noise level (Leq) is the average noise level on an energy basis for a specific time period. The duration of noise and the time of day at which it occurs are important factors in determining the impact of noise on communities. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (Ldn) account for the time of day and duration of noise generation. These indices are time-weighted average values equal to the amount of acoustic energy equivalent to a time-varying sound over a 24-hour period.

The City of Morro Bay General Plan Noise Element contains noise thresholds for land use compatibility near transportation noise sources. According to the Noise Element, the maximum acceptable noise exposure from transportation noise sources is 60 dB at most uses, and 70 dB at playgrounds and parks. In addition, the City of Morro Bay's Zoning Ordinance contains noise requirements with general noise limitations in Chapter 17.52, Performance Standards. The noise ordinance also covers operational hours, criteria for review of development projects, noise mitigation, and requirements for noise reduction measures and acoustical analyses.

Noise-sensitive land uses located near the project site include Morro Dune RV Park north of the project site and recreational uses associated with the nearby seashore areas. According to the City's General Plan, the existing noise environments in the City of Morro Bay are composed of sounds from many sources. The most substantial sources of noise within Morro Bay are related to traffic and transportation.

a) Noise generated by proposed uses on the project site would be minimal. The multi-use pedestrian and bicycle trail would generate low-level sounds such as people talking or dogs barking. **Therefore, impacts would be less than significant.**

b, d) Construction activity at the project site would temporarily increase noise levels beyond the current ambient noise levels in the surrounding area. Construction activity would entail minimal finish grading and clearing, paving, installation of a pre-fabricated/pre-engineered clear span bridge and landscaping. The main sources of noise during construction activities would be the heavy machinery used in grading. There would be no pile driving necessary to complete project construction. Maximum noise levels associated with the use of heavy equipment at construction sites can range from about 74 to 85 dBA at 50 feet from the source,

depending upon the types of equipment in operation at any given time and phase of construction (FHWA, 2006). The Morro Dunes RV Park, located north of the proposed site across Morro Creek, as well as existing residences located approximately 1,400 feet east of the project site, are noise-sensitive uses that may experience a short-term ambient noise increase during construction.

In addition, graders and compactors used during project construction could generate groundborne vibration or groundborne noise levels that may affect nearby residents to the east of the project site, or the existing RV Park located north of the project site across Morro Creek. **Construction-related noise and vibration impacts would be temporary, but are potentially significant. Mitigation Measures NOI-1 through NOI-3 would reduce construction-related noise and vibration impacts to a less than significant level.**

Required pre-construction nesting bird surveys (Mitigation Measure BIO-5(a) through BIO-5(c)) would ensure that temporary noise related to construction activities would not result in an impact to these biological resources.

c) The area presently generates low amounts of noise due to traffic. The primary noise source affecting the project site is traffic on Coleman Drive and Embarcadero Road. As a result of increased bike and pedestrian trail connectivity, there is a possibility that more vehicles trips will be attracted to the area. However, since the proposed project would not add new parking or roadway facilities, an increase in vehicle trips would be minimal and any additional vehicles would continue to be dispersed amongst existing parking facilities in the area, and would not collect in a new centralized area. The additional trail connection and bridge would attract additional pedestrians and bicyclists, which would not result in a substantial increase in existing area noise levels. The proposed project would not significantly expose people to severe noise levels during project operations. **Impacts would be less than significant.**

e, f) The proposed project is not located within the vicinity of an airport, airport land use plan, or private airstrip. Therefore, the project would not result in exposure of project occupants to noise from such facilities. **No impacts would occur.**

Mitigation

NOI-1 **Construction Timing**. Construction activities at the site shall be limited to the daytime hours between 7:00 a.m. to 6:00 p.m. Monday through Friday, with no construction on State recognized holidays.

NOI-2 **Construction Equipment Maintenance/New Construction Equipment**. Newer construction equipment shall be used whenever possible. All construction equipment shall be maintained per manufacturer's specifications.

NOI-3 **Acoustical Shelters/Sound Blankets**. Power-generating and other noise-generating machinery used for construction shall be partially or completely surrounded by temporary acoustical shelters or covered with a sound blanket if within 300 feet of an existing residential unit or recreational vehicle.

Findings

Implementation of Mitigation Measures NOI-1 through NOI-3 would reduce impacts to a less than significant level.

XIII. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Setting

As of the 2010 census, Morro Bay had a population of 10,234 residents. This figure is down from 10,350 residents at the 2000 census.

a) The proposed project does not involve residential development, and would not induce population growth. **Therefore, no impacts would result.**

b, c) The project site is currently undeveloped and would not displace existing housing or people. **Therefore, no impacts would result.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

XIV. 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, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

Setting

Police protection is provided by the Morro Bay Police Department. Police officers operate out of the police headquarters located at 870 Morro Bay Boulevard. Patrol officers work on a 3/12 work shift, which allows the Department to maximize patrol staffing on any given shift. Each patrol shift is supervised by a sergeant who acts as the Watch Commander.

Fire protection services are provided by the Morro Bay Fire Department. Fire personnel operate from one fully staffed fire station located at 715 Harbor Street and one non-staffed station located at 460 Bonita Street. The City operates two fire engines, one 75' ladder truck, one rescue vehicle, one command vehicle, two utility vehicles, a USAR trailer, and a mass casualty trailer.

a,i-iii, v) The proposed project would not result in a population increase such that new or expanded fire and police protection facilities would be needed. Additionally, the proposed bridge will be designed to support a 40,000 pound vehicle and will provide additional emergency access between North and South Morro Bay. Similarly, the project would not generate additional students; therefore, it would not create the need for new or expanded school facilities. Finally, the project would not impact demand on library services. **Therefore, the project would result in no impacts on schools, and less than significant impacts to fire and police protection.**

a, iv) The project would attract new users, consistent with the project objectives, and would improve access to beach recreational areas, including Coleman Park, Moro Bay State Park, and Morro Beach. However, the proposed pedestrian and bicycle path would be designed to accommodate anticipated recreational uses, and the proposed improvements would not result in substantial adverse physical impacts to existing parks or other recreational facilities. The project is designed to improve connectivity between existing recreational resources, and encourage users to stay in designated areas and discourage unauthorized crossings of Morro Creek. Overall, impacts to existing parks and recreational facilities would be **less than significant.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

XV. 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?	☐	☒	☐	☐

Setting

The City of Morro Bay offers a wide variety of recreational opportunities to both residents and tourists. Planning of the Marina is guided by the Morro Bay State Park General Plan, City of Morro Bay General Plan and the Local Coastal Plan. Morro Bay also has extensive outdoor recreation facilities including sports fields, a roller hockey rink, a skate park, bicycle riding and basketball courts. Morro Bay, Morro Strand and Montana de Oro State Parks offer camping facilities, passive recreational opportunities, and active recreational facilities. In addition, San Luis Obispo County operates the Morro Bay Golf Course in Morro Bay State Park. The project site is adjacent to Coleman Park, Morro Bay State Park, and Morro Beach, but the site does not currently provide recreational opportunities for the public.

a) The project would attract new users, consistent with the project objectives, and would improve access to beach recreational areas, including Coleman Park, Morro Bay State Park, and Morro Beach; however, the proposed pedestrian and bicycle path would be designed to accommodate anticipated recreational uses, and the proposed improvements would not result in an increase in use that would cause a substantial physical deterioration of existing neighborhood or regional parks or other regional recreational facilities. The project is designed to improve connectivity between existing recreational resources, and encourage users to stay in designated areas and discourage unauthorized crossings of Morro Creek. Overall, impacts to existing recreational facilities would be **less than significant.**

b) The project would include a pedestrian boardwalk and separated bike path that would extend the existing Morro Bay Harborwalk across the existing parking area and crossing on Embarcadero Road northward by 1,200 feet. This would include an approximately 130 foot long, clear span, pedestrian and bicycle bridge, which would extend the pedestrian boardwalk and bike path across Morro Creek to connect to north Morro Bay on Atascadero Road (State Route 41). The recreational path would include interpretive educational areas. The pathway would provide recreational amenities for nearby residents, as well as improve access to existing shoreline recreation areas, which is consistent with the Morro Bay General Plan's Access and Recreation Element Policies AR-1 and AR-3.

Construction of the recreational path and proposed span may have an adverse physical effect on the environment; however, physical impacts from the construction of these recreational facilities are discussed elsewhere in this document and mitigation measures are recommended to minimize potential impacts.

Mitigation

Mitigation measures that apply to the proposed project are described throughout this IS-MND. No additional mitigation measures are required.

Findings

With implementation of mitigation measures described through this IS-MND, no significant impacts related to recreational resources would occur.

XVI. TRANSPORTATION/TRAFFIC: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Setting

The City of Morro Bay is primarily a residential and commercial community that is bisected by Highway 1, a major regional roadway. Another major regional roadway, Highway 41, carries travelers from east of the city and terminates in Morro Bay. The two roadways that carry the highest levels of traffic in the community are Highway 1 and Main Street. In general, the traffic flow on these roads operates well during most periods. The majority of traffic generated in the City is on the local residential street level, which then flows to the arterials connecting to adjacent highways. Access to the project area would primarily be via Coleman Drive and Embarcadero Road, which are the only two roadways to the site. These roads currently carry moderate traffic volumes, with slower vehicular traffic speeds.

a,b) The project would not result in an increase in existing traffic volumes in the local street system. The proposed project is an extension of the existing multi-use bike and pedestrian trail system that is currently in place along Embarcadero Road and Coleman Drive. The existing unpaved portion of Embarcadero Road and the unpaved informal parking lot, near Morro Creek, would remain unchanged by the project. The proposed pedestrian and bicycle facilities, in combination with the proposed interpretive educational facilities, would attract new users, but would not result in a substantial increase in unique vehicle trips to the project area, as compared to the existing trail system. In addition, by encouraging bicycle and pedestrian travel, the project may reduce motor vehicle trips to the area. As a result, the project would not either individually or cumulatively reduce the level of service on Coleman Drive, Embarcadero Road, or any other area roadway. **Therefore, potential impacts would be less than significant.**

c) The project site is not located in the vicinity of an airport. **The project would result in no impacts to air traffic patterns.**

d) The proposed project includes an expanded, separated, Class I bike path and dedicated pedestrian walkway for visitors and residents that would reduce the interface between vehicles, pedestrians, and bikes. The multi-use trail would cross the vehicle roadway at four points; the informal parking lot adjacent to Morro Creek, across Embarcadero Road at the intersection of Embarcadero Road and Coleman Drive, across Coleman Drive at the intersection of Embarcadero Road and Coleman Drive, and across the parking entrance in front of MBPP. The placement of these crosswalks will be in compliance with the City municipal code 10.36.010, which states "…no crosswalk shall be established in any block which is less than four hundred feet in length and such crosswalk shall be located as nearly as practicable at midblock." The design of the crosswalks will be in compliance with the City General Plan Circulation Element Policy C-5 which states, "Pedestrian crossings of streets shall be designed to minimize hazards to the pedestrian." It will also be in compliance with Program C-5.1 which states, "the City should provide crosswalk stripes at intersections where pedestrian traffic is heavy." **Therefore, the project does not include design features that would result in new hazards. Potential impacts would be less than significant.**

e) The proposed project would not diminish existing emergency access to Coleman Drive or Embarcadero Road, and will be designed in accordance with City of Morro Bay and Morro Bay Fire Department requirements, and according to California Fire Code. Additionally, the bridge will be designed to support a 40,000 pound vehicle and will provide additional emergency

access between North and South Morro Bay. **Compliance with these City and State requirements would ensure that no impacts would result.**

f) The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This multi-use trail project will be designed in compliance with bicycle safety policy as outlined in the City General Plan, Programs C-12.3, C-9.6, and C-9.7, which suggest that pedestrian and bike paths should be separate facilities, bikeway markings and signage should be clear, visible and easy to understand, and efforts be made during the design process to reduce conflicts between bicycles, pedestrians, and motor vehicles. Trail design for the proposed project is in compliance with the Americans with Disabilities Act, as well as Morro Bay General Plan Policy C-3, which states that "handicap access should be provided where feasible pursuant to State Disabled Access Regulations." In addition, no public bus routes or stops would be affected by the project. **Therefore, potential impacts would be less than significant.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting

a, b, e) The proposed project would not include any facilities that would generate wastewater. **Therefore, no impact to existing wastewater treatment facilities would occur.**

c) The proposed project would not result in an increase in stormwater runoff or a substantial change in stormwater flow. The small amount of surface area of the paved multi-use pathways, and available permeable ground surface adjacent to the pathways, would maintain similar pre-project hydrological runoff patterns. The project would not require the construction of additional drainage facilities or expansion of existing facilities. **Therefore, potential impacts would be less than significant.**

d) The proposed project is a multi-use trail and bridge that would consist of a multi-use paved path, pedestrian boardwalk, an approximately 130 foot long clear-span pre-engineered/pre-fabricated bike and pedestrian bridge, two interpretive stations, and non-irrigated native planning areas. The project does not include new uses that would consume additional water supplies. **Therefore, there would be no impact to those water supplies.**

f,g) The proposed project would be served by the Cold Canyon Landfill. This landfill has adequate capacity to serve the project as it is currently being expanded to provide service through the year 2040 (Cold Canyon Landfill Expansion EIR, 2012). Given the size and nature of

the proposed project, would not generate substantial amounts of solid waste. In addition, the project would comply with applicable federal, state and local regulations regarding solid waste. **Therefore, potential impacts would be less than significant.**

Mitigation

No mitigation measures are required.

Findings

Impacts would be less than significant without mitigation.

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

a) The project is consistent with the Local Coastal Program (which includes the General Plan, Local Coastal Plan and zoning regulations). With incorporation of the mitigation measures in this report, the project does not have the potential to significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or

wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory, as evidenced in the preceding discussions. **This impact would be less than significant.**

b) As described throughout this report, the project is not expected to result in any significant loss or fragmentation of habitat, or other significant long-term environmental impacts. Instead the project would provide improved pedestrian and bicycle connectivity between the Embarcadero and north Morro Bay, provide new recreational opportunities for residents and visitors, and enhance the existing habitat by reducing the amount of human disturbance within the stream channel because once installed, the proposed bridge would enable pedestrians to cross over the creek without actually entering it. Trash and debris within the channel are also likely to be reduced with project implementation. Short-term impacts associated with project development would be reduced to a less than significant level through implementation of mitigation measures for biological resources, cultural resources, and noise described throughout this report. **Therefore, implementation of mitigation measures described throughout this report would ensure that the project would not have significant cumulatively considerable impacts.**

c) The project does not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, as evidenced in the preceding discussions. **This impact would be less than significant.**

Mitigation

No additional mitigation measures are required.

Findings

Implementation of mitigation measures described elsewhere in this report would reduce project impacts to a less than significant level. No significant impacts would result.

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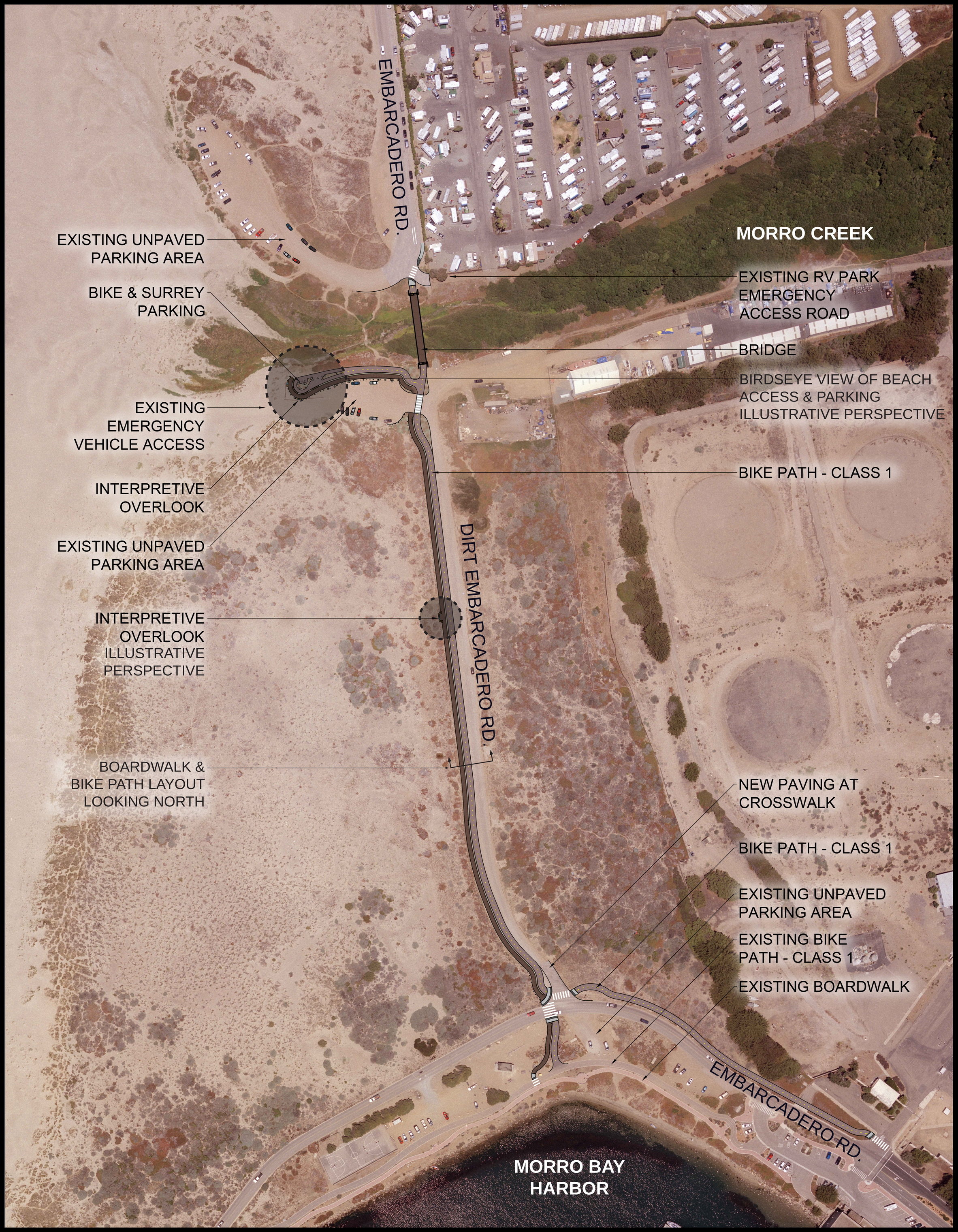
Appendix A

Project Design Specifications and Visual Simulations



MORRO CREEK MULTI-USE TRAIL | ILLUSTRATIVE PLAN

0 30 60 120

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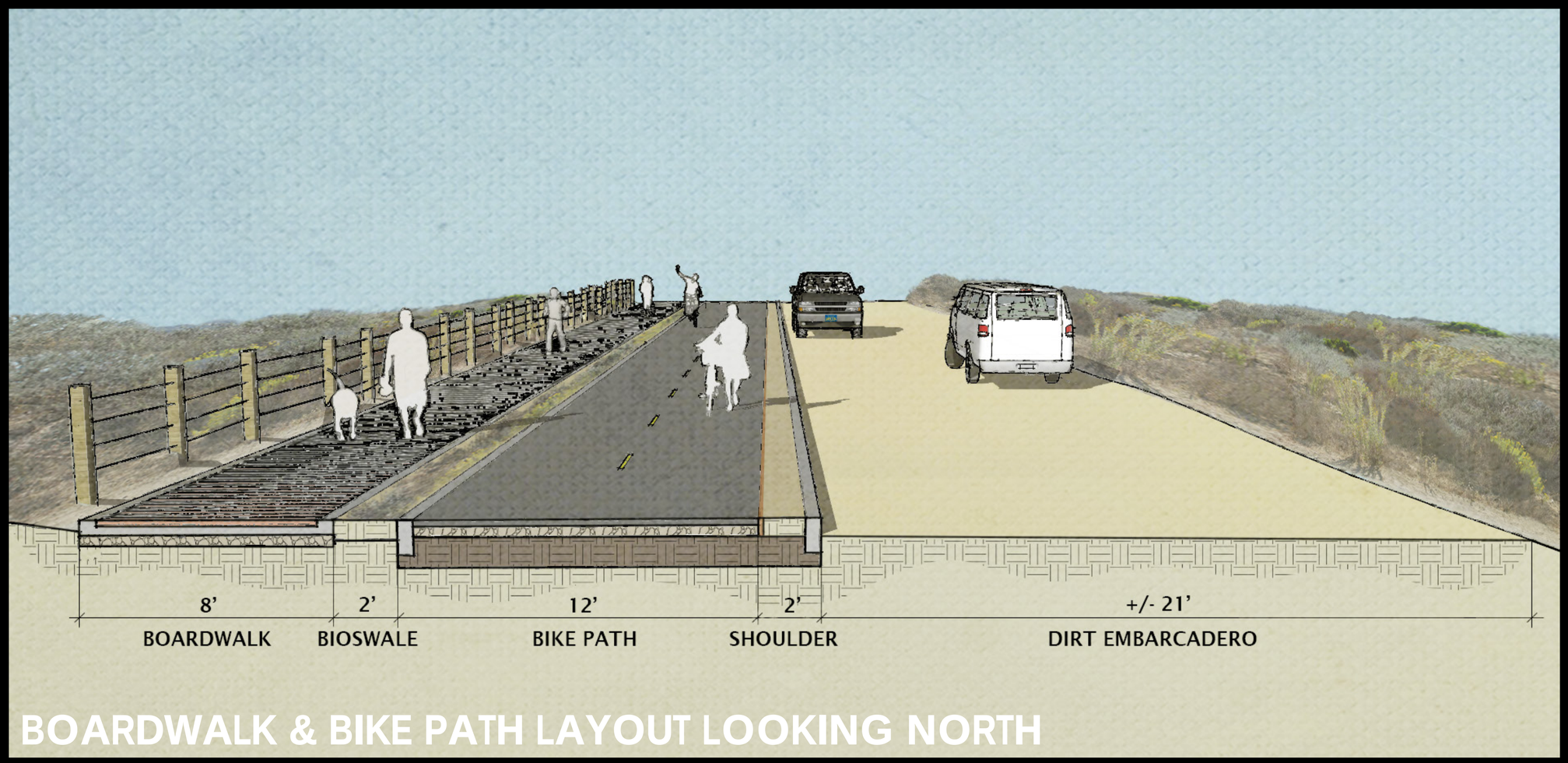
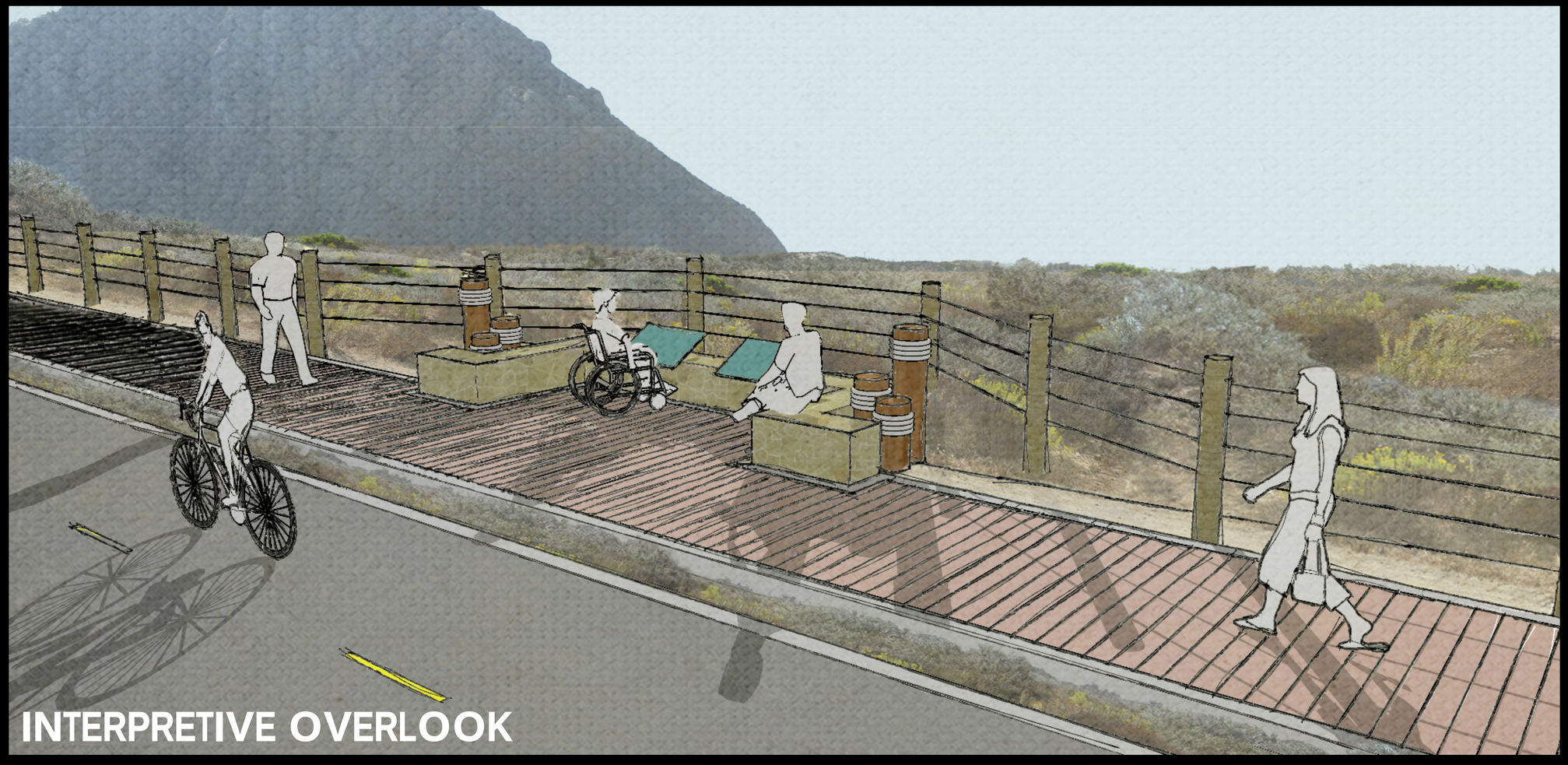


BOARDWALK & BIKE PATH LAYOUT LOOKING NORTH



INTERPRETIVE OVERLOOK

BIRDSEYE VIEW OF BEACH ACCESS & PARKING

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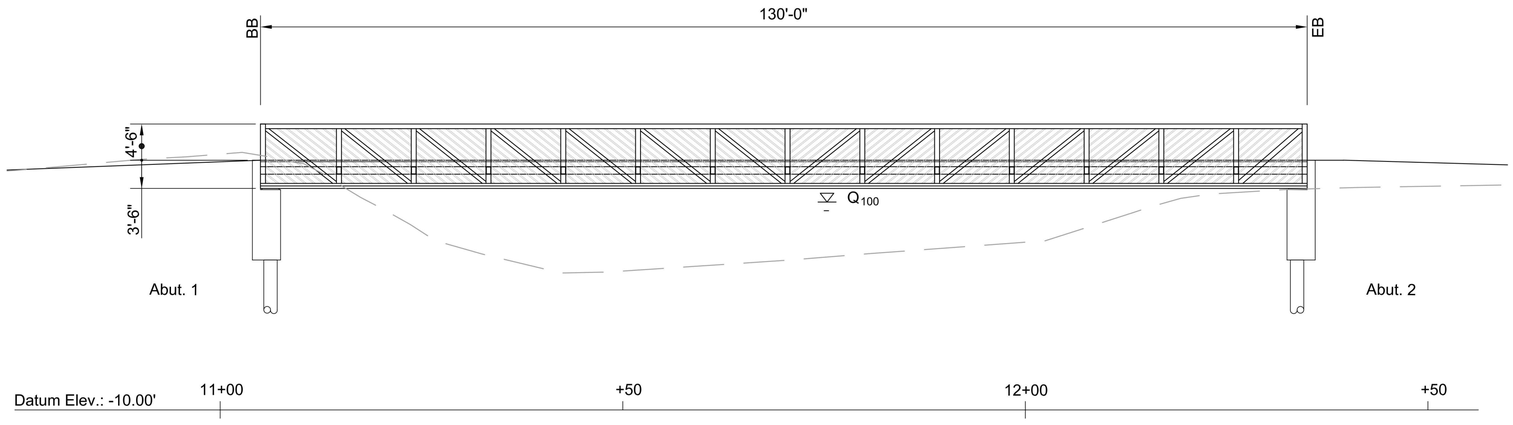
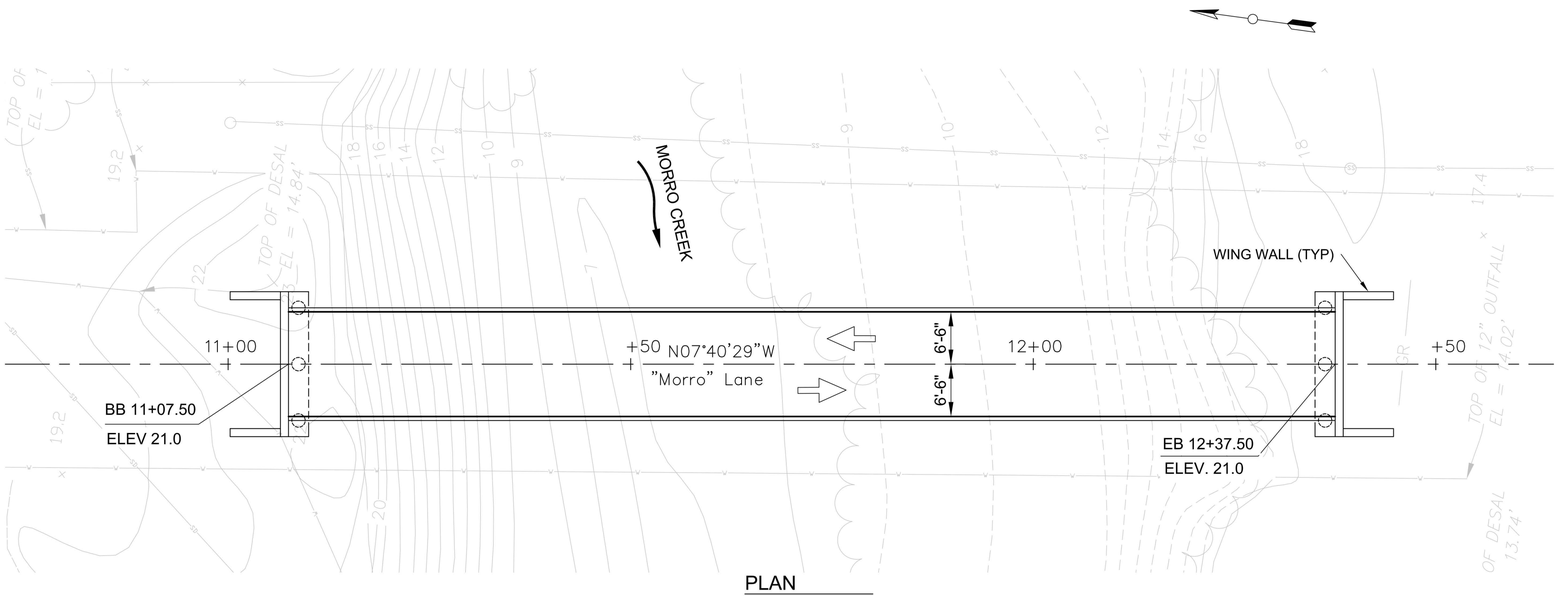
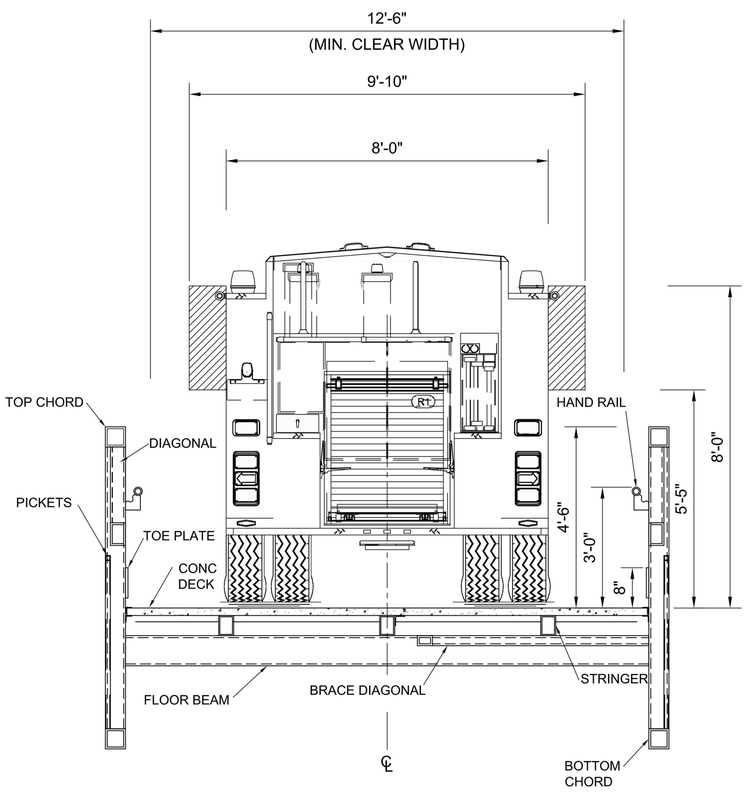


ELEVATION
SCALE: 1" = 10'-0"



PLAN
SCALE: 1"= 10'-0"



TYPICAL SECTION
No Scale

LIVE LOAD:

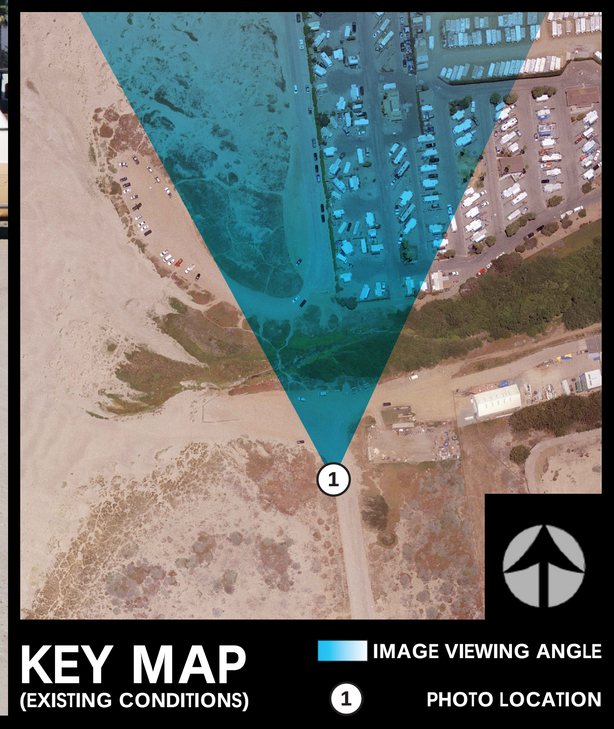
1. H20 VEHICULAR LOAD
2. 90 PSF PEDESTRIAN LOAD

HYDRAULICS DATA:

Condition	Elevation (ft. NAVD)	Top Width (ft.)
Q50 = 5,000 cfs	15.20	97.3
Q100 = 5,760 cfs	15.81	99.7
Q100 + Sea Level Rise	16.14	101.1

CALTRANS STANDARD PLANS, 2010

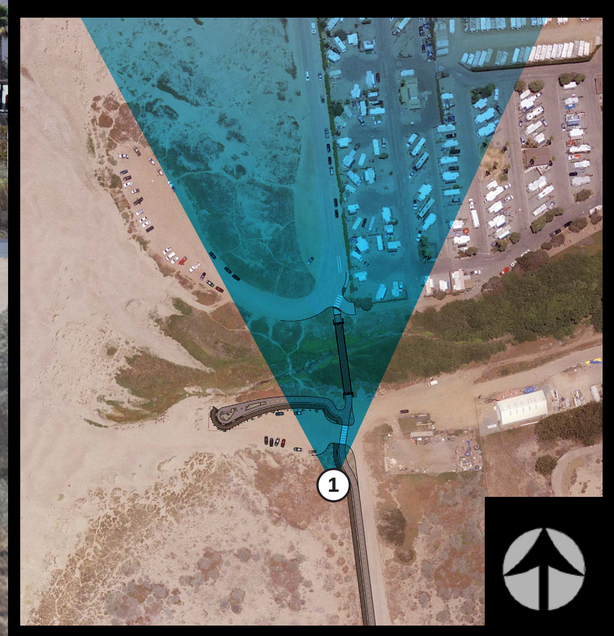
A10-A,B	ACRONYMS AND ABBREVIATIONS
A10 - C,D	SYMBOLS
A62-A	EXCAVATION AND BACKFILL - MISCELANEOUS DETAILS
A62-C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE
B0-1	BRIDGE DETAILS
B2-3	16" AND 24" CAST-IN-DRILLED-HOLE CONCRETE PILE
B2-5	PILE DETAILS CLASS 90 AND CLASS 140
B3-6	RETAINING WALL DETAILS NO. 2



KEY MAP
(EXISTING CONDITIONS)

IMAGE VIEWING ANGLE

1 PHOTO LOCATION



KEY MAP
(PROPOSED CONDITIONS)

IMAGE VIEWING ANGLE

1 PHOTO LOCATION

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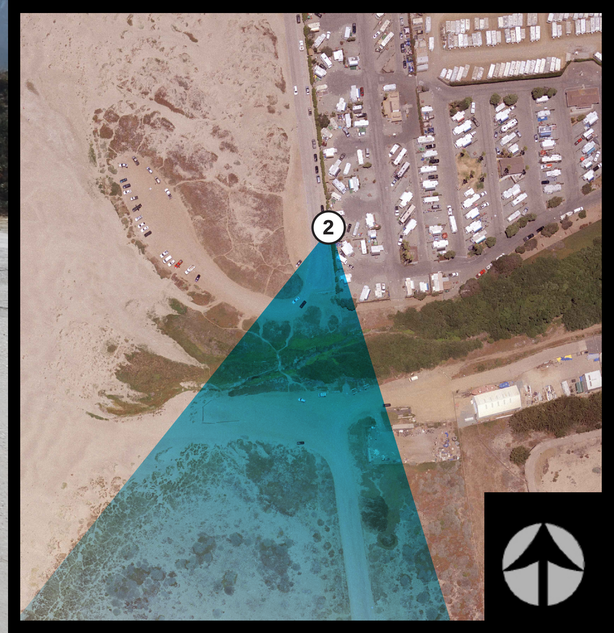
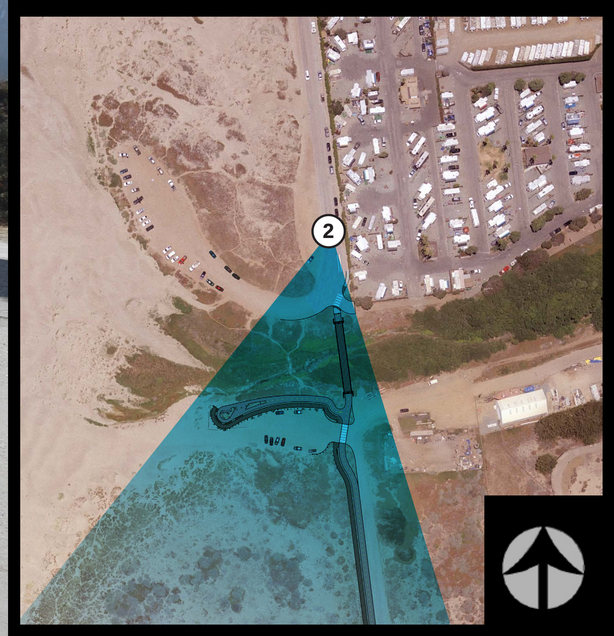


KEY MAP
(EXISTING CONDITIONS)

IMAGE VIEWING ANGLE

2 PHOTO LOCATION



KEY MAP
(PROPOSED CONDITIONS)

IMAGE VIEWING ANGLE

2 PHOTO LOCATION

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KEY MAP
(EXISTING CONDITIONS)

IMAGE VIEWING ANGLE

3 PHOTO LOCATION

KEY MAP
(PROPOSED CONDITIONS)

IMAGE VIEWING ANGLE

3 PHOTO LOCATION

MORRO CREEK MULTI-USE TRAIL | VIEW LOOKING EAST

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Appendix B

Air Quality and Greenhouse Gas Emissions
CalEEMod Estimates

Morro Creek Multi-Use Trail and Bridge

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.80	Acre	4.80	209,088.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2015
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 4.8 acres included in the BSA - actual disturbance/graded area would be smaller.

Construction Phase - Site Prep and Grading phases adequately characterize proposed construction actvities.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0589	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0589**	**0.0000**	**8.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0000**	**1.7000e-004**

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					
2014	0.0313	0.3094	0.2235	2.3000e-004	0.0724	0.0173	0.0897	0.0386	0.0160	0.0545	0.0000	21.8270	21.8270	6.2400e-003	0.0000	21.9581
Total	**0.0313**	**0.3094**	**0.2235**	**2.3000e-004**	**0.0724**	**0.0173**	**0.0897**	**0.0386**	**0.0160**	**0.0545**	**0.0000**	**21.8270**	**21.8270**	**6.2400e-003**	**0.0000**	**21.9581**

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					
2014	0.0313	0.3094	0.2235	2.3000e-004	0.0724	0.0173	0.0897	0.0386	0.0160	0.0545	0.0000	21.8270	21.8270	6.2400e-003	0.0000	21.9581
Total	**0.0313**	**0.3094**	**0.2235**	**2.3000e-004**	**0.0724**	**0.0173**	**0.0897**	**0.0386**	**0.0160**	**0.0545**	**0.0000**	**21.8270**	**21.8270**	**6.2400e-003**	**0.0000**	**21.9581**

	ROG	NOx	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0589	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0589**	**0.0000**	**8.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0000**	**1.7000e-004**

	ROG	NOx	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	1/29/2014	2/4/2014	5	5	
2	Grading	Grading	2/5/2014	2/14/2014	5	8	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1441	0.1074	1.0000e-004		7.8400e-003	7.8400e-003		7.2200e-003	7.2200e-003	0.0000	9.4254	9.4254	2.7900e-003	0.0000	9.4839
Total	**0.0132**	**0.1441**	**0.1074**	**1.0000e-004**	**0.0452**	**7.8400e-003**	**0.0530**	**0.0248**	**7.2200e-003**	**0.0321**	**0.0000**	**9.4254**	**9.4254**	**2.7900e-003**	**0.0000**	**9.4839**

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	1.1000e-003	4.2000e-004	3.8800e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3968	0.3968	3.0000e-005	0.0000	0.3974
Total	**1.1000e-003**	**4.2000e-004**	**3.8800e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3968**	**0.3968**	**3.0000e-005**	**0.0000**	**0.3974**

3.2 Site Preparation - 2014

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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1441	0.1074	1.0000e-004		7.8400e-003	7.8400e-003		7.2200e-003	7.2200e-003	0.0000	9.4254	9.4254	2.7900e-003	0.0000	9.4839
Total	**0.0132**	**0.1441**	**0.1074**	**1.0000e-004**	**0.0452**	**7.8400e-003**	**0.0530**	**0.0248**	**7.2200e-003**	**0.0321**	**0.0000**	**9.4254**	**9.4254**	**2.7900e-003**	**0.0000**	**9.4839**

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	1.1000e-003	4.2000e-004	3.8800e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3968	0.3968	3.0000e-005	0.0000	0.3974
Total	**1.1000e-003**	**4.2000e-004**	**3.8800e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3968**	**0.3968**	**3.0000e-005**	**0.0000**	**0.3974**

3.3 Grading - 2014

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1644	0.1070	1.2000e-004		9.4900e-003	9.4900e-003		8.7300e-003	8.7300e-003	0.0000	11.4756	11.4756	3.3900e-003	0.0000	11.5468
Total	**0.0155**	**0.1644**	**0.1070**	**1.2000e-004**	**0.0262**	**9.4900e-003**	**0.0357**	**0.0135**	**8.7300e-003**	**0.0222**	**0.0000**	**11.4756**	**11.4756**	**3.3900e-003**	**0.0000**	**11.5468**

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	1.4600e-003	5.6000e-004	5.1800e-003	1.0000e-005	5.8000e-004	1.0000e-005	5.8000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	0.5291	0.5291	4.0000e-005	0.0000	0.5299
Total	**1.4600e-003**	**5.6000e-004**	**5.1800e-003**	**1.0000e-005**	**5.8000e-004**	**1.0000e-005**	**5.8000e-004**	**1.5000e-004**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**0.5291**	**0.5291**	**4.0000e-005**	**0.0000**	**0.5299**

3.3 Grading - 2014

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1644	0.1070	1.2000e-004		9.4900e-003	9.4900e-003		8.7300e-003	8.7300e-003	0.0000	11.4756	11.4756	3.3900e-003	0.0000	11.5468
Total	**0.0155**	**0.1644**	**0.1070**	**1.2000e-004**	**0.0262**	**9.4900e-003**	**0.0357**	**0.0135**	**8.7300e-003**	**0.0222**	**0.0000**	**11.4756**	**11.4756**	**3.3900e-003**	**0.0000**	**11.5468**

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	1.4600e-003	5.6000e-004	5.1800e-003	1.0000e-005	5.8000e-004	1.0000e-005	5.8000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	0.5291	0.5291	4.0000e-005	0.0000	0.5299
Total	**1.4600e-003**	**5.6000e-004**	**5.1800e-003**	**1.0000e-005**	**5.8000e-004**	**1.0000e-005**	**5.8000e-004**	**1.5000e-004**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**0.5291**	**0.5291**	**4.0000e-005**	**0.0000**	**0.5299**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455853	0.042424	0.214936	0.151343	0.068369	0.010021	0.017172	0.021892	0.002320	0.001408	0.008721	0.000858	0.004683

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	1.0589	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Unmitigated	1.0589	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004

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	0.2423					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Total	**1.0589**	**0.0000**	**8.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0000**	**1.7000e-004**

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	0.2423					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Total	**1.0589**	**0.0000**	**8.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0000**	**1.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Vegetation

Morro Creek Multi-Use Trail and Bridge

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.80	Acre	4.80	209,088.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2015
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 4.8 acres included in the BSA - actual disturbance/graded area would be smaller.

Construction Phase - Site Prep and Grading phases adequately characterize proposed construction actvities.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2015

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					
2014	5.6986	57.7719	44.5053	0.0412	18.2442	3.1394	21.3836	9.9779	2.8882	12.8661	0.0000	4,337.8559	4,337.8559	1.2406	0.0000	4,363.9078
Total	**5.6986**	**57.7719**	**44.5053**	**0.0412**	**18.2442**	**3.1394**	**21.3836**	**9.9779**	**2.8882**	**12.8661**	**0.0000**	**4,337.8559**	**4,337.8559**	**1.2406**	**0.0000**	**4,363.9078**

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					
2014	5.6986	57.7719	44.5053	0.0412	18.2442	3.1394	21.3836	9.9779	2.8882	12.8661	0.0000	4,337.8559	4,337.8559	1.2406	0.0000	4,363.9078
Total	**5.6986**	**57.7719**	**44.5053**	**0.0412**	**18.2442**	**3.1394**	**21.3836**	**9.9779**	**2.8882**	**12.8661**	**0.0000**	**4,337.8559**	**4,337.8559**	**1.2406**	**0.0000**	**4,363.9078**

	ROG	NOx	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	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**0.0000**	**1.1100e-003**

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	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**0.0000**	**1.1100e-003**

	ROG	NOx	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	1/29/2014	2/4/2014	5	5	
2	Grading	Grading	2/5/2014	2/14/2014	5	8	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2910	57.6198	42.9609	0.0391		3.1377	3.1377		2.8867	2.8867		4,155.8914	4,155.8914	1.2281		4,181.6817
Total	**5.2910**	**57.6198**	**42.9609**	**0.0391**	**18.0663**	**3.1377**	**21.2040**	**9.9307**	**2.8867**	**12.8174**		**4,155.8914**	**4,155.8914**	**1.2281**		**4,181.6817**

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4076	0.1521	1.5444	2.0400e-003	0.1780	1.6900e-003	0.1796	0.0472	1.5100e-003	0.0487		181.9645	181.9645	0.0125		182.2261
Total	**0.4076**	**0.1521**	**1.5444**	**2.0400e-003**	**0.1780**	**1.6900e-003**	**0.1796**	**0.0472**	**1.5100e-003**	**0.0487**		**181.9645**	**181.9645**	**0.0125**		**182.2261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2910	57.6198	42.9609	0.0391		3.1377	3.1377		2.8867	2.8867	0.0000	4,155.8914	4,155.8914	1.2281		4,181.6817
Total	**5.2910**	**57.6198**	**42.9609**	**0.0391**	**18.0663**	**3.1377**	**21.2040**	**9.9307**	**2.8867**	**12.8174**	**0.0000**	**4,155.8914**	**4,155.8914**	**1.2281**		**4,181.6817**

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4076	0.1521	1.5444	2.0400e-003	0.1780	1.6900e-003	0.1796	0.0472	1.5100e-003	0.0487		181.9645	181.9645	0.0125		182.2261
Total	**0.4076**	**0.1521**	**1.5444**	**2.0400e-003**	**0.1780**	**1.6900e-003**	**0.1796**	**0.0472**	**1.5100e-003**	**0.0487**		**181.9645**	**181.9645**	**0.0125**		**182.2261**

3.3 Grading - 2014

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8669	41.0997	26.7538	0.0298		2.3714	2.3714		2.1817	2.1817		3,162.4266	3,162.4266	0.9345		3,182.0518
Total	**3.8669**	**41.0997**	**26.7538**	**0.0298**	**6.5523**	**2.3714**	**8.9238**	**3.3675**	**2.1817**	**5.5492**		**3,162.4266**	**3,162.4266**	**0.9345**		**3,182.0518**

3.3 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3397	0.1268	1.2870	1.7000e-003	0.1483	1.4100e-003	0.1497	0.0393	1.2600e-003	0.0406		151.6371	151.6371	0.0104		151.8551
Total	**0.3397**	**0.1268**	**1.2870**	**1.7000e-003**	**0.1483**	**1.4100e-003**	**0.1497**	**0.0393**	**1.2600e-003**	**0.0406**		**151.6371**	**151.6371**	**0.0104**		**151.8551**

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8669	41.0997	26.7538	0.0298		2.3714	2.3714		2.1817	2.1817	0.0000	3,162.4266	3,162.4266	0.9345		3,182.0518
Total	**3.8669**	**41.0997**	**26.7538**	**0.0298**	**6.5523**	**2.3714**	**8.9238**	**3.3675**	**2.1817**	**5.5492**	**0.0000**	**3,162.4266**	**3,162.4266**	**0.9345**		**3,182.0518**

3.3 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3397	0.1268	1.2870	1.7000e-003	0.1483	1.4100e-003	0.1497	0.0393	1.2600e-003	0.0406		151.6371	151.6371	0.0104		151.8551
Total	**0.3397**	**0.1268**	**1.2870**	**1.7000e-003**	**0.1483**	**1.4100e-003**	**0.1497**	**0.0393**	**1.2600e-003**	**0.0406**		**151.6371**	**151.6371**	**0.0104**		**151.8551**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455853	0.042424	0.214936	0.151343	0.068369	0.010021	0.017172	0.021892	0.002320	0.001408	0.008721	0.000858	0.004683

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Unmitigated	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003

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	1.3276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Total	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**		**1.1100e-003**

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	1.3276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Total	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**		**1.1100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Morro Creek Multi-Use Trail and Bridge

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.80	Acre	4.80	209,088.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2015
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 4.8 acres included in the BSA - actual disturbance/graded area would be smaller.

Construction Phase - Site Prep and Grading phases adequately characterize proposed construction actvities.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2015

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					
2014	5.7951	57.7919	44.5497	0.0411	18.2442	3.1394	21.3836	9.9779	2.8882	12.8661	0.0000	4,329.4789	4,329.4789	1.2406	0.0000	4,355.5308
Total	**5.7951**	**57.7919**	**44.5497**	**0.0411**	**18.2442**	**3.1394**	**21.3836**	**9.9779**	**2.8882**	**12.8661**	**0.0000**	**4,329.4789**	**4,329.4789**	**1.2406**	**0.0000**	**4,355.5308**

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					
2014	5.7951	57.7919	44.5497	0.0411	18.2442	3.1394	21.3836	9.9779	2.8882	12.8661	0.0000	4,329.4789	4,329.4789	1.2406	0.0000	4,355.5308
Total	**5.7951**	**57.7919**	**44.5497**	**0.0411**	**18.2442**	**3.1394**	**21.3836**	**9.9779**	**2.8882**	**12.8661**	**0.0000**	**4,329.4789**	**4,329.4789**	**1.2406**	**0.0000**	**4,355.5308**

	ROG	NOx	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	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**0.0000**	**1.1100e-003**

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	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**0.0000**	**1.1100e-003**

	ROG	NOx	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	1/29/2014	2/4/2014	5	5	
2	Grading	Grading	2/5/2014	2/14/2014	5	8	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2910	57.6198	42.9609	0.0391		3.1377	3.1377		2.8867	2.8867		4,155.8914	4,155.8914	1.2281		4,181.6817
Total	**5.2910**	**57.6198**	**42.9609**	**0.0391**	**18.0663**	**3.1377**	**21.2040**	**9.9307**	**2.8867**	**12.8174**		**4,155.8914**	**4,155.8914**	**1.2281**		**4,181.6817**

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5042	0.1722	1.5888	1.9500e-003	0.1780	1.6900e-003	0.1796	0.0472	1.5100e-003	0.0487		173.5875	173.5875	0.0125		173.8491
Total	**0.5042**	**0.1722**	**1.5888**	**1.9500e-003**	**0.1780**	**1.6900e-003**	**0.1796**	**0.0472**	**1.5100e-003**	**0.0487**		**173.5875**	**173.5875**	**0.0125**		**173.8491**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2910	57.6198	42.9609	0.0391		3.1377	3.1377		2.8867	2.8867	0.0000	4,155.8914	4,155.8914	1.2281		4,181.6817
Total	**5.2910**	**57.6198**	**42.9609**	**0.0391**	**18.0663**	**3.1377**	**21.2040**	**9.9307**	**2.8867**	**12.8174**	**0.0000**	**4,155.8914**	**4,155.8914**	**1.2281**		**4,181.6817**

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5042	0.1722	1.5888	1.9500e-003	0.1780	1.6900e-003	0.1796	0.0472	1.5100e-003	0.0487		173.5875	173.5875	0.0125		173.8491
Total	**0.5042**	**0.1722**	**1.5888**	**1.9500e-003**	**0.1780**	**1.6900e-003**	**0.1796**	**0.0472**	**1.5100e-003**	**0.0487**		**173.5875**	**173.5875**	**0.0125**		**173.8491**

3.3 Grading - 2014

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8669	41.0997	26.7538	0.0298		2.3714	2.3714		2.1817	2.1817		3,162.4266	3,162.4266	0.9345		3,182.0518
Total	**3.8669**	**41.0997**	**26.7538**	**0.0298**	**6.5523**	**2.3714**	**8.9238**	**3.3675**	**2.1817**	**5.5492**		**3,162.4266**	**3,162.4266**	**0.9345**		**3,182.0518**

3.3 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4201	0.1435	1.3240	1.6200e-003	0.1483	1.4100e-003	0.1497	0.0393	1.2600e-003	0.0406		144.6562	144.6562	0.0104		144.8743
Total	**0.4201**	**0.1435**	**1.3240**	**1.6200e-003**	**0.1483**	**1.4100e-003**	**0.1497**	**0.0393**	**1.2600e-003**	**0.0406**		**144.6562**	**144.6562**	**0.0104**		**144.8743**

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8669	41.0997	26.7538	0.0298		2.3714	2.3714		2.1817	2.1817	0.0000	3,162.4266	3,162.4266	0.9345		3,182.0518
Total	**3.8669**	**41.0997**	**26.7538**	**0.0298**	**6.5523**	**2.3714**	**8.9238**	**3.3675**	**2.1817**	**5.5492**	**0.0000**	**3,162.4266**	**3,162.4266**	**0.9345**		**3,182.0518**

3.3 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4201	0.1435	1.3240	1.6200e-003	0.1483	1.4100e-003	0.1497	0.0393	1.2600e-003	0.0406		144.6562	144.6562	0.0104		144.8743
Total	**0.4201**	**0.1435**	**1.3240**	**1.6200e-003**	**0.1483**	**1.4100e-003**	**0.1497**	**0.0393**	**1.2600e-003**	**0.0406**		**144.6562**	**144.6562**	**0.0104**		**144.8743**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455853	0.042424	0.214936	0.151343	0.068369	0.010021	0.017172	0.021892	0.002320	0.001408	0.008721	0.000858	0.004683

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Unmitigated	5.8021	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003

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	1.3276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Total	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**		**1.1100e-003**

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	1.3276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0500e-003	1.0500e-003	0.0000		1.1100e-003
Total	**5.8021**	**0.0000**	**5.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0500e-003**	**1.0500e-003**	**0.0000**		**1.1100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation