Initial Study/Mitigated Negative Declaration for the Traffic Way over Arroyo Grande Creek Bridge Replacement Project, Arroyo Grande, San Luis Obispo County, California

JUNE 2022

PREPARED FOR

City of Arroyo Grande

PREPARED BY

SWCA Environmental Consultants

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE TRAFFIC WAY OVER ARROYO GRANDE CREEK BRIDGE REPLACEMENT PROJECT, ARROYO GRANDE, SAN LUIS OBISPO COUNTY, CALIFORNIA

Prepared for

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1 INTRODUCTION

The City of Arroyo Grande (City) proposes to replace the existing Arroyo Grande Creek Bridge 49C-0380 at Traffic Way (Traffic Way bridge). Traffic Way follows a north–south corridor approximately 0.1 mile east of U.S. Highway (US) 101 in the city of Arroyo Grande, San Luis Obispo County, California. Traffic Way bridge provides vehicular access over Arroyo Grande Creek, which runs through the city of Arroyo Grande parallel to State Route (SR) 227. The surrounding land is generally level and is primarily comprised of an urbanized business district. The existing bridge is hydraulically inadequate as it is subject to creek bed degradation and prone to scour issues. The existing piers and abutments have experienced scour issues for the past several years, making this bridge "scour critical" and in need of replacement. The changes in the creek have exposed the embedment of the supporting piles and the risk level for further damage to the bridge is high.

The project goals include the following:

1. Replace the scour critical bridge.
2. Accommodate a consistent 35 miles per hour (mph) posted speed corridor.
3. Minimize impacts to nearby businesses during construction.
4. Stay within the existing City right-of-way (ROW).

The purpose of the project is to replace the scour critical bridge, improve public safety, stabilize Arroyo Grande Creek, and reduce future maintenance costs. If the bridge is not replaced, the condition will continue to deteriorate and eventually bridge closure will be required.

1.1 Project Location

The project site is in the city of Arroyo Grande, San Luis Obispo County, California (Figure 1). The project site encompasses the existing Traffic Way bridge, which is located in the central portion of the city of Arroyo Grande, approximately 0.1 mile (580 feet) east of US 101 and 0.05 mile (250 feet) south of SR 227. Temporary construction access would require the use of existing unnamed, unpaved agricultural access roads located to the west of US 101, crossing under the existing US 101 bridge, and continuing east of US 101 through an open field that is part of an urban development associated with the Village Creek Plaza. The open field would be used for construction equipment storage and construction access to the project site (Figure 2). Traffic Way is oriented southeast to northwest at the project site and is one of only a few ways to cross Arroyo Grande Creek that runs east to west and divides the city.

1.2 Environmental Setting

The project site is in the city of Arroyo Grande (see Figure 1), and encompasses the existing Traffic Way bridge, which is located in the central portion of the city of Arroyo Grande, approximately 0.1 mile (580 feet) east of US 101 and 0.05 mile (250 feet) south of SR 227. The primary land use immediately adjacent to the project site is mixed commercial. There is land currently zoned and developed for agricultural use located approximately 0.15 mile west, beyond US 101.

The project site is within the Arroyo Grande Creek watershed, which is a coastal basin located in southern San Luis Obispo County. The watershed is dominated by agricultural land uses, including vineyards, ranches, and row crops. Arroyo Grande Creek watershed has an average rainfall of 15 to 28 inches per year (SLO Watershed Project 2020). The project area supports arroyo willow thicket, ruderal, agricultural, developed/disturbed, and ornamental habitats (SWCA Environmental Consultants [SWCA] 2021e).

Figure 1. Project vicinity map.

Figure 2. Project location map.

1.3 Project Description

The portion of Traffic Way north of the Traffic Way bridge is three lanes with shoulders and sidewalks and quickly transitions into an intersection with West Branch Street. To the south, the roadway is wider to account for a right-turn pocket onto Station Way, and parking is allowed on the north side of the roadway. Traffic Way is classified as an on-system arterial road by California Department of Transportation (Caltrans) California Road System (CRS) Map 8S45 (Caltrans 2021a) and the *City of Arroyo Grande 2001 General Plan* (City of Arroyo Grande 2001a). Traffic volumes through the site are approximately 9,600 vehicles per day per the 2020 Bridge Inspection Report (Caltrans 2020). Traffic Way has a posted speed limit of 35 mph in both directions.

The original bridge was constructed in 1932 and consists of six spans of 38 feet each, for a total bridge length of 228 feet. The bridge was originally part of the highway system and was relinquished to the City in 1960. The bridge is a cast-in-place reinforced concrete tee-beam with a longitudinal construction joint near the bridge centerline. The bridge measures 40 feet between curbs and has 6-foot sidewalks on both sides with an open concrete railing that is mounted to the edge of the bridge. The bridge originally carried four lanes of traffic but was reconfigured around 2008 to have three lanes of through traffic with shoulders for a Class II bike route. The Caltrans historic bridge inventory lists the bridge as a Category 5 (ineligible for historic bridge consideration) bridge.

1.3.1 *Roadway Alignment*

Traffic Way is classified as a minor arterial per Caltrans classifications and as an arterial roadway per the *City of Arroyo Grande 2001 General Plan* and has an anticipated future average daily trip rate of 12,550 vehicles a day. Until 2008, the bridge carried four lanes of traffic (two in each direction). Striping modifications have changed the number of lanes across the bridge to three and added shoulders for bike traffic. The bridge centerline is on a radius of 1,800 feet and the intersection of West Branch Street is on a slight skew that is signalized. Lane additions, lane drops, turn lanes, medians, parking, and bike and pedestrian circulation have resulted in unsymmetrical geometry across the bridge.

HORIZONTAL ALIGNMENT

Due to the limited ROW and extensive development adjacent to the ROW at all four bridge quadrants, replacing the bridge on the existing alignment is highly desirable. This option would also reduce environmental impacts. The exact alignment would be controlled by the staging of this project and if the road or single lanes can be closed to traffic.

VERTICAL ALIGNMENT

The proposed vertical alignment would be dependent on the hydraulic requirements of the creek and which bridge alternative is selected. It would be desirable to match the existing profile as closely as possible to reduce the project footprint of the bridge replacement. Based on the preliminary hydraulic water surface and existing or proposed structure depth, it may only be necessary to raise the roadway profile slightly for roadway drainage purposes, but this would be confirmed after the hydraulic analysis has been completed.

STAGED BRIDGE CONSTRUCTION OR ROADWAY DETOUR

Construction of a new bridge at Arroyo Grande Creek would have impacts to the traveling public and some impacts to nearby businesses. It is always the primary design goal to minimize traffic, environmental, and ROW impacts while providing flexibility to the contractor.

In 2019 the comparative impact of a full closure and a partial closure of Traffic Way during construction was evaluated. A full closure was recommended after consideration of several factors, such as project schedule, ROW, environmental impacts, construction costs, and traffic impacts. On July 28, 2020, the City Council unanimously voted for the full closure of Traffic Way. Closing the road to traffic would have several benefits as it would reduce construction duration, reduce environmental and ROW impacts, and be the most cost-efficient approach. The biggest drawback would be the increased temporary traffic, which would navigate a detour route through the downtown village of Arroyo Grande. Traffic analysis showed this was a feasible solution if Bridge Street would be temporarily converted to a one-way road.

BRIDGE CONSIDERATIONS

Alternative bridge length and span configurations were considered based on topographic surveys, hydraulics, and cost. It would be necessary to lay out the new bridge such that the new foundations do not conflict with the existing bridge foundations. The existing bridge piles would be cut off below grade and remain in place. This assumption would need to be hydraulically verified since it would be undesirable for the existing abandoned piles to become visible and result in future maintenance. The number of spans considered was influenced by the roadway profile relative to the hydraulic water surface.

PROPOSED BRIDGE TYPE

Given the necessary bridge span lengths, a post-tensioned concrete box girder bridge type was selected as the proposed design. A review of the existing bridge maintenance reports indicates a long history of debris removal from the upstream side of bridge piers and scour. A new structure with either longer spans or a reduction in intermediate foundations and wider hydraulic opening would reduce future maintenance issues.

The most ideal span configuration at this location would depend on the water surface elevation. Caltrans criteria for the hydraulic design of bridges state that bridges must be designed to pass the 2% probability of annual exceedance flow (50-year design discharge) with freeboard to pass anticipated drift, or the flood of record (usually the 100-year design discharge) with no freeboard, whichever is greater. Typically, the 50-year discharge with freeboard (2 feet is often assumed) controls the design.

Several alternative bridge designs were considered, as described in the *Draft Type Selection Report, Arroyo Grande Creek Bridge at Traffic Way Bridge Replacement Project* (Quincy Engineering 2021). The final bridge design alternatives included a single-span bridge and a three-span bridge. The single-span cast-in-place/pre-stressed box girder design was selected as the final proposed bridge project and approved by Caltrans (personal communication, Quincy Engineering 2021) and is assessed in this document as the proposed project.

The proposed single-span bridge design includes a long and deep clear-span box girder, though the overall bridge would be shorter than the existing bridge. Eliminating all supports would greatly minimize environmental and hydraulic impacts. The deeper structure would result in large foundation loads at the abutments. Due to scour and seismic deficiencies, full replacement of the existing bridge foundations and complete bridge removal is required.

FOUNDATIONS

Due to the extensive history of scour on-site, the new bridge design includes cast-in-drilled-hole (CIDH) piles under the bridge abutments. Installation of the CIDH piles would require contractor equipment access within the creek channel. The number, type, and size of piles required at the abutments would be determined during the design process. Ungrouted rock slope protection (RSP) would be placed around the

abutments along the banks to prevent further erosion. RSP would be placed immediately below the bridge abutments and extend beyond the edges of the bridge rails on the north and south banks.

BRIDGE WIDTH AND CROSS SECTION

The new bridge would consist of three lanes with 5-foot-wide shoulders and 6-foot-wide sidewalks. Traffic Way is classified as an Urban Arterial and, per the American Association of State Highway and Transportation Officials (AASHTO), lane widths can vary from 10 to 12 feet depending on the surrounding conditions. The City is proposing three 11-foot lanes to match the existing stripes and geometry of the approach roadway. To accommodate a Class II bike route, 5-foot-minimum shoulders are proposed next to the vertical curb faces. Current Caltrans Standards suggest 6-foot sidewalks on all structures. To accommodate the geometry and provide standard bridge railings, the overall bridge width is anticipated to measure 59 feet 4 inches. The existing bridge is 52 feet wide; therefore, the overall increase in width would be 7 feet to meet modern standards.

1.3.2 *Design Criteria and Construction Data*

UTILITIES

Below the bridge, there is one 12-kilovolt (kV) Pacific Gas and Electric Company (PG&E) electrical line wrapped in a 6-inch steel casing that is roughly 4 feet from the south edge of deck. There are also three 4-inch conduits hanging together under the bridge that are assumed to be AT&T telephone lines based on AT&T mapping and coordination with local personnel. The City owns and operates an 8-inch polyvinyl chloride (PVC) waterline that sits in a 12-inch steel casing and crosses Arroyo Grande Creek at the south edge of the deck. Based on coordination with City personnel, the waterline is planned to be turned off during construction with shutoff valves on each side of the bridge. During construction of the new bridge, all existing utilities on the bridge would have to be relocated.

The City has an 18-inch reinforced concrete pipe (RCP) storm drain system on the west side of the bridge that drains directly into the creek after collecting stormwater from two inlets just past the end of the bridge. The inlet on the north side of Traffic Way would be modified and may need to be replaced, which may cause small adjustments to the RCP in that location. The outlet of the RCP on the south side of the bridge would also be impacted due to grading and RSP improvements. A larger storm drainage system east of the bridge collects stormwater from the east and drains through a 54-inch RCP that runs down Traffic Way and outlets into Arroyo Grande Creek between the bridge and the Village Creek Plaza. The outlet is lined with a concrete apron that runs down to the low-flow water elevation. The 54-inch RCP outlet would be adjusted to fit the proposed design and construction needs. The project would maintain current drainage patterns with some impacts to the existing systems within the project limits.

GEOTECHNICAL/FOUNDATIONS

Yeh and Associates performed geotechnical test borings at the site from October 12 to October 15, 2020, and from November 2 to November 5, 2020. The exploration consisted of four borings to depths ranging from approximately 89.5 to 121.5 feet below the ground or existing bridge deck surface. Shallower infiltration tests and streambed samples would be taken at a later date when the roadway drainage plan is better understood. The bridge would be supported by CIDH concrete piles embedded into the underlying Pismo Formation sandstone bedrock, or older alluvium, and decomposed Pismo Formation. The draft foundation report is located in Appendix E of the Type Selection Report (Quincy Engineering 2021). The CIDH pile foundations would involve drilling holes with an auger, possibly using slurry, followed by placement of reinforcing cages and casting of pile concrete. CIDH piles offer an advantage over driven piles in that the drilling process produces less noise and vibration, which could minimize construction impacts to nearby businesses and local fish species. Temporary casings may be required to control caving.

ARROYO GRANDE CREEK PERMANENT IMPACTS

Bridge replacement would require creek slope excavation, backfill, and RSP to protect the abutments and roadway approach. The single-span bridge would clear span the creek and would not require intermediate channel supports. The removal, or cutting below grade, of the existing pier supports in the creek would improve the current conditions in Arroyo Grande Creek at the Traffic Way bridge. The proposed bridge configuration would require new foundations, which would be drilled pile foundations and would consist of CIDH piles. Driven piles are being avoided to minimize adverse effects to aquatic species and the nearby historic building.

ARROYO GRANDE CREEK TEMPORARY IMPACTS

The proposed project includes minor modification/alteration to the creek, as a temporary access road would be placed in the creek to allow for contractor access. This access road is necessary to facilitate removal of the existing bridge and placement of the temporary bridge supports (falsework) for construction of the replacement bridge, as well as access for drilling the CIDH foundations. Vegetation below and adjacent to the bridge would be cleared. Cofferdams, stream diversion, and dewatering may also be required to provide a dry work area during construction. Following construction, the temporary fill for the access road and diversion would be removed and the creek would be restored to preconstruction topographic contours.

Construction would require removal of the existing bridge superstructure and foundations. The existing bridge concrete deck would be broken up into smaller pieces by excavators mounted with a concrete breaker "hoe-ram" attachment. The concrete debris would fall to a cleared channel work pad below the bridge for later removal offsite. After the deck is removed, cranes would remove sections of the concrete girders. The existing concrete abutments and piers would then be broken down for removal from the site. The existing bridge piles would be removed 3 to 5 feet below the existing ground line.

CONSTRUCTION EQUIPMENT

Equipment anticipated to be used for the project includes excavators, dozers, cranes, dump trucks, concrete trucks, concrete pumps, and pile-drilling equipment. Removal of the existing bridge would require excavators, hoe rams, cranes, and dump trucks. Construction is currently anticipated to be completed within 9 months (between May 1, 2022, and January 31, 2023).

1.4 Required Discretionary Approvals

The following discretionary approvals are anticipated to be required for the project:

- Section 401 Water Quality Certification from the Central Coast Regional Water Quality Control Board (RWQCB);
- Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW);
- Section 404 Nationwide Permit from the U.S. Army Corps of Engineers (USACE);
- Formal Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries); and
- San Luis Obispo County Air Pollution Control District (SLOAPCD) construction permit.

2 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

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

ENVIRONMENTAL 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 measure 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.

Date: _____ **Signed:** _____

I. Aesthetics

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

Setting

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide people of the state "with… enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California Public Resources Code [PRC] Section 21001[b]). A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. Some scenic vistas are officially or informally designated by public agencies or other organizations. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas. A proposed project's potential effect on a scenic vista is largely dependent on the degree to which it would complement or contrast with the natural setting, the degree to which it would be noticeable in the existing environment, and whether it detracts from or complements the scenic vista.

The California Scenic Highway Program was created by the State Legislature in 1963 with the intention of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors. A highway may be designated scenic depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Designated and eligible Scenic Highways within San Luis Obispo County include US 101, SR 46, portions of SR 41, SR 1, and Lake Nacimiento Drive. US 101 is located approximately 0.1 mile west of the project site (Caltrans 2021c).

The *City of Arroyo Grande Agriculture, Conservation and Open Space Element* (ACOSE) includes goals and policies intended to protect visually accessible scenic resources. Scenic resources protected under the City's ACOSE may include agricultural land, open spaces, hillsides, ridgelines, canyons, valleys, landmark trees, woodlands, wetlands, streambeds, and banks, as well as aspects of the built environment of historic nature or that are unique to the city (City of Arroyo Grande 2007).

The project site consists of Traffic Way bridge, which is located in an urban area in the central portion of the city and surrounded by one- and two-story commercial development in all directions. The existing Traffic Way bridge spans Arroyo Grande Creek, which is a perennial stream with a dense riparian

canopy. The project site is developed with designated bike lanes; pedestrian infrastructure, including sidewalks and crosswalks; and vegetative landscaping. The project site is located approximately 260 feet west of the recently rehabilitated historic Bridge Street bridge, which underwent construction in 2020 and was completed in 2021 (SWCA 2021f).

Environmental Evaluation

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

For CEQA purposes, a scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape or scenic resource for the benefit of the general public. A substantial adverse effect on a scenic vista would occur if the proposed project would significantly degrade the scenic landscape as viewed from public roads or other public areas. The City's ACOSE identifies scenic resources as agricultural land, open spaces, hillsides, ridgelines, canyons, valleys, landmark trees, woodlands, wetlands, streambeds, and banks, as well as aspects of the built environment of historic or unique nature. The project site provides views of commercial development to the north and commercial development and distant hillsides to the south. Views to the east and west are dominated by trees associated with Arroyo Grande Creek. The proposed project includes replacement of the existing Traffic Way bridge to reduce risk caused by erosion surrounding the foundation of the bridge. Construction activities would result in temporary construction-related views during the 7-month construction period, including construction equipment and vehicles, workers, and signage. In addition, construction activities would include vegetation removal below and adjacent to the bridge as necessary for equipment access and installation of the new bridge foundations. Construction-related views would be temporary in nature and would not result in a permanent adverse change to existing views in the project area.

Following construction activities, the proposed bridge would retain the same alignment as the original bridge structure and would consist of a single-span bridge with no piers within the creek bed. Therefore, the project would result in an overall improvement in the views of the bridge and Arroyo Grande Creek. The proposed bridge structure would accommodate the same number of vehicle lanes, Class II bicycle lanes, and pedestrian facilities (sidewalks, light posts, and fencing) as the existing bridge structure. In addition, the project includes revegetation within impacted areas. The proposed bridge structure would be designed in accordance with applicable City and Caltrans design guidelines and standards and would be similar in appearance to the existing bridge. The project would result in the replacement of the existing Traffic Way bridge and does not include components that would significantly change the existing viewshed of the project site; therefore, the project would not have a substantial effect on a scenic vista and impacts would be *less than significant*.

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

There are no designated state scenic highways within or in the immediate vicinity of the project site. US 101 is considered an eligible state scenic highway by Caltrans and is located approximately 0.1 mile west of the Traffic Way bridge (Caltrans 2021c). Temporary construction access would require the use of existing unnamed, unpaved agricultural access roads located west of US 101, crossing under the existing US 101 bridge, and continuing east of US 101 through an open field that is part of an urban development associated with Village Creek Plaza. The open field would be used for construction equipment storage and construction access to the project site. Based on Google Earth Pro imagery, the portion of US 101 that extends through the project site consists of native trees that block views east of US 101. Therefore, views of most of the construction and all operational components of the project from US 101 would be obstructed by intervening vegetation. Construction of the project may result in temporary, intermittent views of workers, vehicles, and equipment accessing the site west of US 101; however, following project

construction, construction crews, vehicles, and equipment would vacate the area and the project site would be returned to preconstruction conditions. The project would require tree removal for development at the bridge site and would not require tree removal within the viewshed of US 101. In addition, the project includes revegetation of disturbed areas to avoid permanently degrading visual resources within the project area. The project would not substantially damage scenic resources within a state scenic highway; therefore, impacts would be *less than significant*.

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

The project site is located in an urbanized area of the city of Arroyo Grande in the Village Mixed-Use (VMU) and Village Downtown Core (VDC) zoning designations (City of Arroyo Grande 2018). The City's *Design Guidelines and Standards for the Historic Character Overlay District* provides guidelines and standards for development in the VDC, VMU, Village SF-Low (VSF-L), Village SF-Medium (VSF-M), Village MF-Medium (VMF-M), and Village Community Facility (VCF) zoning designations that are intended to protect the historic buildings, character, and architecture that reflect the city's heritage (City of Arroyo Grande 1994). In addition, the City's *Design Guidelines and Standards for Design Overlay District (D-2.11) – Traffic Way and Station Way* provide goals to encourage design that would not detract from the neighboring village districts (City of Arroyo Grande 2014). However, the design guidelines would not apply to the project because the project is limited to replacement of an existing bridge and does not include the development of new buildings that would be subject to building design guidelines or other zoning standards.

The City's ACOSE includes goals and policies intended to protect visual resources, including agricultural land, open spaces, hillsides, ridgelines, canyons, valleys, landmark trees, woodlands, wetlands, streambeds and banks, as well as aspects of the built environment of historic nature or that are unique to the city (City of Arroyo Grande 2007). In addition to temporary construction views, proposed construction activities would result in the removal of vegetation below and adjacent to the bridge as necessary for equipment access and installation of the new bridge foundations. Following construction activities, the proposed bridge would retain the same alignment as the original bridge structure and would consist of a single-span bridge with no piers within the creek bed. Therefore, the project would result in an overall improvement in the views of the bridge and Arroyo Grande Creek. The proposed bridge structure would accommodate the same number of vehicle lanes, Class II bicycle lanes, and pedestrian facilities (sidewalks, light posts, and fencing) as the existing bridge structure. In addition, the project includes revegetation of disturbed project areas. Therefore, the project would be consistent with goals and policies of the City's ACOSE.

The project would result in temporary construction views during the 7-month construction period; however, implementation of the project would not result in a significant permanent change to the existing viewshed and does not include any components that would be inconsistent with zoning or other regulations governing scenic quality. Therefore, impacts would be *less than significant*.

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

There are 12 existing outdoor light posts along the railings of the Traffic Way bridge that are used for nighttime lighting. Replacement of the Traffic Way bridge would include replacement of existing light posts along the bridge. New outdoor lighting along the proposed bridge would be consistent with the intensity of existing lighting along the existing bridge. In addition, new outdoor lighting would be

required to comply with City Municipal Code Section 16.48.090(A), which establishes outdoor lighting requirements for nonresidential uses within the city to prevent light pollution from degrading nighttime views of the area. Therefore, based on the nature of development and required compliance with the City Municipal Code, impacts related to nighttime lighting would be *less than significant*.

Conclusion

The project would result in temporary construction-related views during the 7-month construction period. However, implementation of the project would not result in a significant permanent change to the existing viewshed. Any vegetation that is removed during project construction would be revegetated following project activities. The project would not substantially damage scenic resources within a state scenic highway. Nighttime lighting along the proposed bridge would be consistent with existing nighttime lighting conditions. The new bridge would be consistent with the level of development of the existing bridge and would not result in new components that would be inconsistent with zoning or other regulations governing scenic quality. Therefore, potential impacts related to aesthetic resources would be less than significant, and no mitigation is necessary.

Mitigation Measures

No mitigation is required.

II. Agriculture and Forestry Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
(d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Setting

The California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. For environmental review purposes under CEQA, the FMMP categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land are considered "agricultural land." Other non-agricultural designations include Urban and Built-up Land, Other Land, and Water. According to the FMMP, the project site is located on land that is designated as urban and built-up land (CDOC 2016).

The Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agriculture or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based on farming and open space uses as opposed to full market value. The project site does not include land within the Agriculture land use designation and is not subject to a Williamson Act contract.

According to PRC Section 12220(g), forest land is defined as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland is defined as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

The City's ACOSE includes Objectives Ag1 through Ag6 and corresponding policies for the protection of agricultural resources, including, but not limited to, the conservation of prime agricultural land and soils, conservation of groundwater for agricultural operations, and the promotion of the coexistence of agricultural and urban land uses (City of Arroyo Grande 2007).

The project site is designated as Urban and Built-up Land by the FMMP (CDOC 2016). Based on the City's Land Use Map, there is no designated forest land or timberland within the city (City of Arroyo Grande 2018). The existing Traffic Way bridge is not located within designated agricultural land, forest land, or timberland. There is FMMP-designated Prime Farmland- and Agriculture-zoned land located approximately 0.15 mile (800 feet) west of the existing Traffic Way bridge, immediately west of the US 101 southbound lane (CDOC 2016; City of Arroyo Grande 2018).

Environmental Evaluation

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

According to the CDOC FMMP, most of the project site is designated as Urban and Built-up Land, and land located approximately 800 feet west of the project site is designated as Prime Farmland by the FMMP (CDOC 2016). Temporary construction access would require the use of existing unnamed, unpaved agricultural access roads located within the designated Prime Farmland. Proposed construction staging would occur in an open field used for urban commercial development and would not be located in the nearby agricultural land. Existing agricultural access roads would remain accessible to ongoing agricultural operations throughout the proposed construction period. Therefore, temporary use of the

existing agricultural access roads would not result in impacts to existing farmland. Further, all construction access and staging areas would be returned to their original condition following construction; therefore, implementation of the project would not result in the permanent conversion of designated Prime Farmland to non-agricultural use, and impacts would be *less than significant*.

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

The Traffic Way bridge is located in the VMU and VCD zoning designations (City of Arroyo Grande 2018). Land located immediately west of the US 101 southbound lane is within the Agriculture zoning designation and is currently developed and used for agricultural operations, including cropland (City of Arroyo Grande 2018). Temporary access would require the use of existing unnamed, unpaved agricultural access roads located within the agricultural land. The project would not prohibit ongoing agricultural operations because existing agricultural access roads would remain accessible to ongoing agricultural operations throughout the proposed construction period. Temporary use of the existing agricultural roads would not result in conversion of or other impacts to existing farmland and all construction access areas would be returned to their original condition following construction. In addition, the project site is not under a Williamson Act contract. Therefore, the project would not conflict with existing zoning for agricultural uses or a Williamson Act contract, and impacts would be *less than significant*.

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

According to the City's zoning map, there is no designated forest land or timberland within the city (City of Arroyo Grande 2018). Therefore, implementation of the project would not conflict with zoning for forest land or timberland, and *no impact* would occur.

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

As previously described in threshold II(c), there is no designated forest land or timberland within the city (City of Arroyo Grande 2018). Since there is no designated forest land within the project area, proposed tree removal would not result in the loss of forest land or conversion of forest land to non-forest use, and *no impact* would occur.

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

Based on the CDOC FMMP, there is designated Prime Farmland located approximately 0.15 mile west of the Traffic Way bridge (CDOC 2016). This area is also within the Agriculture zoning designation and is currently developed and used for agricultural operations. Temporary construction access would require the use of existing unnamed, unpaved agricultural access roads located west of US 101, crossing under the existing US 101 bridge, and continuing east of US 101 through an open field that is part of an urban development associated with Village Creek Plaza. The open field is within the VMU zoning designation and is not used for agricultural operations. The field would be used for construction staging and access to the bridge site. Temporary use of the existing agricultural access roads would not prohibit access for ongoing agricultural operations and would not result in impacts to existing farmland. Further, all construction access and storage areas would be returned to preconstruction conditions following construction activities. The project does not include long-term features that would interfere with soil

quality, air quality, water quality, or groundwater supply that could permanently affect nearby agricultural land. In addition, according to the City's zoning map, there is no designated forest land or timberland within the city (City of Arroyo Grande 2018). Therefore, the project would not result in changes to the environment that could convert farmland to non-agricultural use or forest land to non-forest use, and impacts would be *less than significant*.

Conclusion

The project would require the temporary use of existing agricultural access routes located on designated Prime Farmland and land zoned for agricultural uses; however, implementation of the project would not permanently convert any Prime Farmland or agriculturally zoned land to non-agricultural uses. The project would not result in adverse impacts to forest land or timberland because there is no designated forest land or timberland within the city. Therefore, potential impacts related to agricultural resources would be less than significant, and no mitigation is necessary.

Mitigation Measures

No mitigation is required.

III. Air Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
(a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
(c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☒	☐	☐

Setting

San Luis Obispo County is part of the South Central Coast Air Basin, (SCCAB), which also includes Santa Barbara and Ventura Counties. Air quality within the SCCAB is regulated by several jurisdictions, including the U.S. Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and San Luis Obispo County Air Pollution Control District (SLOAPCD). Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) of 1988. The State Department of Public Health established California Ambient Air Quality Standards (CAAQS) in 1962 to define the maximum amount of a pollutant (averaged over a specified period of time) that can be present without any harmful effects on people or the environment. The CARB adopted the CAAQS developed by the Department of Public Health in 1969, which had established CAAQS for

10 criteria pollutants: particulate matter (under 10 microns [PM_{10}] and under 2.5 microns [$PM_{2.5}$]), ozone (O_3), nitrogen dioxide (NO_2), sulfate, carbon monoxide (CO), sulfur dioxide (SO_2), visibility-reducing particles, lead (Pb), hydrogen sulfide (H_2S), and vinyl chloride.

The Federal Clean Air Act (FCAA) later required the USEPA to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment, and also set deadlines for their attainment. The USEPA has established NAAQS for six criteria pollutants (all of which are also regulated by CAAQS): CO, Pb, NO_2, O_3, PM_{10} and $PM_{2.5}$, and SO_2. California law continues to mandate compliance with CAAQS, which are often more stringent than national standards. However, California law does not require that CAAQS be met by specified dates as is the case with NAAQS. Rather, it requires incremental progress toward attainment. The SLOAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the county are maintained.

The state and national attainment status designations pertaining to San Luis Obispo County are summarized in Table 1. San Luis Obispo County is currently designated as a nonattainment area with respect to the state O_3 and PM_{10} standards. In addition, the eastern portion of the county is designated nonattainment for the national O_3 standards. The county is designated attainment or unclassified for the remaining national and state standards.

Table 1. Summary of Ambient Air Quality Standards and Attainment Designations

		California Standards[1]		National Standards[1]	
Pollutant	**Averaging Time**	**Concentration**	**Attainment Status**	**Primary**	**Attainment Status**
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Non-Attainment	--	Non-Attainment Eastern San Luis Obispo County
	8-hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)	Attainment Western San Luis Obispo County[2]
Respirable Particle Matter (PM_{10})	24-hour	50 µg/m^3	Non-Attainment	150 µg/m^3	Unclassified/ Attainment
	AAM	20 µg/m^3		–	
Fine Particulate Matter ($PM_{2.5}$)	24-hour	No State Standard	Attainment	35 µg/m^3	Unclassified/ Attainment
	AAM	12 µg/m^3		12 µg/m^3	
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Unclassified
	8-hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm (339 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Unclassified
	AAM	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 mg/m^3)	Unclassified
	3-hour	–		Secondary: 0.5 ppm (1,300 µg/m^3)	
	24-hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)	
	AAM	–		0.030 ppm (for certain areas)	

Pollutant	Averaging Time	California Standards[1]		National Standards[1]	
		Concentration	Attainment Status	Primary	Attainment Status
Lead	30-day Average	1.5 µg/m^3	Attainment	–	No Attainment Information
	Calendar Quarter	–		–1.5 µg/m^3 (for certain areas)	
	Rolling 3-Month Average	–		0.15 µg/m^3	
Visibility-Reducing Particle Matter	8-hour	Extinction of 0.23 per kilometer	Attainment	No Federal Standards	
Sulfates	24-hour	25 µg/m^3	Attainment		
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m^3)	Attainment		
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m^3)	No Attainment Information		

Notes:

µg/m^3 = micrograms per cubic meter, pp, = parts per million, AAM = Annual Arithmetic Mean

[1] Unclassified (USEPA/federal definition): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant.

[2] San Luis Obispo County has been designated non-attainment east of the -120.4 degree longitude line, in areas of San Luis Obispo County that are south of latitude 35.45 degrees, and east of the -120.3 degree longitude line, in areas of San Luis Obispo County that are north of latitude 35.45 degrees.

Source: SLOAPCD 2019.

Naturally Occurring Asbestos (NOA) is identified as a toxic air contaminant by the CARB. Serpentine and other ultramafic rocks are fairly common throughout the county and may contain NOA. If these areas are disturbed during construction, NOA-containing particles can be released into the air and have an adverse impact on local air quality and human health. According to the SLOAPCD's NOA map, the project site is not located in an area the SLOAPCD has identified as having the potential for NOA to be present (SLOAPCD 2021).

The SLOAPCD's *San Luis Obispo County 2001 Clean Air Plan* (2001 Clean Air Plan) is a comprehensive planning document intended to evaluate long-term air pollutant emissions and cumulative effects and provide guidance to the SLOAPCD and other local agencies on how to attain and maintain the state standards for O_3 and PM_{10} (SLOAPCD 2001). The 2001 Clean Air Plan presents a detailed description of the sources and pollutants that impact the jurisdiction's attainment of state standards, future air quality impacts to be expected under current growth trends, and an appropriate control strategy for reducing O_3 precursor emissions, thereby improving air quality.

The SLOAPCD has developed and updated their *CEQA Air Quality Handbook* (most recently updated with a November 2017 Clarification Memorandum) to help local agencies evaluate project-specific impacts and determine if air quality mitigation measures are needed, or if potentially significant impacts could result (SLOAPCD 2012, 2017). General screening criteria are used by the SLOAPCD to determine the type and scope of air quality assessment required for a particular project (Table 1-1 in the SLOAPCD's CEQA Air Quality Handbook). These criteria are based on project size in an urban setting and are designed to identify those projects with the potential to exceed the SLOAPCD's significance thresholds. A more refined analysis of air quality impacts specific to a given project is necessary for projects that exceed the screening criteria identified in Table 2, below, or are within 10% of exceeding the screening criteria.

The county's air quality is measured by a total of 10 ambient air quality monitoring stations, and pollutant levels are measured continuously and averaged each hour, 24 hours a day. The significance of a given pollutant can be evaluated by comparing its atmospheric concentration to federal and state air quality standards. These standards represent allowable atmospheric containment concentrations at which the

public health and welfare are protected and include a factor of safety. The SLOAPCD prepares an Annual Air Quality Report detailing information on air quality monitoring and pollutant trends in the county.

Sensitive Receptors

One of the most important reasons for air quality standards is the protection of those members of the population who are most sensitive to the adverse health effects of air pollution, termed "sensitive receptors." The term "sensitive receptors" refers to specific population groups, as well as the land uses where individuals would reside for long periods. Commonly identified sensitive population groups include children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses would include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Residential dwellings, schools, parks, playgrounds, childcare centers, convalescent homes, and hospitals are examples of sensitive land uses. The nearest sensitive receptor locations include a private single-family residence, located approximately 367 feet southeast from the boundary of the project site, and medical offices, located approximately 290 feet southwest from the boundary of the project site (SWCA 2021d).

Health Risk from a Nearby High-Volume Roadway

Diesel-fueled trucks and cars travel on US 101, which is considered a high-volume roadway, so future residents living in any proposed residential units near US 101 could be exposed to diesel particulate matter (DPM), which has been classified by the state as a toxic air contaminant and a carcinogen.

San Luis Obispo County Air Pollution Control District Thresholds

The SLOAPCD thresholds for determining the significance of impacts for total emissions expected from a project's construction activities are provided in Table 2. The SLOAPCD has discretion to require mitigation for projects that would not exceed the mitigation thresholds if those projects would result in special impacts, such as the release of DPM emissions or asbestos near sensitive receptors.

Table 2. SLOAPCD Thresholds of Significance for Construction Operations

	Threshold[1]		
Pollutant	**Daily**	**Quarterly Tier 1**	**Quarterly Tier 2**
Reactive Organic Gases (ROG) + Nitrogen Oxides (NOx) (combined)	137 lbs	2.5 tons	6.3 tons
Diesel Particulate Matter (DPM)	7 lbs	0.13 tons	0.32 tons
Fugitive Particulate Matter (PM_{10}), Dust [2]	--	2.5 tons	--

Notes:

lbs = pounds

[1] Daily and quarterly emission thresholds are based on the California Health and Safety Code and the CARB Carl Moyer Guidelines.

[2] Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5-ton PM10 quarterly threshold.

Source: SLOAPCD 2012.

Environmental Evaluation

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

In order to be considered consistent with the 2001 Clean Air Plan, a project must be consistent with the land use planning and transportation control measures and strategies that are outlined in the Clean Air Plan (SLOAPCD 2012). Operation of the project may result in infrequent maintenance trips to and from the site on an as-needed basis. Because the project would not generate regular daily vehicle trips, transportation control measures, such as encouraging use of alternative transportation options, telecommuting, and measures intended to reduce vehicle miles traveled (VMT), would not be applicable to the project. The project consists of replacing the existing Traffic Way bridge and does not propose commercial, residential, or other development that would be applicable to land use planning measures, such as provision of mixed-use development, planning compact communities with higher densities, and balancing jobs and housing. Traffic Way currently consists of a Class II bike lane and pedestrian facilities. The proposed bridge would retain the Class II bike lane and pedestrian facilities to allow for a connected community and to encourage alternative modes of travel within the city's downtown. Therefore, the project would not conflict with the 2001 Clean Air Plan, and impacts would be *less than significant*.

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

Project air pollutant emissions were estimated using the most recent version of the California Emissions Estimator Model (CalEEMod 2020.4.0). Based on estimated construction phase length, grading volumes, and other factors, estimated construction-related emissions that would result from the project were calculated and compared to applicable SLOAPCD thresholds in Table 3. The CalEEMod results are included in Appendix A.

Table 3. Estimated Construction Emissions

Pollutant	Project Construction Emissions (Daily)	Project Construction Emissions (quarterly)	SLOAPCD Thresholds[1]		Does the Project exceed SLOAPCD Thresholds?
			Daily	Quarterly Tier 1	
Reactive Organic Gases (ROG) + Nitrogen Oxides (NOx) (combined)	9.34 lbs/day	0.15 tons/quarter	137 lbs	2.5 tons	No
Diesel Particulate Matter (DPM)	0.32 lbs/day	0.008 tons/quarter	7 lbs	0.13 tons	No
Fugitive Particulate Matter (PM_{10}), Dust [2]	--	0.018 tons/quarter	--	2.5 tons	No

Notes:

lbs = pounds

[1] Daily and quarterly emission thresholds are based on the California Health and Safety Code and the CARB Carl Moyer Guidelines.

[2] Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5-ton PM10 quarterly threshold.

Source: SLOAPCD 2012.

As shown in Table 3, the project would not exceed daily or quarterly SLOAPCD thresholds for construction-related emissions. Therefore, the project would not result in a cumulatively considerable net increase in identified criteria pollutants, and construction-related impacts would be *less than significant.*

Implementation of the project would not result in new uses that could increase operational emissions. Operation of the project would include continued operation of the Traffic Way bridge and may require infrequent vehicle trips for maintenance activities on an as-needed basis. The Traffic Way bridge provides passage over Arroyo Grande Creek and, based on the 2016 Bridge Inspection Report, traffic volumes through the site are approximately 9,600 vehicles per day. Traffic Way is classified as an urban arterial roadway and has an estimated future average daily traffic (ADT) rate of 11,000 based on estimated growth within the city. Replacement of the bridge is not anticipated to result in an increase in vehicle trips compared to existing conditions. The proposed replacement bridge would be paved and would not result in increased particulate matter during operation. Therefore, the project would not result in new development that would generate operational emissions or increased VMT. Operational impacts associated with generation of criteria air pollutant emissions would be *less than significant*.

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

The nearest sensitive receptor locations include a private single-family residence, located approximately 367 feet southeast from the boundary of the project site, and medical offices, located approximately 290 feet southwest from the boundary of the project site (SWCA 2021d). According to the SLOAPCD *CEQA Air Quality Handbook*, projects that occur within 1,000 feet of sensitive receptors have the potential to result in adverse impacts involving construction emissions (SLOAPCD 2012). Therefore, based on the proximity to the nearest sensitive receptor locations, Mitigation Measure AQ-1 has been included to require limitations on diesel idling during the construction phase of the project to reduce potential impacts related to air quality emissions near sensitive receptor locations. Therefore, impacts would be *less than significant with mitigation*.

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

Construction of the proposed project would generate odors associated with construction smoke, dust, and equipment exhaust and fumes. Proposed construction activities would not differ significantly from those resulting from any other type of construction project. Any construction odors would be temporary and limited to the construction phase of the proposed project. The SLOAPCD NOA Map indicates the project site is not located within an area identified as having potential for NOA to be present (SLOAPCD 2021). The Traffic Way bridge was originally constructed in 1932 and has been in use for 89 years; therefore, there is potential for asbestos-containing material (ACM) to be released during decommissioning of the existing bridge. Mitigation Measure AQ-2 has been included to reduce impacts related to potential release of ACM during decommissioning of the bridge. With implementation of the identified mitigation measure, impacts would be *less than significant with mitigation*.

Conclusion

The project would be consistent with the 2001 Clean Air Plan. The project would not exceed construction-related or operational air pollutant emission thresholds as established by the SLOAPCD. With implementation of Mitigation Measure AQ-1, construction of the project is not anticipated to result in significant air quality emissions that could adversely affect nearby sensitive receptor locations. Mitigation Measure AQ-2 has been included to reduce potential impacts related to ACM during decommissioning of the existing bridge. Therefore, with implementation of the identified mitigation measures, impacts would be less than significant.

Mitigation Measures

AQ-1 **Idling Control Techniques.** During all construction activities and use of diesel vehicles, the applicant shall implement the following idling control techniques:

1. Idling Restrictions Near Sensitive Receptors for Both On- and Off-Road Equipment.
    a. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors, if feasible;
    b. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
    c. Use of alternative-fueled equipment shall be used whenever possible; and
    d. Signs that specify the no idling requirements shall be posted and enforced at the construction site.
2. California Diesel Idling Regulations. On-road diesel vehicles shall comply with 13 California Code of Regulations (CCR) 2485. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more 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:
    a. 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
    b. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, an air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 1,000 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 website: www.arb.ca.gov/msprog/truck-idling/2485.pdf.

MM AQ-2 **Asbestos Material in Demolition.** Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos-containing material (ACM). ACMs could be encountered during demolition or remodeling of the existing bridge. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). If utility pipelines are scheduled for removal or relocation or a building(s) is proposed to be removed or renovated, various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (NESHAP; 40 Code of Federal Regulations [CFR] 61, Subpart M - asbestos NESHAP). These requirements include but are not limited to: (1) notification to the APCD; (2) an asbestos survey conducted by a Certified Asbestos Inspector; and (3) applicable removal and disposal requirements of identified ACM. More information on asbestos can be found at: http://www.slocleanair.org/business/asbestos.php.

IV. Biological Resources

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

Setting

The Federal Endangered Species Act (FESA) of 1973 provides legislation to protect federally listed plant and animal species. The California Endangered Species Act (CESA) of 1984 ensures legal protection for plants listed as rare or endangered and wildlife species formally listed as endangered or threatened, and also maintains a list of California Species of Special Concern (SSC). SSC status is assigned to species that have limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the CDFW has the authority to review projects for their potential to impact special-status species and their habitats.

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers, popular in the latter part of the 1800s. The MBTA is enforced by the U.S. Fish and Wildlife Service (USFWS), and potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies and are required to be evaluated under CEQA.

The U.S. Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetland and non-wetland waterbodies that meet specific criteria. USACE jurisdiction regulates almost all work in, over, and under waters listed as “navigable

waters of the U.S." that results in a discharge of dredged or fill material within USACE regulatory jurisdiction, pursuant to Section 404 of the Clean Water Act (CWA). Under Section 404, USACE regulates traditional navigable waters (TNWs), wetlands adjacent to TNWs, relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically 3 months), and wetlands that directly abut relatively permanent tributaries.

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) regulate discharges of fill and dredged material in California, under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act, through the State Water Quality Certification Program. State Water Quality Certification is necessary for all projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State. Based on the USFWS National Wetlands Inventory (NWI), Arroyo Grande Creek and associated wetland habitat is located below the project site (USFWS 2021).

City Municipal Code Section 12.16.070 is designed to preserve, enhance, and revitalize the City's urban forest. The Community Tree Program sets forth guidelines and policies with regards to:

- Street tree requirements for new development;
- Landmark trees;
- Responsibility for tree-damaged sidewalks and public improvements;
- Privately owned trees affecting the public ROW;
- Tree removal in residential, mixed-use, and commercial zones;
- Public utility company requirements; and
- Installation, maintenance, and removal of trees relating to property development.

Regulated trees include street trees within the public ROW fronting the property, landmark trees, and any oak trees with a trunk width over 12 inches in diameter when measured 4.5 feet from the base. Removing them is prohibited without first obtaining a permit. The permit is available when the removal is deemed appropriate. Any removal of a regulated tree without a permit is considered to be a misdemeanor violation with a minimum $150.00 tree replacement fee.

The project area is in an urbanized portion of the city and is surrounded by commercial, recreational, community, and residential land uses. The Traffic Way bridge extends over Arroyo Grande Creek, which is a perennial stream with a dense riparian canopy. Elevations within the project area are approximately 125 feet above mean sea level (msl). Vegetation communities within the project area are identified in Table 4 and Figure 3 (SWCA 2021e).

Table 4. Plant Community/Habitat Present within the Project Area

Plant Community/Habitat	Total Acres within Project Area
Arroyo Willow Thicket (includes Stream Channel[1])	3.81
Ruderal	2.30
Ruderal/Agriculture	3.28
Ornamental/Landscaped	0.28
Developed/Disturbed	5.53
Total	**15.2**

[1] Stream channel, delineated by ordinary high-water mark (OHWM), is within the riparian canopy.
Source: SWCA 2021e.

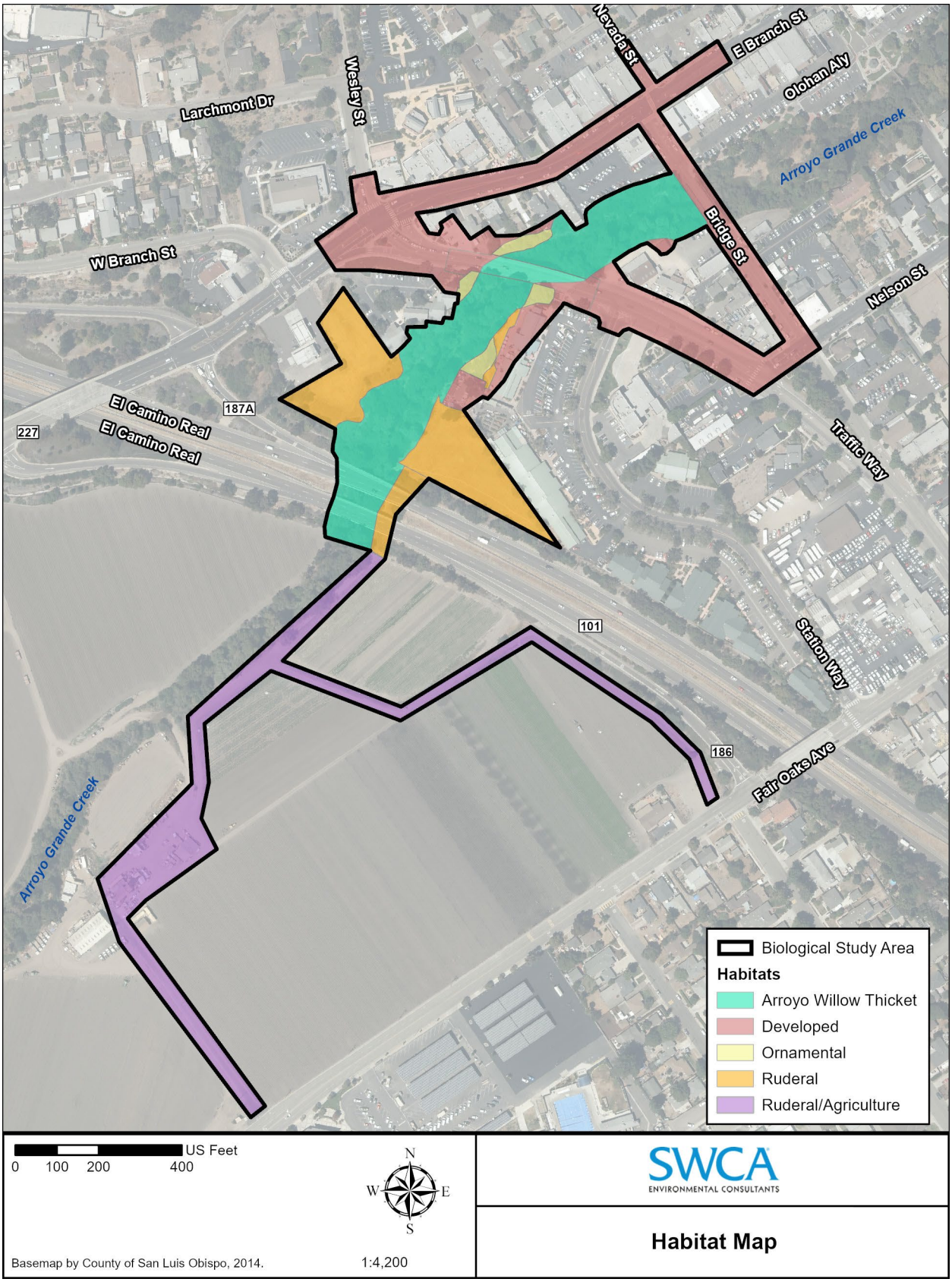


Figure 3. Habitat map.

The following evaluation is based on the Natural Environment Study (NES) prepared by SWCA for the proposed project in September 2021 (SWCA 2021e). The NES includes the results of literature and database reviews of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Electronic Inventory, a species list from the USFWS, and environmental documents that have been prepared for other projects in the general area. The NES also includes the results of the field and botanical surveys conducted in May 2019 and February 2020 and a Wetland Delineation conducted in February 2020. Based on the background review, 30 special-status plant species and 32 special-status animal species have been documented within the vicinity of the project site. However, based on habitat types, soil conditions, and elevations present within the project area, only the following four special-status plant species and six special-status animal species were determined to have the potential to occur within the project area:

- **Special-Status Plants**
  - black-flowered figwort (*Scrophularia atrata*)
  - Gambel's watercress (*Nasturtium gambelii*)
  - marsh sandwort (*Arenaria paludicola*)
  - San Bernardino aster (*Symphyotrichum defoliatum*)
- **Special-Status Animals**
  - California red-legged frog (*Rana draytonii*)
  - least Bell's vireo (*Vireo bellii pusillus*)
  - South-Central California Coast steelhead Distinct Population Segment (DPS) (*Oncorhynchus mykiss*)
  - southwestern willow flycatcher (*Empidonax traillii extimus*)
  - Townsend's big-eared bat (*Corynorhinus townsendii*)
  - western pond turtle (*Emys marmorata*)

During field surveys of the project area, no special-status plants or animals or evidence of special-status plants or animals were observed (SWCA 2021e).

Invasive Species

A total of 30 invasive plant species included on the California Invasive Plant Council (Cal-IPC) Inventory were observed in the project area, as shown in Table 5 (SWCA 2021e). Five species with a Cal-IPC category rating of High, 16 species with a Cal-IPC category rating of Moderate, and nine species with a Cal-IPC category rating of Limited were observed (SWCA 2021e).

Table 5. Invasive Species Observed in the Project Area

Scientific Name	Common Name	Cal-IPC Rating
Arundo donax	giant reed	High
Avena barbata	slender wild oat	Moderate
Avena fatua	common wild oat	Moderate
Brassica nigra	black mustard	Moderate
Bromus diandrus	ripgut brome	Moderate
Bromus tectorum	cheatgrass	High
Carduus pycnocephalus	Italian thistle	Moderate
Centaurea calcitrapa	purple star thistle	Moderate

Scientific Name	Common Name	Cal-IPC Rating
Cirsium vulgare	bull thistle	Moderate
Conium maculatum	poison hemlock	Moderate
Cynodon dactylon	Bermuda grass	Moderate
Delairea odorata	cape ivy	High
Erodium cicutarium	redstem filaree	Limited
Festuca myuros	rattail fescue	Moderate
Festuca perennis	Italian ryegrass	Moderate
Foeniculum vulgare	fennel	High
Hedera helix	English ivy	High
Hordeum marinum ssp. *gussoneanum*	seaside barley	Moderate
Hordeum murinum ssp. *leporinum*	hare barley	Moderate
Hypochaeris glabra	smooth cat's ear	Limited
Hypochaeris radicata	hairy cat's ear	Moderate
Medicago polymorpha	burclover	Limited
Oxalis pes-caprae	Bermuda buttercup	Moderate
Raphanus sativus	wild radish	Limited
Ricinus communis	castor bean	Limited
Robinia pseudoacacia	black locust	Limited
Schinus molle	Peruvian pepper tree	Limited
Silybum marianum	milk thistle	Limited
Stipa miliacea var. *miliacea*	Smilo grass	Limited
Vinca magor	bigleaf periwinkle	Moderate

Source: SWCA 2021e.

Wetlands

According to the USFWS NWI surface water and wetland mapper, there is a riverine feature and associated freshwater/forested shrub wetland that extends through the project area (USFWS 2021). A wetland delineation was conducted in February 2020 for the portion of Arroyo Grande Creek that extends through the project area. Arroyo Grande Creek within the project area has been modified and currently supports an approximately 15-foot-wide channel and steep banks. Very slow flowing water and no vegetation was observed within the creek channel at the time of the wetland delineation survey (SWCA 2021e, 2021h). Based on the conditions observed in the field, Arroyo Grande Creek is likely subject to USACE, CDFW, and RWQCB jurisdiction due to the presence of a clearly identifiable ordinary high-water mark (OHWM), the evidence of a defined bed and bank, connectivity to the Pacific Ocean, a TNW, presence of riparian vegetation, and evidence of wetland hydrology (SWCA 2021e, 2021h). Within the project area, 0.37 acre of federal and 1.89 acres of state jurisdictional wetland features were identified, as shown in Table 6.

Table 6. Jurisdictional Areas Present within the BSA

Jurisdictional Feature	Total Jurisdictional Areas Present
Federal – Clean Water Act (Sections 404/401 applicable)	0.37 acre (16,204 square feet)
State – California Fish and Game Code (Sections 1600–1602 applicable), Porter Cologne Act	1.89 acre (82,328 square feet)

Source: SWCA 2021e.

Environmental Evaluation

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

SPECIAL-STATUS PLANTS

Literature and database reviews of the CDFW CNDDB, CNPS Electronic Inventory, and USFWS Information for Planning and Consultation (IPaC) identified 30 special-status plant species that have the potential to occur in the project area. Based on habitat types, soil conditions, and elevation within the project area, four special-status plant species were identified as having the potential to occur within the project site; however, no special-status species were observed on-site during appropriately timed botanical surveys conducted in May 2019 and February 2020 (SWCA 2021e). The four special-status plant species considered to have the potential to occur within the project site are discussed below.

Black-Flowered Figwort

Black-flowered figwort is a California Rare Plant Rank (CRPR) 1B.2 species that typically occurs in coniferous forest, chaparral, coastal dune, coastal scrub, and riparian scrub habitats. Suitable habitat for this species occurs within the riparian habitat on-site (see Figure 3). Proposed ground disturbance and vegetation removal during construction activities has the potential to result in take of this species if present within the project area. No black-flowered figwort was observed during appropriately timed botanical surveys (SWCA 2021e).

Gambel's Watercress

Gambel's watercress is a CRPR 1B.2 species that typically occurs in freshwater or brackish marshes and swamps. Suitable habitat for this species occurs within and adjacent to Arroyo Grande Creek on-site (see Figure 3). Proposed ground disturbance and vegetation removal within Arroyo Grande Creek has the potential to result in take of this species if present within the project area. No Gambel's watercress was observed during appropriately timed botanical surveys (SWCA 2021e).

Marsh Sandwort

Marsh sandwort is a CRPR 1B.1 species that typically occurs in slow-moving water and tall emergent vegetation. It uses the tall emergent vegetation as structural support. Suitable habitat for this species occurs within and adjacent to Arroyo Grande Creek on-site (see Figure 3). Proposed ground disturbance and vegetation removal within Arroyo Grande Creek has the potential to result in take of this species if present within the project area. No marsh sandwort was observed during appropriately timed botanical surveys (SWCA 2021e).

San Bernardino Aster

San Bernardino aster is a CRPR 1B.2 species that typically occurs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland near ditches, streams, and springs. Suitable habitat for this species occurs near Arroyo Grande Creek on-site (see Figure 3). Proposed ground disturbance and vegetation removal adjacent to Arroyo Grande Creek has the potential to result in take of this species if present within the project area. No San Bernardino aster was observed during appropriately timed botanical surveys (SWCA 2021e).

Implementation of the project is not anticipated to adversely impact special-status plant species because there were no special-status plant species observed during appropriately timed botanical surveys. However, since there is suitable habitat present within the project area, Mitigation Measure BIO-1 has been included to require preconstruction botanical surveys prior to the initiation of construction activities. In addition, there is potential for proposed construction activities to result in the spread of invasive species. Mitigation Measure BIO-2 has been included to avoid or minimize the potential for construction activities to result in the spread of invasive species. Therefore, potential impacts related to special-status plant species would be *less than significant with mitigation*.

SPECIAL-STATUS ANIMALS

Literature and database reviews of the CDFW CNDDB and a species list from the USFWS IPaC identified 32 special-status animal species that have been documented within the project region. Based on the presence of habitat types and site conditions within the project area, six special-status animal species were identified as having the potential to occur within the project area; however, no special-status species were observed on-site during field surveys conducted in May 2019 and February 2020 (SWCA 2021e). The six special-status animal species that have the potential to occur in the project site are discussed in further detail below.

California Red-Legged Frog

The California red-legged frog (CRLF) is federally threatened and considered an SSC by CDFW. CRLF typically occur in a variety of areas, including aquatic, riparian, and upland habitats. The Arroyo Grande Creek bed and bank has the potential to provide suitable aquatic and upland habitat and for this species (SWCA 2021e). Although no CRLF were observed within the project area, there is the potential for CRLF to migrate into the project area during proposed construction activities. Therefore, there is potential for work within and adjacent to Arroyo Grande Creek to adversely affect CRLF if present within the project area. Mitigation Measure BIO-3 has been included to reduce potential impacts to CRLF.

South-Central California Coast DPS Steelhead

The project area is located within designated critical habitat for South-Central California Coast DPS steelhead. South-Central California Coast DPS steelhead is federally listed as threatened and is considered an SSC. Suitable habitat for steelhead on the Pacific Coast includes clear, cool water with abundant instream cover (e.g., submerged branches, rocks, logs), well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio (SWCA 2021e). Although there were no steelhead identified within Arroyo Grande Creek during field surveys, based on the presence of designated critical habitat for this species, there is potential for work within and adjacent to Arroyo Grande Creek to adversely affect this species if present within the project area during proposed construction activities. Mitigation Measure BIO-4 has been included to avoid or minimize potential impacts to steelhead.

Western Pond Turtle

Western pond turtle is considered an SSC by CDFW. This species typically occurs where water persists year-round in ponds along foothill streams or in broad washes near the coast. The ponds favored by turtles typically support emergent and floating vegetation such as cattails and algal mats. They also bask on half-submerged logs, rocks, or flat shorelines close to the edge of water. Therefore, the Arroyo Grande Creek bed and bank has the potential to provide suitable habitat for this species. In addition, western pond turtle has been previously documented within Arroyo Grande Creek, approximately 0.5 mile north of the project area; therefore, there is potential for this species to migrate into the project area during proposed construction activities (SWCA 2021e). Work within and adjacent to Arroyo Grande Creek has the potential to adversely affect this species if present during proposed construction activities. Mitigation Measure BIO-5 has been included to avoid or minimize potential impacts to southwestern pond turtle.

Nesting Migratory Birds (Least Bell's Vireo and Southwestern Willow Flycatcher)

Least Bell's vireo is a federal and state endangered species. Federal critical habitat has been designated for the species within the project region; however, the project area is not within the boundaries of the designated critical habitat. Least Bell's vireo requires riparian areas to breed and typically inhabits structurally diverse woodlands along watercourses. This species typically occurs in riparian habitat types, including cottonwood-willow woodlands/forests, oak woodlands, and mule fat scrub (SWCA 2021e). Southwestern willow flycatcher is a federal and state endangered species. Southwestern willow flycatcher requires dense riparian habitats, including cottonwood, willow, and/or tamarisk vegetation for nesting (SWCA 2021e). Riparian trees and vegetation within the project area have the potential to provide suitable habitat for these species and other nesting migratory bird species. Although no least Bell's vireo or southwestern willow flycatcher were observed within the project area, there is potential for these species to migrate into and nest within the project area during proposed construction activities. Therefore, proposed vegetation removal and construction noise could adversely affect nesting migratory birds, including least Bell's vireo and southwestern willow flycatcher, if present within the project area. Mitigation Measure BIO-6 has been included to reduce potential impacts to nesting migratory birds.

Roosting Bats (Townsend's Big-eared Bat)

Typically, roosting bat species, including Townsend's big-eared bat, forage over a wide variety of habitat types, including, but not limited to, grassland, wetland, shrub, and wooded habitats. Species may roost in caves and rock crevices. Bridges, buildings, and tree cavities are also occasionally used for roosting. No bats or evidence of bat activity (e.g., guano, urine staining, etc.) was observed during visual reconnaissance surveys of the project area; however, the existing bridge and the riparian vegetation may support suitable roosting habitat or structure for bat species (SWCA 2021e). Therefore, there is potential for proposed bridge decommissioning, vegetation removal, and construction noise to adversely affect roosting bats, including Townsend's big-eared bat, if present within the project area. Mitigation Measure BIO-7 has been included to reduce potential impacts to roosting bats if present within the project area.

Proposed construction activities have the potential to adversely affect special-status animal species if present within the project area during implementation. Mitigation Measures BIO-3 through BIO-7 have been included to reduce potential impacts to special-status animal species. Therefore, potential impacts related to special-status animal species would be *less than significant with mitigation*.

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

The project area supports arroyo willow thicket and other riparian vegetation, which is considered a sensitive natural community by the CDFW, and streams and riparian communities are considered sensitive by the City (see Figure 3). Approximately 0.82 acre of arroyo willow thicket would be temporarily impacted by the project (SWCA 2021e). Additionally, other native riparian trees located within the footprint of disturbance for the proposed bridge would be removed during project activities. The project includes revegetation of impacted areas; however, approximately 0.26 acre of arroyo willow thicket would be permanently removed. Mitigation Measure BIO-8 has been included to protect arroyo willows outside of the proposed impact area and would require a compensatory mitigation program for impacted arroyo willow and riparian habitat. In addition, the Arroyo Grande Creek stream channel is considered a sensitive habitat because it is federally designated as steelhead critical habitat (SWCA 2021e). Mitigation Measure BIO-9 has been included to reduce impacts to Arroyo Grande Creek during proposed construction activities. Therefore, impacts would be *less than significant with mitigation*.

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

A total of 0.37 acre of federal and 1.89 acres of state jurisdictional features was identified within the project area, which includes the riparian corridor of Arroyo Grande Creek (SWCA 2021e, 2021h). The project includes replacing the existing Traffic Way bridge to reduce risk caused by scour. Construction of the new foundation would require work within and adjacent to Arroyo Grande Creek, which flows under the Traffic Way bridge. The project is estimated to result in 0.4 acre of permanent impacts and 1.26 acres of temporary impacts to Arroyo Grande Creek, as shown in Table 7.

Table 7. Estimate of Impacts to Jurisdictional Areas

Jurisdiction	Impacts	
	Permanent	Temporary
Federal – Clean Water Act (Sections 404/401 applicable)*	0.03	0.19
State – California Fish and Game Code (Sections 1600–1602), Porter Cologne Act	0.37	0.89
Total	**0.40**	**1.26**

* Delineated by OHWM.

Source: SWCA 2021e.

In addition to direct impacts, proposed construction activities have the potential to result in increased erosion and siltation that may result in runoff from the project site and indirectly impact wetland areas. Mitigation Measure BIO-9 would avoid or minimize potential impacts related to work within and adjacent to Arroyo Grande Creek. Therefore, implementation of Mitigation Measure BIO-9 would reduce potential impacts related to work within Arroyo Grande Creek, and impacts would be *less than significant with mitigation*.

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

Based on a query of the California Essential Habitat Connectivity Project for Essential Habitat Connectivity, the project area is not located within an Essential Connectivity Area (SWCA 2021e). However, it is reasonable to assume that the portion of the Arroyo Grande Creek riparian corridor within the project area may be used by wildlife as a movement corridor (SWCA 2021e). As previously discussed in threshold IV(a), the project area is located within designated critical habitat for steelhead and there is suitable habitat for this species within Arroyo Grande Creek. Although steelhead were not identified within Arroyo Grande Creek during field surveys, based on the presence of designated critical habitat for steelhead, there is potential for work within and adjacent to Arroyo Grande Creek to adversely affect steelhead if present within the project area during proposed construction activities. Mitigation Measure BIO-4 has been included to avoid or minimize potential impacts to steelhead. In addition, work within and adjacent to Arroyo Grande Creek has the potential to result in indirect impacts, including increased erosion, sedimentation, and pollution that may affect water quality and disturb migratory fish species. Mitigation Measure BIO-9 has been included to reduce potential impacts to Arroyo Grande Creek during proposed construction activities that could result in indirect impacts to migratory fish species.

There is potential for nesting migratory birds to migrate into and nest within riparian trees and other vegetation within the project area during proposed construction activities. There is potential for proposed vegetation removal and construction noise to adversely affect nesting migratory birds if present within the project area. Mitigation Measure BIO-6 has been included to reduce potential impacts to nesting migratory birds. Therefore, impacts would be *less than significant with mitigation*.

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

City Municipal Code Section 12.16.070 requires projects that propose to remove street trees within the public ROW fronting the property, landmark trees, and any oak trees with a trunk width over 12 inches in diameter when measured 4.5 feet from the base to obtain a tree removal permit prior to removal of any trees. The project proposes to remove arroyo willows and other riparian vegetation and would not remove any trees covered by the City Municipal Code. The project includes revegetation of impacted areas; however, approximately 0.26 acre of arroyo willow thicket would be permanently removed. Mitigation Measure BIO-8 has been included to protect arroyo willows outside of the proposed impact area and would require a compensatory mitigation program for impacted arroyo willow and riparian habitat. Therefore, impacts would be *less than significant with mitigation*.

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

A Habitat Conservation Plan (HCP) was prepared for Arroyo Grande Creek in 2004 to address protection of habitat for steelhead and CRLF. The HCP extends approximately 10 miles, and its boundaries include Arroyo Grande Creek downstream from Lopez Dam to the flood control channel at Fair Oaks Boulevard. The project would require work within Arroyo Grande Creek and has the potential to adversely affect CRLF and/or steelhead if present within the project area during proposed construction activities. As previously discussed in threshold IV(a), Mitigation Measures BIO-3 and BIO-4 have been included to reduce potential impacts to CRLF and/or steelhead if present within the project area during proposed construction activities. Therefore, impacts would be *less than significant with mitigation*.

Conclusion

Mitigation Measures BIO-1 through BIO-9 have been included to reduce potential impacts related to biological resources. Therefore, with implementation of the identified mitigation, impacts would be less than significant.

Mitigation Measures

MM BIO-1 **Preconstruction Botanical Surveys.** Prior to construction, a preconstruction survey shall be conducted to ensure special-status plant species are not present within the project area. If Gambel's watercress or marsh sandwort are found within the project area, all work will be stopped immediately, the U.S. Fish and Wildlife Service will be notified, and work will not commence until consultation is completed. If other special-status plant species are present, the location and number of individuals will be recorded and suitable measures will be incorporated into the project plans, such as seed collection and replanting of special-status species, to avoid and/or minimize potential impacts to these species. Observations of these or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

MM BIO-2 **Invasive Species Control.** The following measures shall be implemented to reduce potential impacts related to the spread of invasive species:

1. During construction, the project contractor will make all reasonable efforts to limit the use of imported soils for fill. Soils currently existing on-site should 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 similar. To avoid the spread of invasive species, the contractor shall:
    a. Stockpile topsoil and redeposit the stockpiled soil on-site at a sufficient depth to preclude germination or spread of those species after construction is complete; or,
    b. Transport the topsoil to a permitted landfill for disposal.
2. Prior to construction, project plans will clearly identify the type of species, location, and methodology of removal and disposal of invasive exotic species found within the project site. Removal and disposal of invasive exotic plants and wildlife must be in accordance with state law and/or project authorizations from resource agencies (e.g., U.S. Fish and Wildlife Service Programmatic Biological Opinion). In particular, for those invasive exotic plant species that are particularly difficult to remove (e.g., jubata grass [*Cortaderia jubata*]), a combination of cutting and application of herbicide would likely be required, and thus require a request for an amendment to the standard conditions of the U.S. Fish and Wildlife Service Programmatic Biological Opinion. In addition, removal of crayfish or bullfrog (*Lithobates catesbeiana*) must be conducted lawfully using methodologies outlined in the California Fish and Game Code.
3. During construction, the biological monitor(s) will ensure that the spread or introduction of invasive exotic plant and wildlife species is avoided to the maximum extent possible.

4. All erosion control materials including straw bales, straw wattles, or mulch used on-site must be free of invasive species seed.

MM BIO-3 **California Red-Legged Frog.** The following measures shall be implemented to reduce potential impacts to California red-legged frog:

1. Only U.S. Fish and Wildlife Service-approved biologists will participate in activities associated with the capture and handling of California red-legged frogs. Biologists authorized under the Programmatic Biological Opinion do not need to re-submit their qualifications for subsequent projects conducted pursuant to the Programmatic Biological Opinion, unless the U.S. Fish and Wildlife Service has revoked their approval at any time during the life of the Programmatic Biological Opinion.
2. Ground disturbance will not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist(s) is qualified to conduct the work. The California Department of Transportation will request approval of the biologist(s) from the U.S. Fish and Wildlife Service.
3. A U.S. Fish and Wildlife Service-approved biologist will survey the project area 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 site before work activities begin. The U.S. Fish and Wildlife Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and will not be affected by the activities associated with the project. The relocation site should be in the same drainage to the extent practicable. The California Department of Transportation will coordinate with the U.S. Fish and Wildlife Service on the relocation site prior to the capture of any California red-legged frogs.
4. Before any activities begin on a project, a U.S. Fish and Wildlife Service-approved biologist will 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.
5. A U.S. Fish and Wildlife Service-approved biologist will be present at the work site until California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of the habitat has been completed. After this time, the City of Arroyo Grande Public Works Department will designate a person to monitor on-site compliance with minimization measures. The U.S. Fish and Wildlife Service-approved biologist will ensure that this monitor receives the training outlined in (4) above and in the identification of California red-legged frogs. If the monitor or the U.S. Fish and Wildlife Service-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not anticipated by the California Department of Transportation, City of Arroyo Grande Public Works Department, and the U.S. Fish and Wildlife Service 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 actions that are causing these effects be halted. If work is stopped, the California Department of Transportation, City of Arroyo Grande Public Works Department, and U.S. Fish and Wildlife Service will be notified as soon as is reasonably possible.

6. During project activities, trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, trash and construction debris will be removed from work areas.
7. All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or waterbodies 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 will ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the California Department of Transportation and City of Arroyo Grande Public Works Department 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.
8. Habitat contours will be returned to their original configuration at the end of project activities. This measure will be implemented in all areas disturbed by activities associated with the project, unless the U.S. Fish and Wildlife Service, California Department of Transportation, and City of Arroyo Grande Public Works Department determine that it is not feasible or modification or original contours would benefit the California red-legged frog.
9. The number of access routes, size of staging areas, and the total area of activity will be limited to the minimum necessary to achieve the project. Environmentally Sensitive Areas will be established 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.
10. The California Department of Transportation and City of Arroyo Grande Public Works Department will attempt to schedule work 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 would be avoided, to the maximum degree practicable, during the breeding season (November–May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and technical assistance between the U.S. Fish and Wildlife Service and California Department of Transportation during project planning will be used to assist in scheduling work activities to avoid sensitive habitats during key times of year.
11. To control sedimentation during and after project implementation, the California Department of Transportation and City of Arroyo Grande Public Works Department will implement Best Management Practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act that it receives for the specific project. If Best Management Practices are ineffective,

the California Department of Transportation will attempt to remedy the situation immediately, in coordination with the U.S. Fish and Wildlife Service.

12. If a work site is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water will be released 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 streambed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon completion of the project.
13. Unless approved by the U.S. Fish and Wildlife Service, water will not be impounded in a manner that may attract California red-legged frogs.
14. A U.S. Fish and Wildlife Service-approved biologist will permanently remove any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes from the project area, to the maximum extent. The U.S. Fish and Wildlife Service-approved biologist will be responsible for ensuring their activities are in compliance with the California Fish and Game Code.
15. If the California Department of Transportation and the City of Arroyo Grande Public Works Department demonstrate that disturbed areas have been restored to conditions that allow them to function as habitat for the California red-legged frog, these areas will not be included in the amount of total habitat permanently disturbed.
16. To ensure that diseases are not conveyed between work sites by the U.S. Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Task Force will be followed at all times.
17. Project sites will be re-vegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent practicable. This measure will be implemented in all areas disturbed by activities with the project, unless the U.S. Fish and Wildlife Service, California Department of Transportation, and City of Arroyo Grande Public Works Department have determined that it is not feasible or practical.
18. The California Department of Transportation and City of Arroyo Grande Public Works Department will not use herbicides as the primary method to control invasive, exotic plants. However, if the California Department of Transportation and City of Arroyo Grande Public Works Department determine the use of herbicides is the only feasible method for controlling invasive plants at a specific project site, it will implement the following additional measures to protect California red-legged frog:
    a. The California Department of Transportation and City of Arroyo Grande Public Works Department will not use herbicides during the breeding season for California red-legged frog.
    b. The California Department of Transportation and City of Arroyo Grande Public Works Department will conduct surveys for California red-legged frog immediately prior to the start of herbicide use. If found, California red-legged frog will be relocated to suitable habitat far enough from the project area that no direct contact with herbicide would occur.

c. Giant reed and other invasive plants will be cut and hauled out by hand and painted with glyphosate-based products, such as Aquamaster® or Rodeo®.

d. Licensed and experienced California Department of Transportation staff or a licensed and experienced contractor will use a hand-held sprayer for foliar application of Aquamaster® or Rodeo® where large monoculture stands occur at an individual project site.

e. All precautions will be taken to ensure that no herbicide is applied to native vegetation.

f. Foliar applications of herbicide will not occur when wind speeds are in excess of 3 miles per hour.

g. No herbicides will be applied within 24 hours of forecasted rain.

h. Application of herbicides will be done by qualified California Department of Transportation staff, City of Arroyo Grande staff, or contractors to ensure that overspray is minimized, application is made in accordance with the label recommendations, and required and reasonable safety measures are implemented. A safe dye will be added to the mixture to visually denote treated sites. Application of herbicides will be consistent with the U.S. Environmental Protection Agency's Office of Pesticide Programs Endangered Species Protection Program county bulletins.

i. All herbicides, fuels, lubricants, and equipment will be stored, poured, or refilled at least 60 feet from riparian habitat or water bodies in a location where a spill would not drain directly toward aquatic habitat. The California Department of Transportation and City of Arroyo Grande Public Works Department will ensure that a plan is in place for a prompt and effective response to accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

MM BIO-4 **South-Central California Coast Steelhead.** The following measures shall be implemented to reduce potential impacts to South-Central California Coast steelhead:

1. Avoid or reduce the area of permanent structures, such as rock slope protection, within the ordinary high-water mark on-site. Selection of the single-span bridge design reduces the need for additional support structures located within the ordinary high-water mark (structures will still be present on the stream banks). Removal of the existing piles within the ordinary high-water mark would result in improvements to steelhead habitat in the vicinity of the bridge.

2. Prior to initiation of stream diversion/dewatering, a qualified biologist shall conduct a worker environmental training program, including a description of steelhead, steelhead critical habitat, its legal/protected status, proximity to the project site, avoidance/minimization measures to be implemented during the project, and the implications of violating Federal Endangered Species Act and permit conditions.

3. In-stream work will take place between June 1 and October 15 in any given year, when the surface water within Arroyo Grande Creek is likely to be at seasonal minimum. Deviations from this work window will only be made with permission from the relevant regulatory agencies. During in-stream work, a qualified biologist who is approved by the National Oceanic and Atmospheric

Administration National Marine Fisheries Service and has experience in steelhead biology and ecology, aquatic habitats, biological monitoring (including diversion/dewatering), and capturing, handling, and relocating fish species will be retained. During in-stream work, the biological monitor(s) will continuously monitor placement and removal of any required stream diversions and will capture stranded steelhead and other native fish species and relocate them to suitable habitat, as appropriate. The approved biologist(s) will capture steelhead stranded as a result of diversion/dewatering and relocate steelhead to the nearest suitable in-stream habitat. The approved biologist(s) will note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation.

4. During in-stream work, if pumps are incorporated to assist in temporarily dewatering the site, intakes will be completely screened with no larger than 0.2-inch (5-millimeter) wire mesh to prevent steelhead and other sensitive aquatic species from entering the pump system. Pumps will release the diverted water so that suspended sediment will not re-enter the stream. The form and function of pumps used during the dewatering activities will be checked daily, at a minimum, by a qualified biological monitor to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.

MM BIO-5 **Western Pond Turtle.** Prior to construction, a biologist determined qualified by the California Department of Transportation shall survey the Biological Study Area and capture and relocate any western pond turtles, if present, to suitable habitat upstream of the Biological Study Area. Observations of these or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion. If western pond turtle or other special concern aquatic species are observed during construction, they will likewise be relocated to suitable upstream habitat by the qualified biologist.

MM BIO-6 **Nesting Migratory Birds.** The following measures shall be included at appropriate times to reduce potential impacts to nesting migratory birds:

1. Prior to construction, when feasible, tree removal will be scheduled to occur from September 16 through February 14, outside of the typical nesting bird season, to avoid potential impacts to nesting birds.
2. If construction activities are proposed during the typical nesting season (February 15 to September 15), a nesting bird survey will be conducted by qualified biologists no more than two weeks prior to the start of construction to determine presence/absence of nesting birds within the project area and immediate vicinity. The California Department of Transportation will be notified if federally listed nesting bird species are observed during the surveys and will facilitate coordination with the U.S. Fish and Wildlife Service, if necessary, to determine an appropriate avoidance strategy. Likewise, coordination with California Department of Fish and Wildlife will be facilitated by the City of Arroyo Grande Public Works Department if necessary to devise a suitable avoidance plan for state-listed nesting bird species. If raptor nests are observed within the project area during the preconstruction nesting bird surveys, the nest(s) shall be designated an Environmental Sensitive Area and protected by a minimum 500-foot avoidance buffer until the breeding season ends or until a qualified biologist determines that all young have fledged and are no longer reliant upon the nest or parental care for survival. Similarly, if active passerine nests are

observed within the project area during the preconstruction nesting bird surveys, the nest(s) shall be designated an Environmentally Sensitive Area and protected by a minimum 250-foot avoidance buffer until the breeding season ends or until a qualified biologist determines that all young have fledged and are no longer reliant upon the nest or parental care for survival. Resource agencies may consider proposed variances from these buffers if there is a compelling biological or ecological reason to do so, such as protection of a nest via concealment due to site topography.

MM BIO-7 **Roosting Bats.** The following measures shall be included at appropriate times to reduce potential impacts to roosting bats:

1. Prior to construction, a visual survey will be conducted by a qualified biologist, at dawn and at dusk, to identify potential roosting bat activity. This survey shall be conducted between 2 and 4 weeks prior to bridge and/or tree removal activities. If roosting bat activity is identified during the preconstruction survey process, the City of Arroyo Grande will coordinate with the California Department of Fish and Wildlife regarding the biological significance of the bat population and appropriate measures that could be used to exclude bats from roosting under the bridge. Measures may include, but are not limited to, the installation of exclusionary devices by a qualified individual.
2. If it is determined that a substantial impact to individual bat species or a maternity roost will occur, then the City of Arroyo Grande will compensate for the impact through the development and implementation of a mitigation plan in coordination with California Department of Fish and Wildlife.

MM BIO-8 **Arroyo Willow.** The following measures shall be included at appropriate times to reduce potential impacts to Arroyo Grande Creek:

1. Prior to initiation of any construction activities, including vegetation clearing or grubbing, sturdy high-visibility fencing will be installed to protect the arroyo willow thickets adjacent to the designated work areas. This fencing will be placed so that unnecessary adverse impacts to the adjacent habitats are avoided. No construction work (including storage of materials) will occur outside of the specified project limits. The fencing will remain in place during the entire construction period, be monitored periodically by a qualified biologist, and be maintained as needed by the contractor.
2. Prior to construction, the City of Arroyo Grande Public Works Department will prepare a comprehensive Habitat Mitigation and Monitoring Plan that provides for a 1:1 restoration ratio for temporary impacts and a 3:1 enhancement ratio for permanent impacts, unless otherwise directed by regulatory agencies. To the extent feasible, mitigation activities will be implemented within the project area and/or the Arroyo Grande Creek riparian corridor and areas in and adjacent to the project area that support invasive plant species, contain agricultural trash, and have erosion. These areas provide the most optimal mitigation opportunities on-site. Areas within the disturbance area where landscape trees and shrubs would be removed may also provide opportunities for planting native trees and riparian species. Any revegetation will be conducted using only native plant species. The final Habitat Mitigation and Monitoring Plan will identify the specific mitigation sites and it will be implemented immediately following project completion.

MM BIO-9 **Arroyo Grande Creek.** The following measures shall be included at appropriate times to reduce potential impacts to Arroyo Grande Creek:

1. Prior to construction, the City of Arroyo Grande Public Works Department will obtain a Section 404 Permit from the United States Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife for project-related impacts that will occur in areas under state and federal jurisdiction.
2. Prior to construction, the City of Arroyo Grande Public Works Department will retain a qualified biological monitor(s) to monitor construction and ensure compliance with the avoidance and minimization efforts outlined within all the project environmental documents. At a minimum, monitoring will occur during initial ground disturbance activities and vegetation removal within the Arroyo Grande Creek corridor. Monitoring may be reduced to part time once initial disturbance and vegetation removal activities are complete. The duration of monitoring should be at least once per week throughout the remaining construction phases, unless specified otherwise by permitting agencies.
3. Prior to construction, all personnel will participate in an environmental awareness training program conducted by a qualified biologist. The program shall include a description of the sensitive aquatic resources and federally designated critical habitat within the project area and the boundaries within which the project may be accomplished. If appropriate, the biologist may train and designate a representative of the City of Atascadero or other designee to provide training to subcontractors or personnel who will be on-site for short durations during the project.
4. Construction activities within jurisdictional areas will be conducted during the dry season when stream flows will be at annual lows (June 1–October 15) in any given year, or as otherwise directed by the regulatory agencies. Deviations from this work window can be made with permission from the relevant regulatory agencies.
5. Prior to initiation of any construction activities, including vegetation clearing or grubbing, sturdy high-visibility fencing will be installed to protect the jurisdictional areas adjacent to the designated work areas. This fencing will be placed so that unnecessary adverse impacts to the adjacent habitats are avoided. No construction work (including storage of materials) will occur outside of the specified project limits. The fencing will remain in place during the entire construction period, be monitored periodically by a qualified biologist, and be maintained as needed by the contractor.
6. Prior to construction, the contractor will prepare a Hazardous Materials Response Plan to allow for a prompt and effective response to any accidental spills. Workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.
7. Prior to construction, a Storm Water Pollution Prevention Plan will be prepared for the project. Provisions of this plan will be implemented during and after construction as necessary to avoid and minimize erosion and stormwater pollution in and near the work area.
8. During construction, erosion control measures (e.g., silt fencing, fiber rolls, and barriers) will remain available on-site and will be utilized as necessary to prevent

erosion and sedimentation in jurisdictional areas. No synthetic plastic mesh products will be used for erosion control and use of these materials on-site is prohibited. Erosion control measures and other suitable Best Management Practices used will be checked to ensure that they are intact and functioning effectively and maintained daily throughout the duration of construction. The contractor will also apply adequate dust control techniques, such as site watering, during construction to protect water quality.

9. During construction, water quality monitoring of turbidity will be required while water is flowing.
10. During construction, the cleaning and refueling of equipment and vehicles will occur only within a designated staging area and at least 60 feet (20 meters) from the creek banks. At a minimum, equipment and vehicles will be checked and maintained daily to ensure proper operation and avoid potential leaks or spills.
11. During construction, trash will be contained, removed from the work site, and disposed of regularly. Following construction, trash and construction debris will be removed from the work areas. Vegetation removed from the construction site will be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas (such as areas with poison hemlock or other invasive exotic plant species) must be removed off-site, the top 6 inches (152 millimeters) containing the seed layer in areas with weedy species will be disposed of at a permitted landfill.
12. During construction, no pets will be allowed on the construction site.

V. Cultural Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
(c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Setting

The project is located within lands traditionally occupied by the Obispeño Chumash. The term Chumash initially applied only to the people living on Santa Cruz Island (SWCA 2021a). Chumash now refers to the entire linguistic and ethnic group of societies that occupied the coast between San Luis Obispo and northwestern Los Angeles County, including the Santa Barbara Channel Islands, and inland to the southern edge of the San Joaquin Valley. Neighboring groups included the Salinan, Southern Valley Yokuts, and Tataviam to the north and the Gabrielino (Tongva) to the east. Chumash place names in the project vicinity include Pismu (Pismo Beach), Tematatimi (along Los Berros Creek), and Tilhini (near San Luis Obispo) (SWCA 2021a).

Most Chumash managed to maintain a presence in the area into the early twentieth century as cowboys, farmhands, and town laborers. The Catholic Church provided some land near Mission Santa Inés for ex-neophytes. This land eventually was deeded to the U.S. government in 1901 as the 127-acre Santa Ynez Reservation. Since the 1970s, Chumash descendants living in the city of Santa Barbara and the rural areas of San Luis Obispo, Santa Barbara, and Ventura Counties have formed social and political organizations to aid in cultural revitalization, to protect sacred areas and archaeological sites, and to petition for federal recognition. Today, the Santa Ynez Band of Chumash Indians is the only federally recognized Chumash tribe (SWCA 2021a).

San Luis Obispo County possesses a rich and diverse cultural heritage and has an abundance of historic and prehistoric cultural resources dating as far back as 9,000 B.C. The City protects and manages cultural resources in accordance with the provisions detailed by CEQA and local ordinances. PRC Section 5024.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for California Register of Historical Resources (CRHR) eligibility. The purpose of the CRHR is to maintain listings of the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change.

As defined by CEQA, a historical resource includes:

1. A resource listed in or determined to be eligible for listing in the CRHR.
2. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant. The architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence.

Resources are evaluated for eligibility for the CRHR under the following four criteria:

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

The following evaluation is based on *Archaeological Survey Report for the Traffic Way over Arroyo Grande Creek Bridge Replacement Project, Arroyo Grande, San Luis Obispo County, California* (ASR; SWCA 2021a) and *Historical Resources Evaluation Report for the Traffic Way over Arroyo Grande Creek Bridge Replacement Project, Federal Project No. BRLS-5199(030), Arroyo Grande, San Luis Obispo County, California* (HRER; SWCA 2021b).

The ASR includes a records and literature search and a field survey of the project area. Based on the records and literature search, 29 previous cultural resource studies had been conducted within the project site and within a 0.25-mile radius of the project site. Of the 29 previous cultural resource studies in the area, five overlap with the project area and are identified in Table 8.

Table 8. Previously Conducted Cultural Resource Studies within the Project Area

CCIC Report Number	Title of Study	Proximity to Project Area
SL-03479	*Cultural Resources Inventory of the Village Center, Wesley and Branch Streets APN: 07-191-01, 37, 38 Arroyo Grande, CA*	Within
SL-03747	*Cultural Resources Survey and Impact Assessment for a Property at 136 Bridge Street in the city of Arroyo Grande, San Luis Obispo County, California*	Within
SL-06194	*Historic Resources Evaluation Report: State Route 227 Relinquishment Arroyo Grande, San Luis Obispo, California*	Within
SL-06195	*Archaeological Survey Report: Highway 227 Relinquishment to the city of Arroyo Grande, San Luis Obispo County, California*	Within
SL-06356	*Historical Resources Compliance Report, State Route 227 Relinquishment, Arroyo Grande*	Within

Source: SWCA 2021a.

Based on the records and literature search, none of the 29 cultural resource studies, including the five studies within the project area, resulted in the identification of archaeological resources (SWCA 2021a). In addition, the field survey conducted for the project did not identify any unknown cultural resource sites (SWCA 2021a).

Research for the HRER includes a query of online archival resources, including recorded maps from the County of San Luis Obispo (County) Surveyor, biographical information and local news articles available through Ancestry.com, Newspapers.com, GenealogyBank.com, and the California Digital Newspaper Collection. In addition, the local Caltrans District 5 office provided information from the Bridge Inspection Records Information System (BIRIS) and as-builts from 1931 of both the Traffic Way bridge and the new alignment of Traffic Way through the western edge of Arroyo Grande. In January 2021, SWCA emailed letters to two local historical societies, requesting information about additional resources (SWCA 2021b). In addition, a site visit to the project area was conducted in November 2020 to take photographs and notes of the built environment resources within and adjacent to the project area (SWCA 2021b). Based on research and field methods, the HRER concludes that Traffic Way bridge is not eligible for listing in the CRHR (SWCA 2021b).

Environmental Evaluation

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

Based on the HRER prepared for the project, the Traffic Way bridge is not eligible for listing in the CRHR (SWCA 2021b). Therefore, decommissioning the existing bridge and constructing the replacement bridge within the same alignment would not result in adverse effects to a historical resource. In addition, the project does not include demolition or removal of any buildings or other structures surrounding the Traffic Way bridge. As discussed in Section XIII, *Noise*, vibration from construction activities would not result in damage to historic buildings within the Village Core. Therefore, the project would not result in substantial adverse change in a historical resource, and impacts would be *less than significant*.

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

The project site is located within and adjacent to Arroyo Grande Creek. Based on the ASR prepared for the project, there are no previously recorded archaeological resource sites within the project area (SWCA 2021a). Based on the negative field survey, there is low potential for known or unknown cultural resources to occur within the project area. Therefore, proposed ground disturbance activities are not

anticipated to adversely affect any known or unknown cultural resource sites within the project area. Mitigation Measure CR-1 has been included in the unlikely event that previously unidentified cultural resources are uncovered during proposed ground-disturbing activities. Therefore, the project would not result in adverse impacts to known or unknown cultural resources and impacts would be *less than significant with mitigation*.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

There are no known human remains or cemeteries located within or in the immediate vicinity of the project site and the potential for inadvertent discovery of human remains during construction is considered to be low. The project would be required to comply with the State of California Health and Safety Code Section 7050.5, which outlines the protocol for unanticipated discovery of human remains. This code section states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Therefore, impacts would be *less than significant.*

Conclusion

The project would not result in substantial adverse change to historical resources and is not anticipated to disturb any human remains. The project would be required to comply with Health and Safety Code Section 7050.5, which outlines the protocol for unanticipated discovery of human remains. Mitigation Measure CR-1 has been included to avoid potential impacts associated with the inadvertent discovery of unknown cultural resources during construction activities. Therefore, with implementation of the identified mitigation measure, impacts would be less than significant.

Mitigation Measures

MM CR-1 In the event that cultural resources are encountered during project activities, all ground-disturbing activities within a 25-foot radius of the find shall cease and the City of Arroyo Grande shall be notified immediately. Work shall not continue until a qualified archaeologist assesses the find and determines the need for further study. If the find includes Native American-affiliated materials, a local Native American tribal representative will be contacted to work in conjunction with the approved archaeologist to determine the need for further study. A standard inadvertent discovery clause shall be included in every grading and construction contract to inform contractors of this requirement.

VI. Energy

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

Setting

PG&E has historically been the primary electricity provider for the City. On August 13, 2019, the City Council adopted a resolution joining Monterey Bay Community Power (MBCP) under a joint powers agreement (JPA) implementing the community choice aggregation program authorized by Ordinance No. 700. Through that resolution, the City Council committed to joining Central Coast Community Energy (3CE; formerly MBCP) and, beginning in January 2020, 3CE became the City's primary electricity provider. 3CE is striving to provide 100% carbon-free energy mix to the City by 2030.

The City's ACOSE establishes objectives and policies to achieve energy conservation. These goals include development standards and design guidelines that consider refinement to minimize unnecessary energy use. The *City of Arroyo Grande Climate Action Plan* (City of Arroyo Grande 2013) identifies transportation as the largest contributor of greenhouse gas (GHG) emissions at 44%. The City's Climate Action Plan includes climate action measures intended to conserve energy, reduce VMT, divert solid waste from landfills, reduce water consumption, and plant trees to reduce GHG emissions.

Environmental Evaluation

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

During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. The energy consumed during construction would be temporary in nature and would be typical of other similar construction activities in the county. Federal and state regulations in place require the use of fuel-efficient equipment and vehicles and require wasteful activities, such as diesel idling, to be limited. Construction contractors, in an effort to ensure cost efficiency, would not be expected to engage in wasteful or unnecessary energy and fuel practices. In addition, Mitigation Measure AQ-1 includes limitations on diesel idling during the construction phase of the project. Energy consumption during construction would not conflict with a state or local plan for renewable energy and would not be wasteful, unnecessary, or inefficient, and, therefore, would be *less than significant with mitigation*.

Following construction, the project would operate as a bridge and would not require significant use of energy resources, such as electricity and natural gas. There are 12 existing light posts that provide nighttime illumination of the bridge. The new bridge would include nighttime lighting at a similar scale and intensity as existing lighting conditions and would not lead to a significant change in operational energy use compared to existing conditions. Infrequent maintenance trips may be needed for the bridge; however, operation of the bridge would not facilitate new vehicle tips that may result in an overall

increase in ADT to and from the site. Therefore, the project would not cause a substantial increase in operational energy use and operational impacts would be *less than significant*.

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

As previously described, operation of the project would result in operation of a bridge and would not require significant use of energy resources, such as electricity and natural gas. There are 12 existing light posts that provide nighttime illumination of the bridge. The new bridge would include nighttime lighting at a similar scale and intensity as existing lighting conditions and would not result in higher operational energy use. Operation of the project may also include infrequent maintenance and repair trips on an as-needed basis; however, the overall increase in vehicle trips to and from the project site as a result of the project would be negligible. Operational energy use would be limited in nature and would not result in a substantial increase in energy use compared to existing conditions, which is consistent with applicable energy efficiency plans, including the *County of San Luis Obispo EnergyWise Plan* (County of San Luis Obispo 2011). Therefore, impacts would be *less than significant*.

Conclusion

The proposed project would be required to comply with state and local energy efficiency standards during construction. Additionally, operation of the project would require a negligible amount of energy and would be consistent with the goals and policies set forth in the SLOAPCD's Clean Air Plan related to renewable energy or energy efficiency. Therefore, impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure AQ-1.

VII. Geology and Soils

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(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?	☐	☒	☐	☐

	Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Setting

The city of Arroyo Grande is located within the Coast Ranges geomorphic province, which is characterized by its many elongated mountain ranges and valleys extending 600 miles along the coast of California from the Oregon border south to the Santa Ynez River in Santa Barbara County. The city is situated along the interface of the coastal range and the gently sloping coastal terrace, which extends to the shoreline. The city encompasses an urban landscape in the southern portion of San Luis Obispo County at an elevation of approximately 50 to 400 feet above msl.

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) is a California state law that was developed to regulate development near active faults and mitigate the surface fault rupture potential and other hazards. The Alquist-Priolo Act identifies active earthquake fault zones and restricts the construction of habitable structures over known active or potentially active faults. The *County of San Luis Obispo General Plan Safety Element* identifies three active faults that traverse through the county and are currently zoned under the Alquist-Priolo Act: the San Andreas, the Hosgri-San Simeon, and the Los Osos (County of San Luis Obispo 1999). The city of Arroyo Grande is not underlain by the San Andreas, the Hosgri-San Simeon, or the Los Osos Faults.

There are a number of active or potentially active fault systems throughout San Luis Obispo County and, given the past history of earthquakes in the area, experts agree that the probability of a damaging earthquake occurring is high. Mapped faults within the city of Arroyo Grande include the potentially active Wilmar Avenue Fault and the inactive Pismo Fault. The Wilmar Avenue Fault is exposed in the sea cliff near Pismo Beach and the buried trace of the fault is inferred to strike northwest–southeast parallel and adjacent to US 101 beneath portions of Arroyo Grande. The potentially active fault presents a moderate potential fault rupture hazard to the City. The inactive Pismo Fault presents a very low potential fault rupture hazard. Further studies to evaluate the activity of the faults are warranted, prior to placing structures near the mapped fault traces (Mathe 2015). Based on the DOC Fault Activity Map of California, the project area is underlain by the Wilmar Avenue fault line (CDOC 2015).

The estimated peak ground acceleration (g) for the bridge site is approximately 0.8g. The site response for periods less than about 0.35 second is controlled by a magnitude (M) 7.0 earthquake on the Los Osos Fault, mapped approximately 3 miles east of the site. The site response for periods greater than about 0.35 seconds is controlled by a M7.2 earthquake on the Wilmar Avenue Fault. A near-fault factor was applied to the acceleration response spectral (ARS) curve (a formula to determine seismic loadings) because the

site is located less than 15 miles from a potentially controlling fault. The estimated average shear wave velocity for the site is approximately 450 meters per second, characteristic of a Type C very dense soil or soft rock site.

Liquefaction potential increases with earthquake magnitude and ground shaking duration. Low-lying areas adjacent to creeks, rivers, beaches, and estuaries underlain by unconsolidated alluvial soil are most likely to be vulnerable to liquefaction. The portions of the city with high liquefaction potential are those areas underlain by younger alluvium (Qa), which includes most of the low-lying downtown areas south of Branch Street and along Grand Avenue (City of Arroyo Grande 2001a).

Landslides and slope instability can occur as a result of wet weather, weak soils, improper grading, improper drainage, steep slopes, adverse geologic structure, earthquakes, or a combination of these factors. Despite current codes and policies that discourage development in areas of known landslide activity or high risk of landslide, there is a considerable amount of development that is impacted by landslide activity in the county each year. A majority of the existing development in Arroyo Grande is located on gently inclined alluvial valley sediments, which has low to very low potential for slope stability hazards. However, the residences located on the hilly terrain north of Branch Street have greater potential for landslide activity (City of Arroyo Grande 2001a).

Shrink/swell potential is the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils can cause damage to building foundations, roads and other structures. A high shrink/swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating. Moderate and low ratings lessen the hazard accordingly.

The *City of Arroyo Grande General Plan Safety Element* includes objectives for reducing the potential for loss of life and property resulting from geologic and seismic hazards (City of Arroyo Grande 2001a).

Paleontological resources are fossilized remains of ancient environments, including fossilized bone, shell, and plant parts; impressions of plant, insect, or animal parts preserved in stone; and preserved tracks of insects and animals. Paleontological resources are considered nonrenewable resources under federal and state law. Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils, as determined by rock type, past history of the rock unit in producing fossil materials, and fossil sites that have been recorded in the unit. Paleontological resources are generally found below ground surface in sedimentary rock units. The boundaries of the sedimentary rock unit are used to define the limits of paleontological sensitivity in a given region. According to the U.S. Geological Survey (USGS), Arroyo Grande is underlain by the Pismo Formation, which is primarily comprised of massive gray or white arkosic sandstone that is fine- to medium-grained, moderately well sorted, soft to hard, and friable. Based on marine megafossils from the area, the formation is from the late Pliocene era (USGS 2021a).

The City's ACOSE does not identify goals or policies related to the preservation of paleontological resources; however, the *County of San Luis Obispo General Plan Conservation and Open Space Element* (COSE) identifies a policy for the protection of paleontological resources from the effects of development by avoiding disturbance where feasible. Where substantial subsurface disturbance is proposed in paleontologically sensitive units, Implementation Strategy CR 4.5.1 (Paleontological Studies) requires a paleontological resource assessment and mitigation plan be prepared to identify the extent and potential significance of resources that may exist within the proposed development and provide mitigation measures to reduce potential impacts to paleontological resources.

Environmental Evaluation

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

a-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.

a-ii) Strong seismic ground shaking?

a-iii) Seismic-related ground failure, including liquefaction?

a-iv) Landslides?

The project is located in a seismically active region and there is always potential for seismic ground shaking to occur. The city of Arroyo Grande is not underlain by any Alquist-Priolo Faults that occur within the project region, including the San Andreas, the Hosgri-San Simeon, or the Los Osos Faults (Mathe 2015). However, the project is underlain by the Wilmar Avenue Fault, which increases the likelihood for the project to experience seismic ground shaking at some point during its lifetime (CDOC 2015). In addition, the project site is at moderate risk for liquefaction and at low risk for landslide (County of San Luis Obispo 2021). Topography at the project site is relatively flat, which further reduces the potential for landslides to occur.

The proposed bridge would be required to be designed in a manner that would avoid or minimize risk of loss, injury, or death as a result of seismic activity and related ground-failure. The project would be required to meet or exceed the most current AASHTO bridge requirements, which have been developed to establish design requirements to safeguard public health, safety, and general welfare through structural strength, stability, and other standards. The project would also be required to meet or exceed seismic design standards identified in Caltrans Seismic Design Criteria (SDC), Version 2.0 (Caltrans 2019). Roadway, pedestrian, and bicycle path elements would be required to comply with AASHTO's *A Policy on Geometric Design of Highways and Streets* ("The Green Book;" AASHTO 2018) and relevant City standards. Through compliance with applicable structural and other design standards, the proposed bridge would be designed to withstand risk associated with potential seismic events. Therefore, impacts would be *less than significant*.

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

The project includes replacing the existing Traffic Way bridge to reduce risk caused by scour. Proposed construction activities have the potential to result in increased erosion at the project site. Mitigation Measure BIO-9 includes measures to reduce potential impacts related to work within Arroyo Grande Creek. Mitigation Measure BIO-9(4) would require work to be conducted during the dry season (June 1–October 15) to avoid increased runoff from the project site due to rain or flood flows. Mitigation Measure BIO-9(7) would require the project to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) with Best Management Practices (BMPs) to avoid or minimize erosive runoff during project construction. Mitigation Measure BIO-9(8) identifies BMPs to be implemented during construction activities to reduce erosive runoff from the site. Therefore, implementation of Mitigation Measure BIO-9 would reduce potential impacts related to increased erosion and sedimentation during construction of the project. The proposed bridge would be paved and would extend over Arroyo Grande Creek and associated soils; therefore, operational components of the project are not anticipated to increase long-term erosion on-site. Further, the project would be required to comply with City Municipal Code Section 13.24.120,

which requires the preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion. Therefore, with implementation of the identified mitigation measures, construction and operation of the project would not result in substantial erosion or siltation on-site and impacts would be *less than significant with mitigation*.

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

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

As previously mentioned, the project site is at moderate risk for liquefaction and low risk for landslide (County of San Luis Obispo 2021). According to the USGS Areas of Land Subsidence in California Map, the project site is not located within an area of known subsidence (USGS 2021b). Typically, expansive soils have a high shrink/swell potential due to a high clay content within the soils. The project site is underlain by soils that contain some clay materials (U.S. Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 2021). Therefore, there is potential for soils at the project site to experience some expansion.

As previously described, the project would be required to meet or exceed the most current AASHTO bridge requirements, which have been developed to establish design requirements to safeguard public health, safety, and general welfare through structural strength, stability, and other standards. The project would also be required to meet or exceed seismic design standards identified in Caltrans SDC, Version 2.0 (Caltrans 2019). In addition, roadway, pedestrian, and bicycle path elements would be required to comply with AASHTO's "The Green Book" (AASHTO 2018) and relevant City standards. Based on required compliance with applicable design standards, the structural components of the proposed bridge would be designed to safeguard public safety and avoid or minimize the potential for risk related to development on unstable or expansive soils. Therefore, impacts would be *less than significant*.

e) Would the project 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?

The project does not include the development of septic tanks or alternative wastewater disposal systems; therefore, *no impact* would occur.

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

Arroyo Grande is underlain by the Pismo Formation (USGS 2021b), which has a high potential fossil yield for marine fossils (California Public Utilities Commission [CPUC] 2005). Proposed construction activities would primarily be conducted within the footprint of the existing Traffic Way bridge, which reduces the likelihood for unknown paleontological resources to occur within the project area. However, the proposed bridge includes deeper foundations to safeguard against risk associated with scour; therefore, the project would require deeper excavation. Although unlikely based on previous development within and surrounding the project site, there is potential for proposed ground-disturbing activities within native soils to disturb paleontological resources if present within the project area. Mitigation Measure GEO-1 has been included to require paleontological monitoring during work within native soils. Therefore, the project would not result in adverse impacts to potential paleontological resources present within the project area and impacts would be *less than significant with mitigation*.

Conclusion

The proposed bridge would be required to be designed and constructed according to AASHTO and Caltrans standards and requirements, which would reduce the potential for risk of loss, injury, or death as a result of seismic or other geologic stresses. Mitigation Measure BIO-9 has been included to reduce impacts related to erosion from the project site. In addition, Mitigation Measure GEO-1 has been included to reduce potential impacts related to paleontological resources. Therefore, with implementation of the identified mitigation measures, impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure BIO-9.

MM GEO-1 All project-related ground disturbance that occurs in previously undisturbed native soils shall be monitored by a qualified paleontological monitor on a full-time basis. However, the frequency of monitoring may be reduced at the discretion of the qualified paleontologist if the disturbed geologic units are determined to have a low potential to yield significant fossil resources upon further examination of the geologic units during grading operations. In the event that a subsurface fossil is discovered within the project area during project activities, all work within the vicinity of the find shall cease until the qualified paleontological monitor can assess the significance of the find. Field data forms shall be used to record pertinent geologic data. Any recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility. The qualified paleontologist shall prepare a paleontological mitigation and monitoring report to be filed with the City of Arroyo Grande, as lead agency, and the repository.

VIII. Greenhouse Gas Emissions

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

Setting

GHGs are any gases that absorb infrared radiation in the atmosphere, and are different from the criteria pollutants discussed in Section III, *Air Quality*, above. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. These are most commonly emitted through the burning of fossil fuels (oil, natural gas, and coal), agricultural practices, decay of organic waste in landfills, and a variety of other chemical reactions and industrial processes (e.g., the manufacturing of cement).

CO_2 is the most abundant GHG and is estimated to represent approximately 80–90% of the principal GHGs that are currently affecting the earth's climate. According to the CARB, transportation (vehicle exhaust) and electricity generation are the main sources of GHG in the state.

The passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act (2006), recognized the need to reduce GHG emissions and set the GHG emissions reduction goal for the State of California into law. The law required that by 2020, state emissions must be reduced to 1990 levels. This is to be accomplished by reducing GHG emissions from significant sources through regulation, market mechanisms, and other actions. Subsequent legislation (i.e., Senate [SB] Bill 97, Greenhouse Gas Emissions bill) directed the CARB to develop statewide thresholds.

San Luis Obispo County Regional Transportation Plan/Sustainable Communities Strategy

San Luis Obispo County's *2019 Regional Transportation Plan* (RTP) was adopted by the San Luis Obispo Council of Governments (SLOCOG) in June 2019. The purpose of the 2019 RTP is to encourage a fully integrated, intermodal, transportation system that facilitates the safe and efficient movement of people, goods, and information throughout the region. The 2019 RTP also includes the region's Sustainable Communities Strategy (SCS). An SCS identifies a forecasted development pattern for the region, which is informed by the inventory of existing land use throughout the region, along with the identification of sites where future development can be located, while still reducing VMT and GHG emissions.

City of Arroyo Grande Climate Action Plan

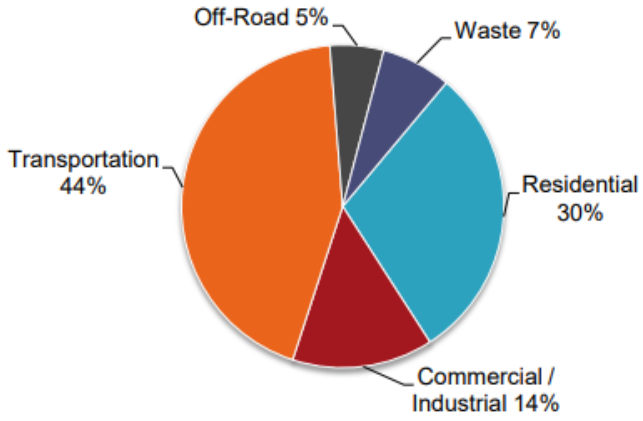
The City's Climate Action Plan (City of Arroyo Grande 2013) is a long-range plan aimed to reduce GHG emissions from City operations, developments, and community activities throughout the city in anticipation of the effects of climate change. The primary purposes of the Climate Action Plan are the following:

- Summarizes the results of the *City of Arroyo Grande 2005 Greenhouse Gas Emissions Inventory Update*, which identifies the major sources and quantities of GHG emissions produced within Arroyo Grande and forecasts how these emissions may change over time.
- Identifies the quantity of GHG emissions that Arroyo Grande will need to reduce to meet its target of 15% below 2005 levels by the year 2020, consistent with AB 32.
- Sets forth City government and community-wide GHG reduction measures, including performance standards which, if implemented, would collectively achieve the specified emission reduction target.
- Identifies proactive strategies that can be implemented to help Arroyo Grande prepare for anticipated climate change impacts.
- Sets forth procedures to implement, monitor, and verify the effectiveness of the City's Climate Action Plan measures and adapt efforts moving forward as necessary.

The City's Climate Action Plan is designed as a Qualified GHG Reduction Plan, consistent with State CEQA Guidelines Section 15183.5(b). This allows for the streamlining of the GHG analysis on a project level by using a programmatic GHG reduction plan meeting certain criteria. Project-specific analysis of GHG emissions is required if GHG emissions from a project would be cumulatively considerable notwithstanding compliance with the Climate Action Plan.

The City's Climate Action Plan included an inventory of community-wide GHG emissions. The inventory was prepared for purposes of identifying major sources and quantities of GHG emissions

produced in Arroyo Grande in 2005 and to forecast how these emissions may change over time. Based on the GHG emissions inventory prepared in 2005, the city emitted approximately 84,399 metric tons of carbon dioxide equivalent ($MTCO_2e$). As shown in Figure 4, the largest contributors of community-wide GHG emissions were the transportation (44%), residential energy (30%), and commercial/industrial energy (14%) sectors. The remainder of emissions resulted from the solid waste (7%) and off-road (5%) sectors.



Source: City of Arroyo Grande 2013.

Figure 4. City of Arroyo Grande 2005 GHG emissions inventory by sector.

Environmental Evaluation

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The proposed construction period is anticipated to be 7 months long. During construction, fossil fuels and natural gas would be used by construction vehicles and equipment. Federal and state regulations in place require fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel idling. Construction contractors, in an effort to ensure cost efficiency, would not be expected to engage in wasteful or unnecessary energy and fuel practices. In addition, Mitigation Measure AQ-1 includes limitations on diesel idling during the construction phase of the project. Therefore, construction activity is not anticipated to result in significant emissions. During the 7-month construction period, the project would require the temporary closure of Traffic Way, which would require a temporary traffic detour route through the Village Core of the city. Temporary striping would be implemented along East Branch, Mason, and Bridge Streets to allow traffic to navigate the detour more efficiently; however, detours would be expected to result in temporary delays along these roadways, which could increase GHG emissions from vehicle idling. Following construction, detours would be removed, and traffic flow would return to pre-construction conditions. Therefore, any increase in GHG emissions from vehicle idling would be temporary in nature and would not result in a new, permanent source of GHG emissions in the area. Therefore, greenhouse gas emissions generated during construction would not be substantial enough to have a significant cumulative impact on the environment, and impacts would be *less than significant with mitigation*.

Operation of the project would include continued operation of the Traffic Way bridge and may require infrequent maintenance trips on an as-needed basis. The Traffic Way bridge provides vehicle passage over Arroyo Grande Creek. Based on the 2016 Bridge Inspection Report, traffic volumes through the site are approximately 9,600 vehicles per day. Traffic Way is classified as an urban arterial roadway and has

an estimated future ADT rate of 11,000 based on estimated growth within the city. Replacement of the bridge is not anticipated to facilitate an increase vehicle trips in comparison to existing conditions. Therefore, the project would not result in new development that would generate operational GHG emissions or increased VMT. Operational impacts associated with generation of GHG emissions would be *less than significant*.

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

As previously described, project construction is estimated to generate temporary GHG emissions resulting from the operation of construction equipment and construction worker vehicles. Federal and state regulations in place require fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel idling. In addition, Mitigation Measure AQ-1 includes limitations on diesel idling during the construction phase of the project. Therefore, GHG emissions generated during construction is not anticipated to be substantial enough to have a significant cumulative impact on the environment and construction impacts would be *less than significant with mitigation*.

Replacement of the bridge is not anticipated to facilitate an increase or otherwise change vehicle trips in comparison to existing conditions. Because the project would not result in new development that would generate increased operational GHG emissions or VMT, the project would be consistent with the City's Climate Action Plan. Further, as described in Section III, *Air Quality*, the project would not conflict with the 2001 Clean Air Plan. Implementation of the project would result in *de minimis* GHG emissions above baseline conditions; therefore, the proposed project would not conflict with an appliable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and impacts would be *less than significant*.

Conclusion

Construction activities would be conducted in accordance with Federal and state laws regarding diesel idling and are not anticipated to generate a significant amount of GHG emissions. In addition, Mitigation Measure AQ-1 includes limitations on diesel idling during the construction phase of the project. Operation of the project would not result in a new land uses that could significantly increase GHG-emissions or facilitate an increase in VMT, which would be consistent with the City's Climate Action Plan and the SLOAPCD's 2001 Clean Air Plan. Therefore, with implementation of Mitigation Measure AQ-1, impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure AQ-1.

IX. Hazards and Hazardous Materials

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐

	Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Setting

According to the California Department of Toxic Substance Control (DTSC) EnviroStor database, there are no active hazardous materials sites within or adjacent to the project site (DTSC 2021). In addition, the SWRCB Geotracker database indicates that there are three previously active leaking underground storage tanks located approximately 600 feet west and 280 feet south and one previously active cleanup program site located approximately 300 feet west of the project site (SWRCB 2021). There are no currently active sites located within or adjacent to the project site (DTSC 2021; SWRCB 2021). Given the developed condition of the majority of the city, it is highly likely that the surface soils along existing roadways are affected by deposition of contaminants, including aerial lead, oils, fuels, and other lubricants.

The purpose of the City's Safety Element is to be prepared for disaster and to manage development to reduce risk. Hazards identified in the City's Safety Element include flooding, dam inundation, dam failure, fire, geologic and seismic hazards, landslides, hazardous trees, and radiation hazards (City of Arroyo Grande 2001a).

Environmental Evaluation

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

Temporary construction activities would include the use of construction equipment, vehicles, and commonly used hazardous substances, including, but not limited to, paint, solvents, oils, fuel, and gasoline. Commonly used hazardous substances within the project site would be transported, stored, and used according to regulatory requirements and existing procedures for the handling of hazardous

materials. In addition, Mitigation Measure BIO-9(6) would require the project to prepare a Hazardous Materials Response Plan to be implemented in the event of an accidental spill during proposed construction activities. Operation of the project may result in infrequent maintenance trips on an as-needed basis and would not require the use of hazardous or acutely hazardous materials. Therefore, impacts associated with the routine transport, use, or disposal of hazardous materials would be *less than significant with mitigation.*

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

As previously discussed, temporary construction activities would include the use of construction equipment, vehicles, and commonly used hazardous substances including, but not limited to, paint, solvents, oils, fuel, and gasoline. Commonly used hazardous substances within the project site would be transported, stored, and used according to regulatory requirements and existing procedures for the handling of hazardous materials. Mitigation Measure BIO-9(6) would require the project to prepare a Hazardous Materials Response Plan to be implemented in the event of an accidental spill during construction activities. The Traffic Way bridge was constructed in 1932 and is 89 years old; therefore, there is potential for the bridge to contain ACM and proposed decommissioning of the bridge may release ACM, if present. Mitigation Measure AQ-2 has been included to reduce impacts related to potential release of ACM during decommissioning of the bridge. Operation of the project may result in infrequent maintenance trips on an as-needed basis and would not require the use of hazardous or acutely hazardous materials that would create a significant hazard in the event of accidental release. With implementation of the identified mitigation measures to reduce potential impacts related to accidental hazardous materials spills and potential release of ACM during proposed construction activities, impacts would be *less than significant with mitigation*.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is located approximately 0.24 mile southeast of Valley View Adventist Academy. Although the project is located within 0.25 mile of a school, operation of the project would not require the use of hazardous materials. Short-term construction activities may require commonly used hazardous materials (i.e., fuel, gasoline, solvents, oils, paints), which would be transported, stored, and used according to regulatory requirements and existing procedures for the handling of hazardous materials. In addition, Mitigation Measure BIO-9(6) would require the project to prepare a Hazardous Materials Response Plan to be implemented in the event of an accidental spill during project construction. In addition, Mitigation Measure AQ-2 has been included to reduce impacts related to the potential release of ACM during decommissioning of the bridge. Operation of the project would not require the long-term use of hazardous or acutely hazardous materials within 0.25 mile of Valley View Adventist Academy. Therefore, potential impacts would be *less than significant with mitigation*.

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

Based on a query of the DTSC EnviroStor database and SWRCB GeoTracker database, there are three previously active leaking underground storage tanks located approximately 600 feet west and 280 feet south and one previously active cleanup program site located approximately 300 feet west of the project site; however, there are no currently active sites located within or adjacent to the project site (DTSC 2021;

SWRCB 2021). Therefore, the project would not be located on a known hazardous materials site that could create significant hazard to the public, and *no impacts* would occur.

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

The closest airport to the project site is the Oceano County Airport, located approximately 2.5 miles southwest of the project site. The project does not include the development of residential units, offices, or other buildings that could expose occupants to excessive noise or safety hazards. Therefore, the project would not be located within 2 miles of an airport or expose project occupants to excessive noise or other safety hazards, and *no impacts* would occur.

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

The project includes replacement of the exiting Traffic Way bridge that allows traffic to cross over Arroyo Grande Creek in the central portion of the city. Construction activities would result in the temporary closure of the Traffic Way bridge and may require other traffic controls and detours on surrounding roadways. The construction period would extend approximately seven months and temporary closures of roadways and associated detours could result in temporary delays in emergency response and evacuation in the city.

Five Cities Fire authority (FCFA) Station 1 is located approximately 300 feet south of the Traffic Way bridge along Traffic Way and road closures and/or traffic controls may impact FCFA emergency response times. The project would maintain FCFA access during the 7-month construction period by implementing detours. In order to maintain access, FCFA Station 1 would be provided a Global Positioning System (GPS) Emergency Vehicle Preemption (EVP) device during the construction phase to transmit a signal to the controller box and allow northbound traffic along Traffic Way a green light during a call for emergency response. While this situation would be most prominent during the school year due to an increase in vehicle traffic along Traffic Way, year-round visitor serving uses would continue to contribute to congestion within the project area during construction activities. Additionally, since wildfire occurrence is highest during the summer, it could be reasonably assumed that an increase in calls for fire protection services would occur during this time. In addition to the provision of a GPS EVP device, Mitigation Measure HAZ-1 has been included to ensure notice is provided to local emergency services prior to implementation of any road closures or detour routes. The project would implement road detours in order to maintain public access throughout the city during closure of Traffic Way. Based on implementation of Mitigation Measure HAZ-1 and proposed project components to allow emergency access during construction, the project would not result in significant impacts related to emergency access or evacuation.

The project would result in the replacement of the Traffic Way bridge to avoid potential risk to the public related to scour and would not result in the permanent closure of Traffic Way bridge or surrounding roadways that could impede long-term emergency access and/or evacuation. Therefore, the project would not substantially impair or interfere with the City's Safety Element, *Multi-Jurisdictional Local Hazard Mitigation Plan* (LHMP; Mathe 2015), or other emergency response or evacuation plans; therefore, impacts would be *less than significant with mitigation*.

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

The project area is located in a developed portion of the city within a Local Responsibility Area (LRA) and is not designated as a state or local fire hazard severity zone (FHSZ) (California Department of Forestry and Fire Protection [CAL FIRE] 2021). The project would replace the existing Traffic Way bridge, which would reduce risk related to erosion surrounding the foundation of the bridge. Replacement of the existing bridge would not increase long-term fire hazard within the project area. Because construction would be limited to the dry season (June 1-October 15), there is potential for construction activities to increase the risk of accidental wildfire ignition at the project site. The project would be required to comply with International Fire Code (IFC) Section 3312, which establishes regulations to reduce the risk of wildfire ignition during construction, such as the removal of combustible waste materials (i.e., paper, rags, wood, etc.) from the site, prohibiting smoking at the project site, identifying proper refueling methods, establishing equipment standards, etc. In addition, the project would not result in the development of new occupiable structures that could expose people or structures to wildfire risks or otherwise exacerbate wildfire risks; therefore, impacts would be *less than significant*.

Conclusion

Any commonly used hazardous materials used during construction of the project would be transported, handled, and stored according to existing regulatory requirements. Mitigation Measure BIO-9(6) would require a Hazardous Materials Response Plan to be prepared and implemented in the event of an accidental spill during project construction. In addition, Mitigation Measure AQ-2 has been included to reduce potential impacts related to ACM during decommissioning of the existing Traffic Way bridge. Operation of the project would not require the use of hazardous materials. In addition, the project site is not located in close proximity to an airport or within a previously documented active hazardous materials cleanup site. Mitigation Measure HAZ-1 has been included to provide notice of road closures and detour routes implemented during project construction. The project would maintain emergency access and evacuation routes during construction and operation and would not increase the risk of wildfire within the city. Therefore, with implementation of the identified mitigation measures, impacts related to hazards and hazardous materials would be less than significant.

Mitigation Measures

Implement Mitigation Measures BIO-9 and AQ-2.

HAZ-1 Prior to the implementation of any lane/road closures or detour routes, the City and/or its project contractors shall provide notice to all residents, business owners, public facilities, and emergency response providers likely to be affected by the closure and detours, including, but not limited to, the Five Cities Fire Authority and Arroyo Grande Police Department. The notice shall include the following information: dates of construction, temporary lane/road closures and detours, and contact information, including the phone number and email address of the City staff person responsible for responding to and addressing public complaints regarding access. The notice shall be provided at least 2 weeks prior to any planned road closure.

X. Hydrology and Water Quality

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

Setting

The project site is located in the Arroyo Grande Creek Watershed, a coastal basin located in southern San Luis Obispo County. The watershed is approximately 96,000 acres ranging from 3,100 feet elevation above msl to the Pacific Ocean. It includes the tributaries of Tally Ho (Corbett), Tar Springs, and Los Berros Creeks. Meadow Creek is a remnant marsh drainage that enters Arroyo Grande Creek just before its confluence with the ocean (SLO Watershed Project 2020).

Arroyo Grande Creek is a major perennial stream that flows 22 miles from the Santa Lucia range to the Pacific Ocean and is an important hydrological feature in southern San Luis Obispo County. The upper portion of the creek is impounded by Lopez Dam, built in 1966, about 8 miles northeast of the city of Arroyo Grande. Arroyo Grande Creek receives water from Lopez Lake and Tar Springs Creek and flows east to west at the Traffic Way bridge before turning southwest toward Oceano, then emptying into the Arroyo Grande Estuary and Pacific Ocean approximately 4 miles downstream of the project area. Oceano Lagoon drains into Arroyo Grande Creek just upstream of confluence with the ocean (SWCA 2021e).

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 06079C1602G (effective date 11/16/2012), the project site is located within Zone A and Zone AE, areas with 1% chance of annual flooding (FEMA 2020).

The project site is located in the Santa Maria River Valley Groundwater Basin – Arroyo Grande Subbasin (No. 3-12.02) (County of San Luis Obispo 2021). The Arroyo Grande Subbasin is approximately 7 miles long, oriented in a northeastern to southwestern direction. The Arroyo Grande Subbasin is not considered a high-priority basin and has ample water supply to meet the water demand of the city. However, a groundwater sustainability plan (GSP) for the subbasin is being prepared to facilitate sustainable groundwater management and use (County of San Luis Obispo 2020).

Environmental Evaluation

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

The project includes replacing the existing Traffic Way bridge to reduce risk caused by scour. Construction of the new foundation would require work within Arroyo Grande Creek, which runs under the Traffic Way bridge. Ground disturbance has the potential to increase erosion and sedimentation on-site and construction equipment and vehicle use has the potential to increase pollution on-site that could runoff and degrade water quality. Mitigation Measure BIO-9 includes measures to reduce potential impacts related to work within Arroyo Grande Creek. Mitigation Measure BIO-9(4) would require work to be conducted during the dry season (June 1–October 15) to avoid increased runoff from the project site due to rain or flood flows. Mitigation Measure BIO-9(6) would require the project to prepare a Hazardous Material Response Plan to be implemented in the event of accidental fuel, oil, paint, or other hazardous materials spills. Mitigation Measure BIO-9(7) would require the project to prepare and implement a SWPPP with BMPs to avoid or minimize erosive runoff during project construction. Mitigation Measure BIO-9(8) identifies BMPs to be implemented during construction activities to reduce erosive runoff from the site. Mitigation Measure BIO-9(9) would require daily water quality monitoring while water is flowing to ensure project activities are not adversely affecting the water quality of Arroyo Grande Creek. Mitigation Measure BIO-9(10) requires vehicle washing and refueling to occur at least 60 feet from Arroyo Grande Creek to avoid accidental fuel spills or other pollutants from entering the creek. Mitigation measure BIO-9(11) requires trash to be contained and removed from the project site to avoid solid waste from entering the creek during construction of the project. Implementation of Mitigation Measure BIO-9 would reduce potential impacts related to water quality degradation during construction of the project.

The project would be required to comply with City Municipal Code Section 13.24.120, which requires the preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion that could runoff from the project site and degrade water quality. The project would also be subject to Central Coast RWQCB *Post-Construction Stormwater Requirements* (PCRs) (Resolution R3-20132-0032025) to ensure long-term reduction of pollutant discharges (Central Coast RWQCB 2013). Therefore, with implementation of Mitigation Measure BIO-9 to reduce potential sources of pollution during construction activities and required compliance with the City Municipal Code and RWQCB PCRs, construction and operation of the project would not substantially degrade water quality, and impacts would be *less than significant with mitigation*.

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

The project site is located in the Santa Maria River Valley Groundwater Basin – Arroyo Grande Subbasin. Any water needed for construction (i.e., dust suppression) would be limited in volume and would be supplied from off-site sources. Operation of the project does not require any new connections to groundwater or sustained groundwater use that could substantially decrease groundwater supplies. In addition, the proposed bridge replacement would occur within the development footprint of the existing bridge and would not result in additional impervious surfaces that could interfere with groundwater recharge at the site. Therefore, impacts would be *less than significant*.

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

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

The project includes replacing the existing Traffic Way bridge to reduce risk caused by scour. Construction of the new foundation would require work within Arroyo Grande Creek, which runs under the Traffic Way bridge. The project is anticipated to result in 0.4 acre of permanent impacts and 1.26 acres of temporary impacts to Arroyo Grande Creek. Proposed ground-disturbing construction activities have the potential to result in increased erosion and siltation that may result in runoff from the project site. Mitigation Measure BIO-9 includes measures to reduce potential impacts related to work within Arroyo Grande Creek. Mitigation Measure BIO-9(4) would require work to be conducted during the dry season (June 1–October 15) to avoid increased runoff from the project site due to rain or flood flows. Mitigation Measure BIO-9(7) would require the project to prepare and implement a SWPPP with BMPs to avoid or minimize erosive runoff during project construction. Mitigation Measure BIO-9(8) identifies BMPs to be implemented during construction activities to reduce erosive runoff from the site. Therefore, implementation of Mitigation Measure BIO-9 would reduce potential impacts related to increased erosion and sedimentation during construction of the project.

Replacement of the Traffic Way bridge would reduce risk associated with erosion of the existing foundation. Operational components of the project are not anticipated to increase long-term erosion or siltation on-site. The project would be required to comply with City Municipal Code Section 13.24.120, which requires the preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion. The project would also be subject to RWQCB PCRs (Resolution R3-20132-0032025) to ensure long-term reduction of pollutant discharges. Therefore, with implementation of the identified mitigation measures and required compliance with the City Municipal Code and RWQCB PCRs, construction and operation of the project would not result in substantial erosion or siltation on-site, and impacts would be *less than significant with mitigation*.

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

Implementation of the project would result in a new Traffic Way bridge within the same alignment as the existing bridge. Following construction activities, the project would not result in additional impervious surface areas that could contribute to an increase of surface water runoff. The project would require work within Arroyo Grande Creek for installation of the new foundation. The foundation would be constructed in accordance with Caltrans hydraulic design standards in order to maintain the creek's ability to convey potential flood flows. Therefore, installation of the new bridge foundation within Arroyo Grande Creek would not result in flooding. Mitigation Measure BIO-9 includes measures to reduce potential impacts

related to work within Arroyo Grande Creek. Mitigation Measure BIO-9(4) would require work to be conducted during the dry season (June 1–October 15) to avoid increased runoff from the project site due to rain or flood flows. Mitigation Measure BIO-9(7) would require the project to prepare and implement a SWPPP with BMPs to avoid or minimize erosive runoff during project construction. Mitigation Measure BIO-9(8) identifies BMPs to be implemented during construction activities to reduce erosive runoff from the site. In addition, the project would be required to comply with City Municipal Code Section 13.24.120, which requires preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion. The project would also be subject to RWQCB PCRs (Resolution R3-20132-0032025) to ensure long-term reduction of pollutant discharges. Therefore, the project is not anticipated to substantially increase polluted or other surface water runoff from the project site, and impacts would be *less than significant with mitigation*.

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

The proposed bridge would be constructed within the same alignment as the existing Traffic Way bridge and would not result in new impervious surfaces that could contribute to long-term stormwater runoff. Construction of the project would result in in 0.4 acre of permanent impacts and 1.26 acres of temporary impacts to Arroyo Grande Creek. Based on proposed alterations of Arroyo Grande Creek, the project has potential to increase erosive or polluted runoff during construction that may run off from the site during proposed construction activities. Mitigation Measure BIO-9(4) would require work to be conducted during the dry season (June 1–October 15) to avoid increased surface water runoff from the project site due to rain or flood flows. In addition, Mitigation Measure BIO-9(7) and BIO-9(8) would require the project to prepare and implement a SWPPP and identifies BMPs to be implemented during construction activities to reduce erosive or polluted runoff. The project would also be required to comply with City Municipal Code Section 13.24.120, which requires preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion. The project would also be subject to RWQCB PCRs (Resolution R3-20132-0032025) to ensure long-term reduction of pollutant discharges. The project does not include components that require connections to any public or private stormwater drainage systems. Therefore, with implementation of the identified mitigation during project construction and required compliance the City Municipal Code and RWQCB PCRs, potential impacts related to runoff would be *less than significant with mitigation*.

c-iv) Impede or redirect flood flows?

According to FEMA FIRM Panel 06079C1602G (effective date 11/16/2012), the project site is located within Zone A and Zone AE, areas with 1% chance of annual flooding (FEMA 2020). Construction of the project has the potential to impede flood flows based on proposed work within Arroyo Grande Creek for installation of the bridge foundation, which would result in 0.4 acre of permanent impacts and 1.26 acres of temporary to the creek; however, Mitigation Measure BIO-9(4) has been included to require construction activities to occur during the dry season (June 1–October 15) to avoid increased runoff due to rain or flood flows. Implementation of the project would result in 0.4 acre of permanent impacts to Arroyo Grande Creek; however, permanent impacts are not anticipated to adversely affect flood flows because the proposed bridge would be required to comply with Caltrans hydraulic design criteria to allow for the conveyance of flood flows. One of the objectives of the project is to replace the existing structure with a new structure with no supports within the creek bed and a wider hydraulic opening that would reduce maintenance issues in the future and improve creek flows through the area compared to existing conditions (SWCA 2021g). The Caltrans Local Assistance Procedures Manual identifies hydraulic design criteria that require a facility be capable of conveying the base or 100-year flood and pass the 50-year flood "without causing objectionable backwater, excessive flow velocities or encroaching on through traffic lanes" (Caltrans 2021b). The proposed bridge would be required to comply with Caltrans

requirements for hydraulic design; therefore, proposed permanent impacts would not substantially impede or redirect potential flood flows and impacts would be *less than significant with mitigation*.

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

The project site is not located in an area that would be subject to inundation caused by tsunami or seiche; however, the project site is located within the Lopez Dam flood inundation zone. In addition, according to FEMA FIRM Panel 06079C1602G (effective date 11/16/2012), the project site is located within Zone A and Zone AE, areas with one percent chance of annual flooding (FEMA 2020). Due to the project's location within a flood hazard and dam inundation zone, there is potential for inundation to occur. Proposed construction activities would have the potential to increase on-site erosion and other pollutants that could runoff in the event of project inundation. Mitigation Measure BIO-9(4) has been included to require construction activities to occur during the dry season (June 15–October 31) to avoid increased runoff due to rain or flood flows, which would reduce the potential for flood inundation to occur during project construction. Further, Mitigation Measure BIO-9 has been included to reduce erosion and other pollutants during construction of the project, which would reduce the risk of substantial pollutant release due to project inundation during proposed construction activities.

Replacement of the Traffic Way bridge would reduce the risk associated with erosion of the existing foundation and is not anticipated to increase long-term erosion or siltation on-site that could result in substantial pollutant release due to project inundation. The project would be required to comply with City Municipal Code Section 13.24.120, which requires the preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion that could runoff from the site. The project would also be subject to RWQCB PCRs (Resolution R3-20132-0032025) to ensure long-term reduction of pollutant discharges. Based on required compliance with the City Municipal Code and RWQCB PCRs, implementation of the project would not increase long-term erosion or pollutants at the site in a manner that would result in substantial pollutant release due to project inundation. In addition, the proposed bridge would be designed in accordance with hydraulic design criteria included in the Caltrans Local Assistance Procedures Manual to ensure adequate conveyance of 50- and 100-year flood flows. Therefore, with implementation of Mitigation Measure BIO-9(4) to reduce the potential for pollutant release associated with flood flows and required compliance with the City Municipal Code, RWQCB PCRs, and Caltrans hydraulic design criteria, potential impacts would be *less than significant with mitigation*.

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

As previously identified, the project does not require any new connections to groundwater or sustained groundwater use that could substantially decrease groundwater supplies; therefore, the project would not conflict with a sustainable groundwater management plan. As described in threshold X(a), there is potential for construction activities to degrade the water quality of Arroyo Grande Creek due to required work within and adjacent to the surface water resource. Mitigation Measure BIO-9 has been included to avoid or minimize potential impacts related to degradation of water quality related to proposed construction activities. In addition, the project would be required to comply with City Municipal Code Section 13.24.120, which requires the preparation and implementation of an Erosion and Sedimentation Control Plan to reduce short- and long-term impacts associated with erosion that could run off from the site. The project would also be subject to RWQCB PCRs (Resolution R3-20132-0032025) to ensure long-term reduction of pollutant discharges. Therefore, with implementation of Mitigation Measure BIO-9 to reduce the potential for pollutant release and required compliance with the City Municipal Code and RWQCB PCRs, potential impacts would be *less than significant with mitigation*.

Conclusion

The project would require work within and adjacent to Arroyo Grande Creek. Mitigation Measure BIO-9 has been included to avoid or minimize potential impacts related to erosion, sedimentation, and other pollutants during project construction. The project would also be required to comply with City Municipal Code Section 13.24.120 and RWQCB PCRs for long-term pollutants. The project is located within an identified flood hazard zone and would be constructed in accordance with Caltrans standards to maintain potential flood flows. The project does not require connection to groundwater and would not conflict with groundwater management. In addition, the proposed bridge would be constructed within the footprint of the existing bridge and would not result in new impervious surfaces that could increase surface runoff. Therefore, with implementation of Mitigation Measure BIO-9 and required compliance with existing requirements, impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure BIO-9.

XI. Land Use and Planning

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Physically divide an established community?	☐	☐	☒	☐
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

Setting

The City's General Plan consists of nine elements, including the ACOSE and Land Use, Circulation, Housing, Safety, Noise, Economic Development, and Parks and Recreation Elements, which guide and facilitate planning and development in the city (City of Arroyo Grande 2001a). The City's LUE identifies zoning and land use designations for the City and includes goals and policies intended to guide growth and development. The city is comprised of a developed urban area with agricultural land located in the eastern and southeastern portions of the city. The project site is located within the Village Core land use designation.

Environmental Evaluation

a) Would the project physically divide an established community?

The project includes replacing the existing Traffic Way bridge to reduce risk associated with scour. The proposed bridge would be developed in the same alignment and contain the same roadway, bicycle, and pedestrian facilities as the existing bridge. Therefore, implementation of the project would not result in long-term impacts associated with dividing an established community. However, construction of the proposed project would result in temporary impacts due to the closure of Traffic Way, which currently provides access into the City's Village Core.

Temporary closure of Traffic Way during construction would require a temporary traffic detour route through the Village Core of the city. Traffic analysis showed that this was a feasible solution if Bridge Street was temporarily converted to a one-way, two-lane road in the northbound direction. Southbound traffic would not be allowed on Bridge Street and would need to use an alternate route, such as Mason Street, South Halcyon Road, or even US 101. A temporary signal would be required at the intersection of Bridge Street and West Branch Street to accommodate the traffic flow from northbound Bridge Street to West Branch Street. Temporary striping along East Branch, Mason, and Bridge Streets would allow traffic to navigate the detour more efficiently but would require the temporary removal of approximately 17 on-street parking spaces. The planned striping would also allow for trucks and emergency vehicles that typically use Traffic Way to navigate other urban streets.

The proposed temporary roadway detour would require the temporary loss of 17 existing on-street parking spaces. Thirteen of those on-street parking spaces and one on-street loading zone are located on the north side of West Branch Street between Bridge Street and Traffic Way. The temporary loss of on-street parking spaces is necessary to accommodate restriping of Branch Street for two westbound lanes. Many of these on-street spaces were temporarily removed during the Coronavirus Disease 2019 (COVID-19) pandemic in 2020 to accommodate outside dining areas for local businesses. These businesses have requested that the City permanently approve the conversion of these parking spaces. Recognizing the need for the temporary use of those spaces during construction of the bridge on Traffic Way, a more permanent solution could be approved by the City after the proposed project is complete and the detour has been removed.

In addition to the parking spaces temporarily removed on Branch Street, there would be three parking spaces temporarily removed on Bridge Street to allow for trucks and emergency vehicles to navigate the intersection. This would be necessary to accommodate the two-lane turning onto Branch Street from Bridge Street.

While there would be a temporary loss of on-street parking spaces on Branch and Bridge Streets, there are several parking lots available for use by the community frequenting the businesses in the area. On the south side of Branch Street, Klondike Pizza operates a parking lot and currently charges a fee to park for users that are not Klondike patrons. The City is coordinating with Klondike to provide a temporary removal of parking fees in the Klondike parking lot during construction to alleviate some of the added pressure of removing the 17 parking spaces. The temporary loss of 17 parking spaces would be for the full 7-month construction period.

Closure of Traffic Way would also result in a temporary closure of a Class II bike lane and pedestrian facilities that allow for connectivity into the Village Core along Traffic Way. Detour routes would be made available for these facilities and are further discussed in Section XVII, *Transportation,* threshold XVII(a). In addition, potential impacts related to emergency access due to the closure of Traffic Way are further discussed in Section XVII, *Transportation*, threshold XVII(d).

Based on a review of local parcel maps, the proposed project would be located entirely within 100 feet of City ROW centered along the existing road. Since the bridge replacement structures would be located as close as possible to the existing alignment, no additional permanent ROW acquisitions are anticipated to construct this project.

Potential impacts related to dividing an established community would be temporary and would be minimized through the provision of detour routes through the city. In addition, following construction activities, Traffic Way would be fully accessible to vehicle, bicycle, and pedestrian circulation and would not create a permanent barrier to movement. Therefore, potential impacts would be *less than significant*.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project would be required to comply with the City's General Plan, which establishes goals and policies to guide and facilitate planning within the city. As previously identified, the City's General Plan consists of nine elements, including the ACOSE and the Land Use, Circulation, Housing, Safety, Noise, Economic Development, and Parks and Recreation Elements. In addition, the project would be required to comply with requirements of the SLOAPCD 2001 Clean Air Plan, SLOCOG 2019 RTP/SCS, and City's Climate Action Plan. Mitigation has been provided throughout this document to reduce potential impacts related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, energy, hazards and hazardous materials, hydrology and water quality, noise, public services, tribal cultural resources, and wildfire, which would be consistent with the goals and policies of the City's General Plan. Therefore, the project would be consistent with the City's General Plan and impacts would be *less than significant with mitigation*.

Conclusion

Potential impacts related to dividing an established community would be temporary and would be accommodated through the provision of detour routes through the city. In addition, following construction activities, Traffic Way would be fully accessible to vehicle, bicycle, and pedestrian circulation and would not create a permanent barrier to movement. The project would be consistent with the City's General Plan, City's Climate Action Plan, SLOAPCD 2001 Clean Air Plan, and SLOCOG 2019 RTP/SCS following implementation of mitigation measure identified throughout this document. Therefore, with implementation of the identified mitigation measures, impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, and N-1 and N-2.

XII. Mineral Resources

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

Setting

The California Surface Mining and Reclamation Act (SMARA) of 1975 requires that the State Geologist classify land into mineral resource zones (MRZ) according to the known or inferred mineral potential of the land (PRC Sections 2710–2796).

The three MRZs used in the SMARA classification-designation process in the San Luis Obispo-Santa Barbara Production-Consumption Region are defined below (California Geological Survey [CGS] 2015):

- MRZ-1: Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based on economic–geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- MRZ-3: Areas containing known or inferred aggregate resources of undetermined significance.

According to the CDOC CGS Information Warehouse: Mineral Land Classification map, the city is located within a SMARA Study area (CGS 2015). The 1990 General Plan did not identify any Mineral Resource Zones within the city. According to the General Plan Integrated Program Environmental Impact Report (EIR), the 1990 General Plan does not identify any MRZs within the city limits (City of Arroyo Grande 2001b).

Environmental Evaluation

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

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

The city is located within a SMARA study area; however, there are no identified MRZs within the city (CGS 2015; City of Arroyo Grande 2001b). In addition, the project site has been previously developed, which reduces the potential for unknown mineral resources to occur within the project area. Therefore, mineral resources of value are not anticipated to be located within the project area and implementation of the project would not result in loss of availability of important mineral resources of value to the region or delineated in a local plan. Therefore, *no impacts* related to mineral resources would occur.

Conclusion

The project area is located in a previously developed area and there are no known mineral resources located within the city. Therefore, the project would not result in the loss of availability of a known mineral resource. Therefore, impacts would be less than significant, and mitigation is not necessary.

Mitigation Measures

No mitigation is required.

XIII. Noise

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

Setting

The *City of Arroyo Grande General Plan Noise Element* provides policy framework for addressing potential noise impacts. The Noise Element establishes maximum allowable noise exposure levels for transportation and non-transportation noise sources. The standards applied to transportation noise sources are based on average-daily noise exposure levels (in A-weighted decibels [dBA] Community Noise Equivalent Level/day-night equivalent level [CNEL/L_{dn}]). For noise-sensitive land uses exposed to non-transportation noise, the maximum allowable noise exposure standards vary depending on the duration of exposure and time of day. The City's noise standards for determining the compatibility for new development near transportation noise sources are summarized in Table 9.

Table 9. General Plan Land Use Compatibility Guidelines Near Transportation Noise Sources

Land Use	Land Use Compatibility		
	Acceptable	Conditionally Acceptable	Unacceptable
Residential, Theaters, Auditoriums, Music Halls, Meeting Halls, Churches	<60	60–70	>70
Transient Lodging: Hotels and Motels	<60	60–75	>75
Schools, Libraries, Museums, Hospitals, Nursing Homes	<60	60–75	>75
Playgrounds and Parks	<70	70–75	>75
Office Buildings	<60	60–75	>75

Notes:

Acceptable: Specified land use is satisfactory. No noise mitigation measures are required.

Conditionally Acceptable: Use should be permitted only after careful study and inclusion of protective measures as needed to satisfy the policies of the Noise Element.

Unacceptable: Development is usually not feasible in accordance with the goals of the Noise Element.

Source: City of Arroyo Grande 2001a.

In areas where the noise environment is acceptable, new development may be permitted without requiring noise mitigation. For areas where the noise environment is conditionally acceptable, new development

should be allowed only after noise mitigation has been incorporated into the design of the project to reduce noise exposure. For areas where the noise environment is unacceptable, new development in compliance with Noise Element policies is usually not feasible. New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB CNEL or L_{dn} (70 CNEL/L_{dn} for playgrounds and neighborhood parks) unless the project design includes mitigation measures to reduce noise to or below levels identified in Table 9 (City of Arroyo Grande 2001a).

Construction noise is commonly exempt from noise standards. Pursuant to City Municipal Code Section 9.16.030, noise sources associated with construction, provided such activities do not take place before 7:00 a.m. or after 10:00 p.m. on any day except Saturday or Sunday or before 8:00 a.m. or after 5:00 p.m. on Saturday or Sunday, constitute an exception to the City's noise standards.

The existing ambient noise environment at the project site is dominated by vehicle noise from Traffic Way and surrounding roadways, including West Branch Street/East Branch Street (formerly SR 227), which is located approximately 250 feet north of the Traffic Way bridge, and US 101, which is located approximately 550 feet south of the Traffic Way bridge. While the *City of Arroyo Grande General Plan* (City of Arroyo Grande 2001a) does not include noise contour maps of the city, the County's Land Use View tool shows the project area as being located within the 60-decibel (dB) noise contour of US 101, and portions of the project site being located within the 65 dB and 70 dB contours of US 101 (County of San Luis Obispo 2021).

Typical noise-sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. These are areas where the occupants are more susceptible to the adverse environmental effects, such as noise (USEPA 2017). The project site is surrounded by development with varying sensitivity to noise impacts. The nearest noise-sensitive land uses to the project site include a private single-family residence, located approximately 367 feet southeast from the boundary of the project site; medical offices, located approximately 290 feet southwest from the boundary of the project site; and a financial office, located approximately 120 feet northwest from the boundary of the project site.

Environmental Evaluation

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

The proposed project includes replacement of the existing Traffic Way bridge and would require decommissioning of the existing bridge, excavation, and construction of the new bridge over a 7-month construction period. The nearest noise-sensitive receptors to the project site include a private single-family residence, located approximately 367 feet southeast from the boundary of the project site; medical offices, located approximately 290 feet southwest from the boundary of the project site; and a financial office, located approximately 120 feet northwest from the boundary of the project site. Noise from construction activities may intermittently dominate the noise environment in the immediate vicinity of construction. Construction noise would be short term, intermittent, and often overshadowed by existing local traffic noise from surrounding roadways, including US 101 to the west and West Branch Street to the north.

There is potential for nearby sensitive receptor locations to experience intermittent exceedances of noise thresholds for office and residential uses set forth in the City's Noise Element. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance

over hard sites (e.g., pavement) and 7.5 dB per doubling of distance over soft sites (e.g., grass). Therefore, construction noise ranging between 80 and 90 dB at 50 feet would be reduced to noise levels between 68 and 78 dB at 200 feet and between 62 and 72 dB at 400 feet, which would exceed the maximum allowable noise exposure from transportation noise sources threshold set forth in the City's Noise Element. However, noise standards set forth in the City's Noise Element are intended to be used for planning purposes to avoid noise conflicts between existing and proposed land uses. Noise sources associated with construction, provided such activities do not take place before 7:00 a.m. or after 10:00 p.m. on any day except Saturday or Sunday or before 8:00 a.m. or after 5:00 p.m. on Saturday or Sunday, constitute an exception to the City's noise standards. Mitigation Measure N-1 has been included to ensure construction activities comply with timing established in the City Municipal Code. Mitigation Measure N-2 has been included to require mufflers on all combustion engines during project construction to further reduce construction-related noise impacts. Therefore, project construction activities would not result in noise levels in the vicinity of the project in excess of the standards established in the City's General Plan or Noise Ordinance.

Temporary closure of Traffic Way during construction would require a temporary traffic detour route through the Village Core of the city, which includes the temporary conversion of Bridge Street to a one-way, two-lane road in the northbound direction and diversion of southbound traffic to alternate routes, such as Mason Street, South Halcyon Road, or US 101. Implementation of detours could result in a temporary increase in vehicle traffic and associated noise near residential and office uses along these alternative routes. Typically, a doubling in traffic would result in an increase in noise that is perceptible to the human ear. Vehicle traffic would be diverted to several roadways and would not be limited to a single route; therefore, doubling of vehicle traffic is not anticipated to occur along a single roadway. Ambient noise along these roadways is already dominated by existing vehicle traffic; therefore, any additional diverted trips would result in a marginal increase in existing noise levels to which surrounding uses are generally accustomed to. According to City Municipal Code Section 9.16.030, construction and construction-related noise sources are exempt from the City's noise standards between the hours of 7:00 a.m. and 10:00 p.m. Monday through Friday and 8:00 a.m. and 5:00 p.m. Saturday and Sunday. Proposed detours would be temporary in nature and would not result in a new, permanent source of mobile noise near residential, office, or other noise-sensitive land uses. Therefore, a temporary increase in vehicle traffic would not generate a substantial permanent or temporary increase in ambient noise and would not exceed noise standards established in the City's General Plan or Noise Ordinance.

Upon implementation of Mitigation Measures N-1 and N-2 to reduce temporary construction-related noise near noise-sensitive land uses, implementation of the project would not result in an increase in ambient noise that would be inconsistent with the City's General Plan or Noise Ordinance. Therefore, potential impacts would be *less than significant with mitigation*.

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

The proposed project includes replacement of the existing Traffic Way bridge and would require decommissioning of the existing bridge, excavation, and construction of the new bridge over a 7-month construction period. The Federal Highway Administration (FHWA) establishes a 25-foot distance reference point from residential structures to measure the severity of potential vibration impacts (measured by peak particle velocity [ppv]) (FHWA 2018). With regard to human perception, vibration levels would begin to be perceptible at levels of 0.04 inches per second (in/sec) ppv for continuous events and 0.25 in/sec ppv for transient events. Based on Federal Transit Administration (FTA) vibration standards for general construction equipment, typical equipment (e.g., large bulldozer) would generate a maximum vibration level of approximately 0.089 in/sec at 25 feet, which is less than the FTA's most stringent vibration standard for older residential structural damage of 0.5 in/sec and would be

intermittently perceptible to surrounding receptors but below the thresholds for annoyance (FTA 2018). The typical vibration source levels generated by construction equipment are identified in Table 10 below.

Table 10. Representative Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 feet (in/sec)
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small Bulldozers	0.0003

While some construction activities may result in perceptible vibration, the project-generated vibration levels would be well below the thresholds identified as having the potential to adversely affect surrounding historic buildings, and the majority of construction activities and resulting vibration would not be at levels perceptible to humans. In addition, Mitigation Measure N-1 has been included to ensure construction activities comply with timing established in the City Municipal Code to further reduce potential annoyance caused by construction-related vibration to sensitive receptor locations.

The project is not anticipated to adversely affect nearby sensitive receptor locations due to construction-related vibration because surrounding private residences are all located more than 25 feet from the project limits, no significant vibration-inducing construction methods (such as pile driving) would be used during reconstruction or reinforcement of the slope, and construction activities would be conducted in accordance with allowable construction hours identified in the City Municipal Code. Therefore, impacts would be *less than significant with mitigation*.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project site is located approximately 2.5 miles northeast of the Oceano County Airport. Based on the *Airport Land Use Plan for the Oceano County Airport*, the project site is not located within any of the airport noise contours (County of San Luis Obispo 2007). Therefore, the project would not have the potential to expose people residing or working in the project area to excessive noise levels due to proximity to airport facilities and *no impacts* would occur.

Conclusion

Mitigation Measure N-1 has been included to ensure construction noise would be limited to the hours of 7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on weekends, in accordance with Caltrans Standard Specifications and City Municipal Code Requirements. In addition, Mitigation Measure N-2 would further reduce construction-related noise by requiring mufflers on all combustion engines during proposed construction activities. Construction noise would be short term, intermittent, and limited to applicable daytime hours per City standards. With implementation of the identified mitigation measures to further reduce construction-related noise, impacts would be less than significant.

Mitigation Measures

MM N-1 Noise-generating construction activities shall be limited to the daytime hours of 7:00 a.m. to 9:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. Saturday through Sunday, excluding legal holidays observed by the City during which no noise-generating construction activities shall be allowed. Any exceptions to this period of time would need to be authorized by the City of Arroyo Grande on a case-by-case basis and would be subject to the City of Arroyo Grande Noise Standards.

MM N-2 Internal combustion engines for construction equipment shall be equipped with the muffler recommended by the manufacturer. Internal combustion engines shall not be operated on the job site without the appropriate muffler.

XIV. Population and Housing

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

Setting

As of 2021, the City's population is an estimated 17,854, which has slightly decreased from the City's estimated population of 17,976 in 2019 (World Population Review 2021; U.S. Census Bureau 2010). The city has an estimated population density of 3,007 people per square mile. The median age in Arroyo Grande is 44.6 years old. The city's demographics are made up of 84.8% White, 4.2% Asian, 1.7% Native American, 0.9% Black or African American, 0.4% Native Hawaiian or Pacific Islander, and 7.9% other (World Population Review 2021). There are approximately 7,026 households within the city with an average household size of 2.53 persons. The city has a home ownership rate of 67.5%. The city has a poverty rate is 6.16% and an unemployment rate of 2.1% (World Population Review 2021).

Environmental Evaluation

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

The project includes replacement of the existing Traffic Way bridge. The project does not include the development of new residential development that could directly induce substantial unplanned population growth. The project does not include development of new businesses, extension of existing roads, or development of new roads or other infrastructure that could facilitate indirect unplanned population growth. Construction of the project would result in a short-term increase in construction workers in the area; however, it is anticipated the workers would come from the local work force or commute to the site and would not require housing within the city. Operation of the project may include infrequent repair or

maintenance trips on an as-needed basis by existing City employees; however, operation of the project is not anticipated to increase long-term employment opportunities within the city. Therefore, the project would not directly or indirectly induce substantial unplanned population growth and impacts would be *less than significant*.

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

The project site is located adjacent to commercial businesses in all directions. There is housing located approximately 367 feet southeast from the boundary of the project site; however, there is no housing located immediately adjacent to the project site. The project would not displace existing housing or necessitate the construction of replacement housing elsewhere; therefore, *no impacts* would occur.

Conclusion

The project would not induce substantial unplanned population growth and would not result in the construction of new or displacement of existing housing. Therefore, impacts would be less than significant, and no mitigation is necessary.

Mitigation Measures

No mitigation is required.

XV. Public Services

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Setting

Fire Protection Services

The FCFA is a Joint Powers Authority (JPA) between the City of Arroyo Grande, City of Grover Beach, and Oceano Community Services District, serving a population of 37,000 in a 10-square-mile service area (FCFA 2021). The FCFA was created to increase service levels to citizens and visitors, ensure consistent

and professional training standards, and increase operational efficiencies. The FCFA currently operates out of three stations with an average response time of 6 minutes (FCFA 2021). The nearest FCFA Station to the project site is Station 1, approximately 300 feet south.

Police Protection Services

The Arroyo Grande Police Department (AGPD) provides public safety services for the city of Arroyo Grande. The AGPD is located at 200 North Halcyon Road in Arroyo Grande and consists of 29 full-time employees (AGPD 2021). The crime rate in the region is among the lowest in California. The AGPD responded to 17,137 documented incidents in 2016 and 17,925 documented incidents in 2017. At the same time, the AGPD has been able to maintain a response time for emergency calls at less than 2 minutes (AGPD 2021). The AGPD is located approximately 0.65 mile west of the project site. The California Highway Patrol (CHP) office, located at 4115 Broad Street in San Luis Obispo, serves South County, including the city of Arroyo Grande. The nearest CHP office is located approximately 9 miles north of the project site.

Schools

Arroyo Grande students in grades K through 12 are served by two school districts: San Luis Obispo Coastal Unified School District and Lucia Mar Unified School District (LMUSD). LMUSD covers 550 square miles and serves the adjoining communities of Arroyo Grande, Grover Beach, Nipomo, Oceano, Pismo Beach, and Shell Beach.

Parks

Arroyo Grande has 13 city parks, several sports facilities, and open space and wildlife preserve areas. The nearest park is Kiwanis Park located approximately 0.1 mile east of the project site.

Libraries

The City does not provide library services to City residents. This service is provided by the San Luis Obispo City-County Library system, which presently maintains the Arroyo Grande Library located at 800 West Branch Street, approximately 0.5 mile north of the project site.

Environmental Evaluation

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:

Fire protection?

As discussed in Section XX, *Wildfire*, the project site is located in a developed portion of the city of Arroyo Grande in an LRA (CAL FIRE 2021). Temporary road detours could temporarily increase emergency response times in the area; however, alternative routes and additional measures would be implemented to ensure adequate emergency response to the project area. In addition, Mitigation Measure HAZ-1 has been included to ensure adequate notice has been provided to local police and fire protection services prior to the implementation of any road closures or detours. Following construction, traffic circulation along Traffic Way and emergency response efforts would be consistent with existing conditions and would not result in the need for new or expanded fire protection services. The project would replace the existing Traffic Way bridge and relocate existing utility infrastructure. The project does

not include components that could permanently exacerbate fire risk or significantly increase demand on local fire protection services. The project would not result in the need for new or physically altered governmental facilities for fire protection. Therefore, impacts related to fire protection services for the project would be *less than significant with mitigation*.

Police protection?

Temporary road detours could temporarily increase emergency response times in the area during construction of the project; however, alternative routes would be available to ensure adequate emergency response to the project area. Mitigation Measure HAZ-1 has been included to provide notice to local police and fire protection services prior to the implementation of proposed road closures and detour routes. Following construction, traffic circulation along Traffic Way would be consistent with existing conditions and would not result in a permanent change to emergency response efforts that would require new or expanded police protection facilities. The project does not propose construction of new residential homes, businesses, or other facilities that would create an increased demand for police protection. The project would not result in the need for new or physically altered governmental facilities for police protection; therefore, impacts related to police protection for the project would be *less than significant with mitigation.*

Schools?

As discussed in Section XIV, *Population and Housing*, the project would not induce direct or indirect population growth. Implementation of the proposed project would not result in an increase of school-aged children in the area; therefore, the project would not create an increased demand on local schools and *no impacts* would occur.

Parks?

As discussed in Section XIV, *Population and Housing*, the project would not induce direct population growth. Implementation of the proposed project would not result in a population increase that could result in deterioration of existing recreation facilities or require the expansion of new facilities; therefore, the project would not create an increased demand on public recreation facilities and *no impacts* would occur.

Other public facilities?

As discussed in Section XIV, *Population and Housing*, the project would not induce direct population growth. The project does not propose features that would significantly increase the demand on public facilities such as libraries or post offices or result in the need for new or physically altered governmental facilities; therefore, *no impacts* would occur.

Conclusion

The proposed project would not result in the provision of or need for new or physically altered governmental facilities. Additionally, the project does not have the potential to induce unplanned growth. Consequently, the project would not increase demand for fire or police protection services, schools, parks, libraries, or other public facilities. Therefore, no impacts would occur, and no mitigation is necessary.

Mitigation Measures

Implement Mitigation Measure HAZ-1.

XVI. Recreation

Environmental Issues	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 Arroyo Grande General Plan Parks and Recreation Element* states that it is the overall goal of the City to adequately provide for the recreational needs of residents and visitors of Arroyo Grande. The Parks and Recreation Element acts as a guide for the development of additional park and recreation facilities. The City currently funds public recreational facilities through the Quimby Act, federal and state grants, land dedications and easements, trail easements, development impact fees, user fees, general obligation bonds, revenue bonds, and cooperation with other agencies (City of Arroyo Grande 2001a).

Arroyo Grande prides itself on its beautiful array of parks, open space, and community recreational facilities. The City provides and maintains recreational facilities, including 13 parks, the Soto Sports Complex, fields and courts, and the James Way Oak Habitat open space and wildlife preserve (City of Arroyo Grande 2021b). The nearest park to the project site is Heritage Square Park, located approximately 1,000 feet east.

Environmental Evaluation

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?

The proposed project includes replacement of the existing Traffic Way bridge and would not create a new use that would generate unplanned population growth or increase demand on existing recreational facilities. Therefore, implementation of the project would not result in deterioration of existing facilities, and *no impact* would occur.

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?

Traffic Way is currently designated as a Class II Bikeway in the *City of Arroyo Grande Bicycle & Trails Master Plan* (City of Arroyo Grande 2012). The project includes replacement of the Traffic Way bridge, including the existing bicycle lanes and pedestrian facilities. Following project construction, the Traffic Way bridge would continue to provide a Class II bike lane and adequate pedestrian facilities as identified in the 2012 Bicycle & Trails Master Plan. The project does not include the development of new or expansion of existing recreation facilities, including bikeways; therefore, *no impacts* related to the construction or expansion of recreational facilities would occur.

Conclusion

Implementation of the proposed project would not result in increased use of existing recreational facilities that could result in deterioration. The project does not include the construction of new or expansion of existing recreational facilities. Following project construction, the Class II bike lane and pedestrian facilities would be maintained along Traffic Way. Therefore, impacts would be less than significant, and mitigation is not required.

Mitigation Measures

No mitigation is required.

XVII. Transportation

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

Setting

The City's previous General Plan Circulation Element was adopted in 2001 and provides goals and policies to maintain an acceptable level of service (LOS), create a multi-modal circulation system, and coordinate land use and circulation (City of Arroyo Grande 2001a). The updated *City of Arroyo Grande General Plan Circulation Element* was recently adopted in 2021 (City of Arroyo Grande 2021a). The updated Circulation Element provides objectives and policy guidance for long-term planning and implementation of the transportation system needed to serve the City's projected development. The objectives and policies in the updated Circulation Element are closely correlated with the City's Land Use Element and other elements that comprise the General Plan and are intended to enhance travel choices for current and future residents, visitors, and workers. The updated Circulation Element also defines a preferred transportation system that reflects the City's financial resources and broader goals, including providing safe and convenient access for all modes of travel while preserving the local character of the community.

The 2019 RTP/SCS, adopted on June 5, 2019, is a long-term blueprint of San Luis Obispo County's transportation system (SLOCOG 2019). The RTP/SCS identifies and analyzes transportation needs of the region and creates a framework for project priorities. SLOCOG represents and works with the County and the cities within the county in facilitating the development of the RTP/SCS.

Traffic Way is classified as an on-system arterial road based on Caltrans CRS Map 8S45 and the updated Circulation Element. The original bridge was constructed in 1932 and consists of six 38-foot spans, for a total bridge length of 228 feet. The bridge was originally part of the highway system and was relinquished to the City in 1960. The bridge is a cast-in-place reinforced concrete tee-beam with a longitudinal construction joint near the bridge centerline. The bridge measures 40 feet between curbs and has 6-foot sidewalks on both sides with an open concrete railing that was mounted to the edge of the bridge. The bridge originally carried four lanes of traffic but was reconfigured around 2008 to have three lanes of through traffic with shoulders for a Class II bike route.

Traffic Way north of the bridge has three lanes with shoulders and sidewalks and quickly transitions into an intersection with West Branch Street, approximately 300 feet north of the project site. South of the bridge, Traffic Way is wider to account for a right-turn pocket onto Station Way and parking is allowed on the north side of the roadway. Traffic volumes through the site are approximately 9,600 vehicles per day per the 2016 Bridge Inspection Report. Traffic Way has a posted speed limit of 35 mph in both directions.

Environmental Evaluation

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

Traffic Way bridge provides passage over Arroyo Grande Creek. Based on the 2016 Bridge Inspection Report, traffic volumes through the site are approximately 9,600 vehicles per day. Traffic Way is classified as an urban arterial roadway and has an estimated future ADT rate of 11,000. The project proposes replacement of the existing bridge and would include the same number of vehicle lanes, Class II bicycle lanes, and pedestrian facilities (sidewalks, light posts, and fencing) as the existing bridge structure. Operation of the project may result in infrequent maintenance trips on an as-needed basis, consistent with existing operations, and would not increase vehicle trips to or from the project site. Therefore, the project would be consistent with the updated Circulation Element and the 2019 RTP/SCS, which aims to reduce VMT and provide opportunities for alternative modes of transportation.

Traffic Way is designated as a Class II Bikeway (Bike Lane) in the updated Circulation Element. The bike lane is currently striped on Traffic Way from the intersection of West Branch Street to the northbound US 101 off-ramp intersection with Traffic Way. When Traffic Way is temporarily closed for construction of the bridge, bicycle traffic would be required to utilize a signed detour route towards Bridge Street, which is an existing bike route, and would allow users continued access to their desired destination. Bicycle traffic through the Village of Arroyo Grande would be maintained throughout construction. Following construction activities, Traffic Way would be returned to a Class II bike lane, which is consistent with the updated Circulation Element.

A pedestrian stairway adjacent to the existing bridge, and the pedestrian walkway on Traffic Way and across the existing bridge, provide pedestrian access from Branch Street to Village Creek Plaza. The pedestrian stairway and pedestrian access on the existing bridge would be temporarily closed during construction. However, pedestrian access to Village Creek Plaza from Branch Street would be maintained via the proposed temporary roadway detour using Traffic Way south of the construction area, the existing pedestrian crosswalk on Traffic Way at Station Way, Nelson Street, and Bridge Street to Branch Street. Following construction, the pedestrian stairway and pedestrian access on the bridge and Traffic Way would be fully restored. Therefore, the project would be consistent with the updated Circulation Element, which aims to provide ample pedestrian and bicycle facilities.

The project would be consistent with the updated Circulation Element and 2012 Bicycle & Trails Master Plan; therefore, impacts would be *less than significant*.

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

According to the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor's Office of Planning and Research [OPR] 2018), projects that would not generate a potentially significant level of VMT, that are consistent with an SCS or general plan, or that would generate or attract fewer than 110 trips per day would not result in significant transportation impacts. The project does not propose features that would increase long-term circulation to or from the project site. During operation, a negligible number of trips may be required for infrequent maintenance activities on an as-needed basis, consistent with existing operations. Implementation of the project would not result in or exceed 110 trips per day and would not generate a significant increase in VMT. Therefore, project impacts would be *less than significant*.

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

Traffic Way is classified as an urban arterial roadway and, per AASHTO standards, lane widths for urban arterial roads can vary from 10 feet to 12 feet depending on the surrounding conditions. The project includes three 11-foot lanes, which would match the existing stripes and geometry of the approach roadway. Per AASHTO standards, it is recommended that a Class II bike route includes 5-foot minimum shoulders next to vertical curb faces. In addition, current Caltrans standards recommend 6-foot sidewalks on all structures. In order to be consistent with existing roadway design standards and recommendations, the overall bridge width would measure 59 feet and 4 inches. The project would be consistent with AASHTO and Caltrans roadway design standards and recommendations. Therefore, implementation of the project would not result in hazards due to proposed roadway design measures and impacts would be *less than significant*.

d) Would the project result in inadequate emergency access?

Construction of the project would occur over a 7-month period and would likely require closure and/or traffic controls along Traffic Way and surrounding roadways. FCFA Station 1 is located approximately 300 feet south of the Traffic Way bridge along Traffic Way and road closures and/or traffic controls may impact FCFA emergency response times. In order to maintain access, FCFA Station 1 would be provided a GPS EVP device during the construction phase to transmit a signal to the controller box and allow northbound traffic along Traffic Way a green during a call for emergency response. It is anticipated that this situation would be mostly prominent during the school year due to an increase in vehicle traffic along Traffic Way. Since most of the construction would occur during the summer, impacts related to emergency response would be limited. Other emergency response vehicles would be able to access the project area through temporary road detours through the city. Based on proposed features to allow emergency access during construction, the project would not result in significant impacts related to FCFA emergency access. Following construction of the project, Traffic Way would be fully operational and would provide adequate emergency access. Therefore, potential impacts related to emergency access would be *less than significant*.

Conclusion

The project would be consistent with the updated Circulation Element and 2012 Bicycle & Trails Master Plan. The project would generate a negligible amount of vehicle trips to and from the project site during operation and would not exceed the established VMT threshold of 110 trips per day. Roadway design of Traffic Way would be subject to AASHTO and Caltrans standards and recommendations and would not result in hazardous features. The project includes components that would allow for emergency access

during temporary closure of Traffic Way. Additionally, operation of the project would not result in inadequate emergency access. Therefore, impacts related to transportation would be less than significant, and no mitigation is necessary.

Mitigation Measures

No mitigation is required.

XVIII. Tribal Cultural Resources

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

Setting

The project is located within lands traditionally occupied by the Obispeño Chumash. The term Chumash initially applied only to the people living on Santa Cruz Island (SWCA 2021a). Chumash now refers to the entire linguistic and ethnic group of societies that occupied the coast between San Luis Obispo and northwestern Los Angeles County, including the Santa Barbara Channel Islands, and inland to the southern edge of the San Joaquin Valley. Neighboring groups included the Salinan, Southern Valley Yokuts and Tataviam on the north, and the Gabrielino (Tongva) to the east. Chumash place names in the project vicinity include Pismu (Pismo Beach), Tematatimi (along Los Berros Creek), and Tilhini (near San Luis Obispo) (SWCA 2021a).

Most Chumash managed to maintain a presence in the area into the early twentieth century as cowboys, farmhands, and town laborers. The Catholic Church provided some land near Mission Santa Inés for ex-neophytes. This land eventually was deeded to the U.S. government in 1901 as the 127-acre Santa Ynez Reservation. Since the 1970s, Chumash descendants living in the city of Santa Barbara and the rural areas of San Luis Obispo, Santa Barbara, and Ventura Counties have formed social and political organizations to aid in cultural revitalization, to protect sacred areas and archaeological sites, and to petition for federal recognition. Today, the Santa Ynez Band of Chumash Indians is the only federally recognized Chumash tribe (SWCA 2021a).

Approved in 2014, AB 52 added tribal cultural resources to the categories of resources that must be evaluated under CEQA. Tribal cultural resources are defined as either of the following:

1. Sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the CRHR; or
    b. Included in a local register of historical resources as defined in PRC Section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying these criteria for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Recognizing that tribes have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe regarding the potential for adverse impacts on tribal cultural resources as a result of a project. Consultation may include discussing the type of environmental review necessary, the presence and/or significance of tribal cultural resources, the level of significance of a project's impacts on the tribal cultural resources, and available project alternatives and mitigation measures recommended by the tribe to avoid or lessen potential impacts on tribal cultural resources.

As part of background research for the ASR prepared for this project, the NAHC was contacted on March 16, 2020, requesting a search of their Sacred Lands File for traditional cultural resources. The NAHC responded on March 17, 2020, indicating the results of the Sacred Lands File search were positive, and previous studies had been conducted within the project area. The NAHC also provided a list of 11 Native American groups, which were contacted on April 13, 2020. The following is a summary of received responses:

- Patti Dunton, Tribal Administrator of the Salinan Tribe of Monterey and San Luis Obispo Counties, did not have any specific information regarding cultural resources in the project area but requested that a cultural resource specialist from her tribe be present on-site for the proposed undertaking.
- Mona Tucker, Chair of the *yak tit^{y}u tit^{y}u yak tiłhini* Northern Chumash Tribe of San Luis Obispo County and Region, recognized the importance of the project area and requested to receive a copy of the results of the records search and conduct a site visit.

Per AB 52 requirements, the City provided the opportunity for tribal consultation on July 1, 2021. Nine tribes were contacted, and the following response was received:

- The Tribal Elders' Council for the Santa Ynez Band of Chumash Indians did not request any further consultation based on the existing scope of the project and requested to be notified if the existing scope of the project were to change.

There have been no other responses as of December 6, 2021.

Environmental Evaluation

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a-i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

a-ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The City has provided notice of the opportunity to consult with appropriate tribes per the requirements of AB 52. As discussed in Section IV, *Cultural Resources*, based on desktop-level review and field investigation, the project site is not anticipated to contain tribal cultural resources that have been listed or been found eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1. The project is located within and adjacent to Arroyo Grande Creek and would require excavation and vegetation removal for construction of the proposed bridge. Based on the ASR prepared for the project, there are no previously recorded archaeological resource sites within the project area and field surveys did not identify any unknown resources (SWCA 2021a). Therefore, proposed ground disturbance activities are not anticipated to adversely affect known or unknown tribal cultural resource sites present within the project area. In addition, based on the scope of the project, there were no requests for consultation from tribes contacted per AB 52 requirements. Mitigation Measure CR-1 has been included in the unlikely event unknown tribal cultural resources are uncovered during proposed ground-disturbing activities. Mitigation Measure CR-1 requires that work be halted in the vicinity of the find until a qualified archaeologist can assess the significance of the find. Implementation of the identified mitigation measure would ensure protection of tribal cultural resources during implementation of the project; therefore, impacts would be *less than significant with mitigation*.

Conclusion

There is potential for unknown tribal cultural resources to be present within the project area. Mitigation CR-1 has been included to mitigate impacts related to discovery of tribal cultural resources during ground-disturbing construction activities. Therefore, with implementation of the identified mitigation measure, impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure CR-1.

XIX. Utilities and Service Systems

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

Setting

Utilities would be served by both the City and other regional entities. Water and wastewater services within the City are provided by the City Public Works Department. The City has a franchise agreement with South County Sanitary Service for collection, diversion, and disposal of solid waste and is served by the Cold Canyon Landfill, located approximately 2 miles north of the city in unincorporated San Luis Obispo County. The Cold Canyon Landfill currently has a daily capacity of 1,650 tons per day and an estimated remaining capacity of 13,000,000 cubic yards. Currently, the estimated closure date for this landfill is December 31, 2040 (California Department of Resources Recycling and Recovery [CalRecycle] 2019).

There is existing utility infrastructure that crosses the Traffic Way bridge and/or is located within the project footprint, including PG&E electrical lines, AT&T lines, a City water line, and a City storm drain system.

Environmental Evaluation

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

As previously described, there is existing utility infrastructure that crosses the Traffic Way bridge and/or is located within the project footprint, including PG&E electrical lines, AT&T lines, a City water line, and

a City storm drain system. The project includes replacement of the existing Traffic Way bridge and would require relocation of existing utility infrastructure during construction of the new bridge. Implementation of the proposed project has the potential to result in impacts to air quality, biological resources, cultural resources, geology and soils, GHG emissions, energy, hazards and hazardous materials, hydrology and water quality, noise, public services, tribal cultural resources, and wildfire. As described in the corresponding resource sections, implementation of Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, and N-1 and N-2 would avoid and/or minimize potential environmental impacts to less-than-significant levels. Therefore, impacts would be less than *significant with mitigation*.

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

The project does not require any connections to water and would not require any long-term operational water use. During construction, water may be used for dust suppression; however, any water used during construction would be limited in volume and would be supplied from off-site sources. The project includes relocation of an existing City water pipe; however, the project would not increase or change the existing use of the City's water supply. Therefore, *no impact* would occur.

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

Operation of the project does not include connection to any public or private wastewater treatment providers. Portable restrooms would likely be used by workers and other personnel throughout the construction period; therefore, the project would not require short- or long-term connections to wastewater treatment providers, and *no impact* would occur.

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

Construction of the project may result in a temporary increase in solid waste, which would be disposed of in accordance with applicable state and local laws and regulations. The project would be serviced by Cold Canyon Landfill, which has a remaining capacity of 13,000,000 cubic yards and an estimated closure date of 2040 (CalRecycle 2019). Operation of the project would result in infrequent maintenance on an as-needed basis, consistent with existing operations, and would not generate waste in excess of state or local standards or in excess of the capacity of local infrastructure; therefore, impacts would be *less than significant*.

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

As previously described, operation of the project would not result in the long-term generation of solid waste. Construction-related waste (i.e., excavated soils) would be disposed of according to federal and state regulations. The project would not generate long-term solid waste and would be compliant with solid waste reduction statutes and regulations. Therefore, impacts would be *less than significant*.

Conclusion

The project would require the relocation of existing utility infrastructure that may have adverse environmental impacts. Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, and N-1 and N-2 have been included to reduce potential adverse impacts to less than significant.

The project does not require connection to the City's water supply or wastewater system. In addition, the project would not result in solid waste in exceedance of federal, state, or local regulations. Therefore, with implementation of the identified mitigation, impacts related to utilities and service systems would be less than significant.

Mitigation Measures

Implement Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, and N-1 and N-2.

XX. Wildfire

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

Setting

In central California, the fire season usually extends from May through October; however, recent events indicate that wildfire behavior, frequency, and duration of the fire season are changing in California. FHSZs are defined by CAL FIRE based on the presence of fire-prone vegetation, climate, topography, assets at risk (e.g., high population centers), and a fire protection agency's ability to provide service to the area (CAL FIRE 2007). FHSZs throughout the county have been designated as "Very High," "High," or "Moderate." In San Luis Obispo County, most of the area that has been designated as a "Very High Fire Hazard Severity Zone" is located in the Santa Lucia Mountains, which extend parallel to the coast along the entire length of the county. The Moderate FHSZ designation does not mean the area cannot experience a damaging fire; rather, it indicates that the probability is reduced, generally because the number of days a year that the area has "fire weather" is less than in high or very high FHSZs. The city of Arroyo Grande, including the project site, is located within an LRA, and is not a designated FHSZ (CAL FIRE 2021).

The City's Safety Element includes the objective of reducing the threat to life, structures, and the environment caused by fire and includes specific policies related to pre-fire management; availability of facilities, equipment, and personnel; readiness and response; and loss prevention (City of Arroyo Grande 2001a).

The Multi-Jurisdictional LHMP was originally adopted in 2013 and modified in 2015. The intention of the LHMP is to implement practical mitigation solutions to minimize risk of hazards within each city covered by the LHMP. The plan includes specific action items related to fire hazard mitigation within each jurisdiction (Mathe 2015).

Environmental Evaluation

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

The project site is located in an urbanized portion of the city within an LRA (CAL FIRE 2021). The project includes replacement of the Traffic Way bridge that allows traffic to cross over Arroyo Grande Creek in the central portion of the city. Construction activities would result in the temporary closure of the Traffic Way bridge and may require other traffic controls and detours on surrounding roadways. The construction period would extend approximately 7 months and temporary closures of roadways and associated detours may result in temporary delays in emergency response and evacuation in the city. Any short-term road closures or traffic controls would be required to provide prior notice and use proper detour signage for public safety and circulation.

FCFA Station 1 is located approximately 300 feet south of the Traffic Way bridge along Traffic Way and road closures and/or traffic controls may impact FCFA emergency response times. In order to maintain access, FCFA Station 1 would be provided a GPS EVP device during the construction phase to transmit a signal to the controller box and allow northbound traffic a green light during a call for emergency response. While this situation would be most prominent during the school year due to an increase in vehicle traffic along Traffic Way, year-round visitor serving uses would continue to contribute to congestion within the project area during construction activities. Additionally, since wildfire occurrence is highest during the summer, it can be assumed that an increase in calls for fire protection services would occur during this time. In addition to the provision of a GPS EVP device, Mitigation Measure HAZ-1 has been included to provide notice to local fire protection services prior to the implementation of any road closures or detour routes. The project would also implement road detours that would maintain public access throughout the city during closure of Traffic Way. Based on implementation of Mitigation Measure HAZ-1 and proposed components to allow emergency access during construction, the project would not result in significant impacts related to FCFA emergency access.

The project would result in the replacement of the Traffic Way bridge to avoid potential risk to the public related to scour and would not result in the permanent closure of Traffic Way bridge or surrounding roadways that could impede long-term emergency access and/or evacuation. Therefore, the project would not substantially impair or interfere with the City's Safety Element, the Multi-Jurisdictional LHMP, or other emergency response or evacuation plans; therefore, impacts would be *less than significant with mitigation*.

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

The project area is located in a developed portion of the city in an LRA and is not designated as a State Responsibility Area (SRA) or FHSZ. The average wind speed in the city ranges from 7.1 to 9.5 mph, with the highest wind speeds occurring between the months of April and May (WeatherSpark 2021). The project would result in the replacement of the Traffic Way bridge, which would reduce risk related to

erosion surrounding the foundation of the bridge. Replacement of the existing bridge would not result in a long-term increase in fire hazard within the project area. However, since construction would be limited to the dry season (June 1-October 15), there is potential for construction activities to increase the risk of wildfire ignition at the project site. The project would be required to comply with IFC Section 3312, which establishes regulations to reduce the risk of wildfire ignition during construction and demolition activities. Regulations include, but are not limited to, prohibiting smoking at the site, removal of combustible waste materials (i.e., paper, rags, wood, etc.) from the project site, identifying proper refueling methods, and establishing equipment standards. In addition, the project would not result in the development of new buildings that could expose project occupants to wildfire risks or otherwise exacerbate wildfire risks; therefore, impacts would be *less than significant*.

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

According to the CAL FIRE FHSZ Viewer, the project site is not located within or near an SRA (CAL FIRE 2021). There is existing utility infrastructure that crosses the Traffic Way bridge and/or is located within the project footprint, including PG&E electrical lines, AT&T lines, a City water line, and a City storm drain system. The project includes replacement of the existing Traffic Way bridge and would require relocation of existing utility infrastructure with the construction of the new bridge. As previously identified, construction would be limited to the dry season (June 1-October 15), which has the potential to increase the risk of wildfire ignition during utility installation at the project site. The project would be required to comply with provisions of IFC Section 3312, including regulations and standards to reduce the potential for the use of construction equipment at the project site to generate sparks or otherwise increase the risk of wildfire. The project would not result in development or installation of additional or extended roads, fuel breaks, or utilities that may exacerbate long-term fire risk within the project area. Therefore, potential impacts would be *less than significant*.

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

According to the CAL FIRE FHSZ Viewer, the project site is not located within or near an SRA (CAL FIRE 2021). The project site is located in a developed portion of the city and would not be exposed to significant wildfire risk. The project site consists of an existing bridge over Arroyo Grande Creek and is characterized by relatively flat topography. Implementation of the project is not anticipated to result in downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes because the project site has a low potential for wildfire that could result in post-fire ground failure events. Therefore, impacts would be *less than significant*.

Conclusion

The project site is not located in an SRA. In addition, the project does not include components that would significantly increase the potential for long-term wildfire within the project area. The project would be required to comply with Mitigation Measure HAZ-1 to ensure adequate emergency access is maintained throughout construction and IFC Section 3312 to reduce the potential for wildfire ignition during project construction. Since there is low potential for wildfire, implementation of the project is not anticipated to result in any post-fire ground failure or other events. Therefore, impacts would be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measure HAZ-1.

XXI. Mandatory Findings of Significance

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

Environmental Evaluation

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

As discussed in the preceding sections, the project has the potential to significantly degrade the quality of the environment, including effects on biological resources. During construction, ground disturbance within and adjacent to Arroyo Grande Creek and construction of the project may affect biological resources, including sensitive and special-status species, sensitive natural communities, and wetland resources. Mitigation measures are identified to reduce potential impacts a less-than-significant level, including, but not limited to, measures intended to prevent the inadvertent take of special-status plants and animals, avoid the spread of invasive species, reduce impacts to arroyo willow thicket and associated riparian vegetation, and avoid or minimize potential impacts to Arroyo Grande Creek.

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)?

When project impacts are considered along or in combination with other impacts, the project-related impacts may be significant. Construction and operation of the project have the potential to create erosion and down-gradient sedimentation, result in accidental spill or commonly used hazardous materials, generate air quality emissions, generate excessive construction noise, and disturb special-status biological resources, paleontological resources, and cultural resources. Mitigation measures have been incorporated into the project to reduce project-related impacts to a less-than-significant level. Based on implementation of identified project-specific mitigation measures, the cumulative effects of the proposed project would be less than significant.

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

Implementation of the project would result in the generation of pollutants, which may affect air quality and/or water quality. The project may result in accidental spill of commonly used hazardous materials. In addition, the project may generate excessive noise during proposed construction activities. Mitigation measures have been developed that would reduce these project-specific impacts to a less-than-significant level; therefore, the project would not result in substantial, adverse environmental effects to human beings, either directly or indirectly.

Conclusion

With implementation of Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, and N-1 and N-2, impacts would be less than significant with mitigation.

3 REFERENCES

American Association of State Highway and Transportation Officials (AASHTO). 2018. *A Policy on Geometric Design of Highways and Streets*. Seventh Edition. 2018.

Arroyo Grande Police Department (AGPD). 2021. About AGPD. Available at: http://www.agpd.org/260/About-AGPD. Accessed September 2021.

California Department of Conservation (CDOC). 2015. Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/. Accessed September 2021.

_____. 2016. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed September 2021.

California Department of Forestry and Fire Protection (CAL FIRE). 2007. Draft Fire Hazard Severity Zones in Local Responsibility Areas. Available at: http://frap.fire.ca.gov/webdata/maps/san_luis_obispo/fhszl06_1_map.40.pdf. Accessed September 20, 2021.

_____. 2021. Fire Hazard Severity Zone Viewer. Available at: https://egis.fire.ca.gov/FHSZ/. Accessed September 20, 2021.

California Department of Resources Recycling and Recovery (CalRecycle) 2019. SWIS Facility/Site Activity Details Cold Canyon Landfill, In. (40-AA-0004). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1509?siteID=3171. Accessed September 20, 2021.

California Department of Toxic Substances Control (DTSC). 2021. EnviroStor. Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed September 15, 2021.

California Department of Transportation (Caltrans). 2019. *Caltrans Seismic Design Criteria*. Version 2.0. April. Available at: https://dot.ca.gov/-/media/dot-media/programs/engineering/documents/seismicdesigncriteria-sdc/202007-seismicdesigncriteria-v2-a11y.pdf. Accessed April 2021.

———. 2020. Bridge Inspection Report. Prepared by Caltrans Structure Maintenance and Investigations. Prepared for the City of Arroyo Grande. October 31, 2020.

———. 2021a. California Road System – Functional Classification. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=026e830c914c495797c969a3e5668538. Accessed September 23, 2021.

———. 2021b. *Local Assistance Procedures Manual*. Available at: https://dot.ca.gov/programs/local-assistance/guidelines-and-procedures/local-assistance-procedures-manual-lapm. Accessed September 22, 2021.

———. 2021c. Scenic Highways Mapper. Available at: http://gisdata.dot.ca.gov/arcgis/rest/services/Highway/Scenic_Highways/MapServer. Accessed September 2021.

California Geologic Survey (CGS). 2015. Mineral Land Classification Maps. California Geologic Survey Information Warehouse. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed September 2021.

California Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluation Transportation Impacts in CEQA*. December. Available at: https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed July 14, 2021.

California Public Utilities Commission (CPUC). 2005. *DCPP Steam Generator Replacement Project Draft Environmental Impact Report*. Available at: https://ia.cpuc.ca.gov/environment/info/aspen/diablocanyon/deir/d05_geology.pdf. Accessed September 22, 2021.

Central Coast Regional Water Quality Control Board (RWQCB). 2013. *Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region*. Available at: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/hydromod_lid_docs/2013_0032_attach1_post_construction_requirements.pdf. Accessed September 15, 2021.

City of Arroyo Grande. 1994. *Design Guidelines and Standards for the Historic Character Overlay District. Available at:* https://www.arroyogrande.org/DocumentCenter/View/280/Village-Design-Guidelines-PDF. Accessed September 2021.

———. 2001a. *City of Arroyo Grande General Plan Circulation, Land Use, Safety, Noise, Parks and Recreation Elements*. Available at: https://www.arroyogrande.org/142/Planning-Division. Accessed September 2021.

———. 2001b. *Integrated Program EIR Master Plan*. Available at: http://www.arroyogrande.org/DocumentCenter/View/2080/General-Plan-Integrated-Program-EIR?bidId=. Accessed September 2021.

———. 2007. *City of Arroyo Grande General Plan Agriculture, Conservation and Open Space Element*. Available at: https://www.arroyogrande.org/142/Planning-Division. Accessed September 2021.

———. 2012. *City of Arroyo Grande Bicycle & Trails Master Plan*. Available at: http://www.arroyogrande.org/DocumentCenter/View/276/Bicycle-and-Trails-Master-Plan. Accessed April 2021.

———. 2013. *City of Arroyo Grande Climate Action Plan*. Available at: https://www.arroyogrande.org/DocumentCenter/View/1327/Climate-Action-Plan-PDF. Accessed September 2021.

———. 2014. *Design Guidelines and Standards for Design Overlay District (D-2.11) – Traffic Way and Station Way.* Available at: https://www.arroyogrande.org/DocumentCenter/View/1351/Design-Guidelines-and-Standards-for-Design-Overlay-District-D-211-Traffic-Way--Station-Way-PDF. Accessed September 2021.

———. 2018. Land Use Map. Available at: https://www.arroyogrande.org/DocumentCenter/View/477/Land-Use-Map. Accessed September 2021.

———. 2021a. *City of Arroyo Grande General Plan Circulation Element*. Available at: http://www.arroyogrande.org/DocumentCenter/View/9843/Circulation-Element-Final. Accessed September 2021.

———. 2021b. City Park and Facilities. Available at: https://www.arroyogrande.org/711/City-Parks-Facilities. Accessed September 10, 2021.

County of San Luis Obispo. 1999. Safety Element. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Safety-Element.pdf. December 14, 1999. Accessed September 14, 2021.

_____. 2007. *Airport Land Use Plan for the Oceano County Airport*. County of San Luis Obispo Airport Land Use Commission. Adopted February 1976, amended May 2007. Available at: https://www.sloairport.com/wp-content/uploads/2017/11/OceanoALUP-final.pdf. Accessed September 2020.

_____. 2011. *County of San Luis Obispo EnergyWise Plan*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Energy-and-Climate/Energy-Climate-Reports/EnergyWise-Plan.aspx. Accessed September 15, 2021.

———. 2020. Arroyo Grande Groundwater Basin. Available at: https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Arroyo-Grande-Groundwater-Basin.aspx. Accessed September 20, 2021.

_____. 2021. Land Use View. Available at: https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL_LandUseView/viewers/PL_LandUseView/virtualdirectory/Resources/Config/Default. Accessed September 2021.

Federal Emergency Management Agency (FEMA). 2020. Flood Insurance Rate Maps (FIRM). Available at: https://msc.fema.gov/portal/home. Accessed September 20, 2021.

Federal Highway Administration (FHWA). 2018. *Techniques for Reviewing Noise Analysis and Associated Noise Reports*. Available at: https://www.fhwa.dot.gov/Environment/noise/resources/reviewing_noise_analysis/fhwahep18067.pdf. Accessed September 2020.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Washington D.C. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed September 2020.

Five Cities Fire Authority (FCFA). 2021. Five Cities Fire – At a Glance. Available at: http://www.fivecitiesfireauthority.org/fivecitiesfireataglance. Accessed September 20, 2021.

Mathe, David. 2015. *Multi-Jurisdictional Local Hazard Mitigation Plan*. Prepared by David L. Mathe, Emergency Preparedness Coordinator, Five Cities Fire Authority. Available at: http://www.arroyogrande.org/DocumentCenter/View/3857/Local-Hazard-Mitigation-Plan-PDF. Accessed September 2021.

Quincy Engineering. 2021. *Draft Type Selection Report, Arroyo Grande Creek Bridge at Traffic Way Bridge Replacement Project*. Prepared for the City of Arroyo Grande. August 2021.

San Luis Obispo County Air Pollution Control District (SLOAPCD). 2001. *San Luis Obispo County 2001 Clean Air Plan*. December. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/business/pdf/CAP.pdf. Accessed September 2021.

———. 2012. *CEQA Air Quality Handbook*. April. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20Map2019%29_LinkedwithMemo.pdf. Accessed September 2021.

_____. 2017. *Clarification Memorandum for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook*. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/FINAL_Clarification%20Memorandum%2020172.pdf. Accessed July 16, 2021.

———. 2019. San Luis Obispo County Attainment Status. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/AttainmentStatus29January2019.pdf. Accessed September 2021.

———. 2021. Naturally Occurring Asbestos Map. Available at: https://www.google.com/maps/d/u/0/viewer?mid=1YAKjBzVkwi1bZ4rQ1p6b2OMyvIM&ll=35.364986805363756%2C-120.52563349999998&z=9. Accessed September 2021.

San Luis Obispo Council of Governments (SLOCOG). 2019. *2019 Regional Transportation Plan*. June 5. Available at: https://www.dropbox.com/s/oc6i8wshikuirsh/__FINAL%202019%20RTP.pdf?dl=0. Accessed September 22, 2021.

SLO Watershed Project. 2020. Arroyo Grande Creek Watershed. Available at: http://slowatershedproject.org/watersheds/arroyo-grande-creek/. Accessed September 2021.

SWCA Environmental Consultants (SWCA). 2021a. *Archaeological Survey Report for the Traffic Way over Arroyo Grande Creek Bridge Replacement Project, Arroyo Grande, San Luis Obispo County, California.* Draft. September.

———. 2021b. *Historical Resources Evaluation Report for the Traffic Way over Arroyo Grande Creek Bridge Replacement Project, Federal Project No. BRLS-5199(030), Arroyo Grande, San Luis Obispo County, California*. Draft. August.

———. 2021c. *Land Use, Community, and Farmland Impacts Technical Memorandum for the Traffic Way Bridge Replacement Project, Arroyo Grande, San Luis Obispo County, California / SWCA Project No. 53479.* September.

———. 2021d. *Noise Impact Analysis for the Traffic Way Bridge Replacement Project No. 5199(030), Arroyo Grande, San Luis Obispo County, California*. Draft. September.

———. 2021e. *Traffic Way Bridge Replacement Project Natural Environment Study*. Draft. September.

———. 2021f. *Visual Impact Assessment Memorandum for the Traffic Way Bridge Replacement Project, Arroyo Grande, San Luis Obispo County, California / Federal Project No. BRLS-5199(030) / SWCA No. 53479*. Draft. August.

———. 2021g. *Water Quality Assessment for the Traffic Way Bridge Replacement Project Federal Project No. 5199(030), Arroyo Grande, San Luis Obispo County, California*. Draft. August.

———. 2021h. *Wetlands and Waters Delineation and Assessment Arroyo Grande Creek Bridge At Traffic Way Replacement Project*. Draft. July.

State Water Resources Control Board (SWRCB). 2021. Geotracker. Available at: http://geotracker.waterboards.ca.gov/. Accessed September 15, 2021.

U.S. Census Bureau. 2010. City of Arroyo Grande Quickfacts. Available at: https://www.census.gov/quickfacts/fact/table/arroyograndecitycalifornia,fountainvalleycitycalifornia,claremontcitycalifornia,cherrylandcdpcalifornia,nationalcitycitycalifornia,placervillecitycalifornia#. Accessed September 10, 2021.

U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2021. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed September 21, 2021.

U.S. Geological Survey (USGS). 2021a. Areas of Land Subsidence in California. Available at: https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed September 21, 2021.

———. 2021b. National Geologic Map Database. Available at: https://ngmdb.usgs.gov/Geolex/UnitRefs/SquireRefs_11983.html. Accessed September 10, 2021.

U.S. Fish and Wildlife Service (USFWS). 2021. National Wetlands Inventory Surface Waters and Wetlands. Available at: https://www.fws.gov/wetlands/data/Mapper.html. Accessed September 21, 2021.

U.S. Environmental Protection Agency (USEPA). 2017. What are Sensitive Receptors? Available at: https://www3.epa.gov/region1/eco/uep/sensitivereceptors.html. Accessed September 2020.

WeatherSpark. 2021. Climate and Average Weather Year Round in Arroyo Grande California, United States. Available at: https://weatherspark.com/y/1273/Average-Weather-in-Arroyo-Grande-California-United-States-Year-Round. Accessed September 20, 2021.

World Population Review. 2021. Arroyo Grande, California Population 2021. Available at: https://worldpopulationreview.com/us-cities/arroyo-grande-ca-population. Accessed September 20, 2021.

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APPENDIX A

California Emissions Estimator Model (Version 2020.4.0)
Annual and Winter Results

Traffic Way Bridge Replacement

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	21.83	1000sqft	0.50	21,830.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2023
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 - The project site is located in Arroyo Grande, California
Construction is estimated to occur over nine months

Land Use - The proposed bridge would be appx 59 feet wide and 370 feet long

Construction Phase - Ground disturbance is anticipated to 7 months (May - December)

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - The project would result in the temporary disturbance of 3 acres

Demolition -

Trips and VMT -

On-road Fugitive Dust -

Architectural Coating -

Vehicle Trips -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Road Dust -

Area Coating -

Consumer Products -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	33.00
tblConstructionPhase	NumDays	2.00	144.00
tblConstructionPhase	PhaseEndDate	10/19/2022	1/31/2024
tblConstructionPhase	PhaseEndDate	10/5/2022	1/17/2024
tblConstructionPhase	PhaseEndDate	5/13/2022	5/12/2023
tblConstructionPhase	PhaseEndDate	5/18/2022	12/1/2023
tblConstructionPhase	PhaseEndDate	10/12/2022	1/24/2024
tblConstructionPhase	PhaseEndDate	5/16/2022	5/15/2023
tblConstructionPhase	PhaseStartDate	10/13/2022	1/25/2024
tblConstructionPhase	PhaseStartDate	5/19/2022	12/3/2023
tblConstructionPhase	PhaseStartDate	5/2/2022	5/1/2023
tblConstructionPhase	PhaseStartDate	5/17/2022	5/16/2023
tblConstructionPhase	PhaseStartDate	10/6/2022	1/18/2024
tblConstructionPhase	PhaseStartDate	5/14/2022	5/14/2023
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	MaterialExported	0.00	400.00
tblGrading	MaterialImported	0.00	550.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0601	0.5370	0.6713	1.1900e-003	0.0751	0.0251	0.1002	0.0341	0.0239	0.0580	0.0000	104.8817	104.8817	0.0186	0.0000	105.3466
2024	0.0114	0.0571	0.0712	1.2000e-004	1.1600e-003	2.6000e-003	3.7700e-003	3.1000e-004	2.4200e-003	2.7300e-003	0.0000	10.7402	10.7402	2.8700e-003	0.0000	10.8120
Maximum	**0.0601**	**0.5370**	**0.6713**	**1.1900e-003**	**0.0751**	**0.0251**	**0.1002**	**0.0341**	**0.0239**	**0.0580**	**0.0000**	**104.8817**	**104.8817**	**0.0186**	**0.0000**	**105.3466**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0601	0.5370	0.6713	1.1900e-003	0.0751	0.0251	0.1002	0.0341	0.0239	0.0580	0.0000	104.8816	104.8816	0.0186	0.0000	105.3465
2024	0.0114	0.0571	0.0712	1.2000e-004	1.1600e-003	2.6000e-003	3.7700e-003	3.1000e-004	2.4200e-003	2.7300e-003	0.0000	10.7402	10.7402	2.8700e-003	0.0000	10.8120
Maximum	**0.0601**	**0.5370**	**0.6713**	**1.1900e-003**	**0.0751**	**0.0251**	**0.1002**	**0.0341**	**0.0239**	**0.0580**	**0.0000**	**104.8816**	**104.8816**	**0.0186**	**0.0000**	**105.3465**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	2-2-2023	5-1-2023	0.0029	0.0029
5	5-2-2023	8-1-2023	0.2216	0.2216
6	8-2-2023	11-1-2023	0.2186	0.2186
7	11-2-2023	2-1-2024	0.2138	0.2138
		Highest	0.2216	0.2216

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	1.9000e-003	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.6000e-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	**1.9000e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.2000e-004**	**7.2000e-004**	**0.0000**	**0.0000**	**7.6000e-004**

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	1.9000e-003	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.6000e-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	**1.9000e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.2000e-004**	**7.2000e-004**	**0.0000**	**0.0000**	**7.6000e-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	Demolition	Demolition	5/1/2023	5/12/2023	5	10	
2	Site Preparation	Site Preparation	5/14/2023	5/15/2023	5	1	
3	Grading	Grading	5/16/2023	12/1/2023	5	144	
4	Building Construction	Building Construction	12/3/2023	1/17/2024	5	33	
5	Paving	Paving	1/18/2024	1/24/2024	5	5	
6	Architectural Coating	Architectural Coating	1/25/2024	1/31/2024	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,310 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	79.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	119.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	4.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.7800e-003	0.0000	8.7800e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	**3.2300e-003**	**0.0289**	**0.0370**	**6.0000e-005**	**8.7800e-003**	**1.4100e-003**	**0.0102**	**1.3300e-003**	**1.3500e-003**	**2.6800e-003**	**0.0000**	**5.2091**	**5.2091**	**9.5000e-004**	**0.0000**	**5.2328**

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	7.6800e-003	2.2700e-003	3.0000e-005	6.7000e-004	2.0000e-005	6.9000e-004	1.9000e-004	2.0000e-005	2.0000e-004	0.0000	2.8883	2.8883	1.7000e-004	0.0000	2.8925
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	1.8000e-004	1.4000e-004	1.3000e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3610	0.3610	1.0000e-005	0.0000	0.3612
Total	**3.9000e-004**	**7.8200e-003**	**3.5700e-003**	**3.0000e-005**	**1.1500e-003**	**2.0000e-005**	**1.1700e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**3.2493**	**3.2493**	**1.8000e-004**	**0.0000**	**3.2537**

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					8.7800e-003	0.0000	8.7800e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	**3.2300e-003**	**0.0289**	**0.0370**	**6.0000e-005**	**8.7800e-003**	**1.4100e-003**	**0.0102**	**1.3300e-003**	**1.3500e-003**	**2.6800e-003**	**0.0000**	**5.2091**	**5.2091**	**9.5000e-004**	**0.0000**	**5.2328**

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	7.6800e-003	2.2700e-003	3.0000e-005	6.7000e-004	2.0000e-005	6.9000e-004	1.9000e-004	2.0000e-005	2.0000e-004	0.0000	2.8883	2.8883	1.7000e-004	0.0000	2.8925
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	1.8000e-004	1.4000e-004	1.3000e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3610	0.3610	1.0000e-005	0.0000	0.3612
Total	**3.9000e-004**	**7.8200e-003**	**3.5700e-003**	**3.0000e-005**	**1.1500e-003**	**2.0000e-005**	**1.1700e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**3.2493**	**3.2493**	**1.8000e-004**	**0.0000**	**3.2537**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0181	0.0181	0.0000	0.0000	0.0181
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0181**	**0.0181**	**0.0000**	**0.0000**	**0.0181**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0181	0.0181	0.0000	0.0000	0.0181
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0181**	**0.0181**	**0.0000**	**0.0000**	**0.0181**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0559	0.0000	0.0559	0.0300	0.0000	0.0300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0465	0.4161	0.5323	8.6000e-004		0.0203	0.0203		0.0194	0.0194	0.0000	75.0108	75.0108	0.0137	0.0000	75.3519
Total	**0.0465**	**0.4161**	**0.5323**	**8.6000e-004**	**0.0559**	**0.0203**	**0.0762**	**0.0300**	**0.0194**	**0.0494**	**0.0000**	**75.0108**	**75.0108**	**0.0137**	**0.0000**	**75.3519**

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0116	3.4300e-003	4.0000e-005	1.0200e-003	3.0000e-005	1.0500e-003	2.8000e-004	3.0000e-005	3.1000e-004	0.0000	4.3507	4.3507	2.5000e-004	0.0000	4.3570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	2.0700e-003	0.0188	6.0000e-005	6.9300e-003	4.0000e-005	6.9700e-003	1.8400e-003	4.0000e-005	1.8800e-003	0.0000	5.1985	5.1985	1.4000e-004	0.0000	5.2019
Total	**2.9100e-003**	**0.0136**	**0.0222**	**1.0000e-004**	**7.9500e-003**	**7.0000e-005**	**8.0200e-003**	**2.1200e-003**	**7.0000e-005**	**2.1900e-003**	**0.0000**	**9.5492**	**9.5492**	**3.9000e-004**	**0.0000**	**9.5589**

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					0.0559	0.0000	0.0559	0.0300	0.0000	0.0300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0465	0.4161	0.5323	8.6000e-004		0.0203	0.0203		0.0194	0.0194	0.0000	75.0107	75.0107	0.0137	0.0000	75.3518
Total	**0.0465**	**0.4161**	**0.5323**	**8.6000e-004**	**0.0559**	**0.0203**	**0.0762**	**0.0300**	**0.0194**	**0.0494**	**0.0000**	**75.0107**	**75.0107**	**0.0137**	**0.0000**	**75.3518**

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0116	3.4300e-003	4.0000e-005	1.0200e-003	3.0000e-005	1.0500e-003	2.8000e-004	3.0000e-005	3.1000e-004	0.0000	4.3507	4.3507	2.5000e-004	0.0000	4.3570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	2.0700e-003	0.0188	6.0000e-005	6.9300e-003	4.0000e-005	6.9700e-003	1.8400e-003	4.0000e-005	1.8800e-003	0.0000	5.1985	5.1985	1.4000e-004	0.0000	5.2019
Total	**2.9100e-003**	**0.0136**	**0.0222**	**1.0000e-004**	**7.9500e-003**	**7.0000e-005**	**8.0200e-003**	**2.1200e-003**	**7.0000e-005**	**2.1900e-003**	**0.0000**	**9.5492**	**9.5492**	**3.9000e-004**	**0.0000**	**9.5589**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3200e-003	0.0642	0.0710	1.1000e-004		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	10.0208	10.0208	3.2400e-003	0.0000	10.1019
Total	**6.3200e-003**	**0.0642**	**0.0710**	**1.1000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**10.0208**	**10.0208**	**3.2400e-003**	**0.0000**	**10.1019**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	2.9800e-003	9.0000e-004	1.0000e-005	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7472	0.7472	4.0000e-005	0.0000	0.7482
Worker	3.2000e-004	2.6000e-004	2.3500e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6498	0.6498	2.0000e-005	0.0000	0.6502
Total	**4.1000e-004**	**3.2400e-003**	**3.2500e-003**	**2.0000e-005**	**1.0500e-003**	**1.0000e-005**	**1.0600e-003**	**2.8000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**1.3971**	**1.3971**	**6.0000e-005**	**0.0000**	**1.3985**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3200e-003	0.0642	0.0710	1.1000e-004		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	10.0208	10.0208	3.2400e-003	0.0000	10.1019
Total	**6.3200e-003**	**0.0642**	**0.0710**	**1.1000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**10.0208**	**10.0208**	**3.2400e-003**	**0.0000**	**10.1019**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	2.9800e-003	9.0000e-004	1.0000e-005	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7472	0.7472	4.0000e-005	0.0000	0.7482
Worker	3.2000e-004	2.6000e-004	2.3500e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6498	0.6498	2.0000e-005	0.0000	0.6502
Total	**4.1000e-004**	**3.2400e-003**	**3.2500e-003**	**2.0000e-005**	**1.0500e-003**	**1.0000e-005**	**1.0600e-003**	**2.8000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**1.3971**	**1.3971**	**6.0000e-005**	**0.0000**	**1.3985**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0388	0.0459	7.0000e-005		1.8400e-003	1.8400e-003		1.6900e-003	1.6900e-003	0.0000	6.5158	6.5158	2.1100e-003	0.0000	6.5684
Total	**3.8700e-003**	**0.0388**	**0.0459**	**7.0000e-005**		**1.8400e-003**	**1.8400e-003**		**1.6900e-003**	**1.6900e-003**	**0.0000**	**6.5158**	**6.5158**	**2.1100e-003**	**0.0000**	**6.5684**

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.9000e-003	5.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4830	0.4830	3.0000e-005	0.0000	0.4837
Worker	2.0000e-004	1.5000e-004	1.4100e-003	0.0000	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4060	0.4060	1.0000e-005	0.0000	0.4062
Total	**2.5000e-004**	**2.0500e-003**	**1.9600e-003**	**0.0000**	**6.8000e-004**	**0.0000**	**6.9000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.8890**	**0.8890**	**4.0000e-005**	**0.0000**	**0.8899**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0388	0.0459	7.0000e-005		1.8400e-003	1.8400e-003		1.6900e-003	1.6900e-003	0.0000	6.5158	6.5158	2.1100e-003	0.0000	6.5684
Total	**3.8700e-003**	**0.0388**	**0.0459**	**7.0000e-005**		**1.8400e-003**	**1.8400e-003**		**1.6900e-003**	**1.6900e-003**	**0.0000**	**6.5158**	**6.5158**	**2.1100e-003**	**0.0000**	**6.5684**

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.9000e-003	5.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4830	0.4830	3.0000e-005	0.0000	0.4837
Worker	2.0000e-004	1.5000e-004	1.4100e-003	0.0000	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4060	0.4060	1.0000e-005	0.0000	0.4062
Total	**2.5000e-004**	**2.0500e-003**	**1.9600e-003**	**0.0000**	**6.8000e-004**	**0.0000**	**6.9000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.8890**	**0.8890**	**4.0000e-005**	**0.0000**	**0.8899**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1400e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.0800e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3123	0.3123	1.0000e-005	0.0000	0.3125
Total	**1.5000e-004**	**1.2000e-004**	**1.0800e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3123**	**0.3123**	**1.0000e-005**	**0.0000**	**0.3125**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1400e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.0800e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3123	0.3123	1.0000e-005	0.0000	0.3125
Total	**1.5000e-004**	**1.2000e-004**	**1.0800e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3123**	**0.3123**	**1.0000e-005**	**0.0000**	**0.3125**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**5.0000e-003**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0347	0.0347	0.0000	0.0000	0.0347
Total	**2.0000e-005**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0347**	**0.0347**	**0.0000**	**0.0000**	**0.0347**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**5.0000e-003**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0347	0.0347	0.0000	0.0000	0.0347
Total	**2.0000e-005**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0347**	**0.0347**	**0.0000**	**0.0000**	**0.0347**

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 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 Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299

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 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 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 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 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	1.9000e-003	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.6000e-004
Unmitigated	1.9000e-003	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.6000e-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	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.6000e-004
Total	**1.9000e-003**	**0.0000**	**3.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.2000e-004**	**7.2000e-004**	**0.0000**	**0.0000**	**7.6000e-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	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.6000e-004
Total	**1.9000e-003**	**0.0000**	**3.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.2000e-004**	**7.2000e-004**	**0.0000**	**0.0000**	**7.6000e-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 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 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 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 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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Traffic Way Bridge Replacement

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	21.83	1000sqft	0.50	21,830.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2023
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 - The project site is located in Arroyo Grande, California
Construction is estimated to occur over nine months

Land Use - The proposed bridge would be appx 59 feet wide and 370 feet long

Construction Phase - Ground disturbance is anticipated to 7 months (May - December)

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - The project would result in the temporary disturbance of 3 acres

Demolition -

Trips and VMT -

On-road Fugitive Dust -

Architectural Coating -

Vehicle Trips -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Road Dust -

Area Coating -

Consumer Products -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	33.00
tblConstructionPhase	NumDays	2.00	144.00
tblConstructionPhase	PhaseEndDate	10/19/2022	1/31/2024
tblConstructionPhase	PhaseEndDate	10/5/2022	1/17/2024
tblConstructionPhase	PhaseEndDate	5/13/2022	5/12/2023
tblConstructionPhase	PhaseEndDate	5/18/2022	12/1/2023
tblConstructionPhase	PhaseEndDate	10/12/2022	1/24/2024
tblConstructionPhase	PhaseEndDate	5/16/2022	5/15/2023
tblConstructionPhase	PhaseStartDate	10/13/2022	1/25/2024
tblConstructionPhase	PhaseStartDate	5/19/2022	12/3/2023
tblConstructionPhase	PhaseStartDate	5/2/2022	5/1/2023
tblConstructionPhase	PhaseStartDate	5/17/2022	5/16/2023
tblConstructionPhase	PhaseStartDate	10/6/2022	1/18/2024
tblConstructionPhase	PhaseStartDate	5/14/2022	5/14/2023
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	MaterialExported	0.00	400.00
tblGrading	MaterialImported	0.00	550.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.7297	7.3255	8.1207	0.0186	1.9931	0.3212	2.2798	0.4465	0.2955	0.7173	0.0000	1,858.2317	1,858.2317	0.3636	0.0000	1,864.4475
2024	2.0099	6.2857	7.4646	0.0129	0.1780	0.2833	0.4218	0.0472	0.2607	0.2896	0.0000	1,253.6607	1,253.6607	0.3636	0.0000	1,262.7502
Maximum	**2.0099**	**7.3255**	**8.1207**	**0.0186**	**1.9931**	**0.3212**	**2.2798**	**0.4465**	**0.2955**	**0.7173**	**0.0000**	**1,858.2317**	**1,858.2317**	**0.3636**	**0.0000**	**1,864.4475**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.7297	7.3255	8.1207	0.0186	1.9931	0.3212	2.2798	0.4465	0.2955	0.7173	0.0000	1,858.2317	1,858.2317	0.3636	0.0000	1,864.4475
2024	2.0099	6.2857	7.4646	0.0129	0.1780	0.2833	0.4218	0.0472	0.2607	0.2896	0.0000	1,253.6607	1,253.6607	0.3636	0.0000	1,262.7502
Maximum	**2.0099**	**7.3255**	**8.1207**	**0.0186**	**1.9931**	**0.3212**	**2.2798**	**0.4465**	**0.2955**	**0.7173**	**0.0000**	**1,858.2317**	**1,858.2317**	**0.3636**	**0.0000**	**1,864.4475**

	ROG	NOx	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	0.0104	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.7800e-003	4.7800e-003	1.0000e-005		5.0900e-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	**0.0104**	**2.0000e-005**	**2.2300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**4.7800e-003**	**4.7800e-003**	**1.0000e-005**	**0.0000**	**5.0900e-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	0.0104	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.7800e-003	4.7800e-003	1.0000e-005		5.0900e-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	**0.0104**	**2.0000e-005**	**2.2300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**4.7800e-003**	**4.7800e-003**	**1.0000e-005**	**0.0000**	**5.0900e-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	Demolition	Demolition	5/1/2023	5/12/2023	5	10	
2	Site Preparation	Site Preparation	5/14/2023	5/15/2023	5	1	
3	Grading	Grading	5/16/2023	12/1/2023	5	144	
4	Building Construction	Building Construction	12/3/2023	1/17/2024	5	33	
5	Paving	Paving	1/18/2024	1/24/2024	5	5	
6	Architectural Coating	Architectural Coating	1/25/2024	1/31/2024	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,310 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	79.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	119.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	4.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7562	0.0000	1.7562	0.2660	0.0000	0.2660			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**1.7562**	**0.2821**	**2.0383**	**0.2660**	**0.2698**	**0.5358**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0431	1.5175	0.4669	5.8200e-003	0.1380	4.0300e-003	0.1420	0.0378	3.8500e-003	0.0417		630.8810	630.8810	0.0376		631.8218
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0293	0.2612	7.9000e-004	0.0989	5.8000e-004	0.0994	0.0262	5.3000e-004	0.0268		78.9451	78.9451	2.0600e-003		78.9968
Total	**0.0834**	**1.5468**	**0.7281**	**6.6100e-003**	**0.2369**	**4.6100e-003**	**0.2415**	**0.0640**	**4.3800e-003**	**0.0684**		**709.8262**	**709.8262**	**0.0397**		**710.8186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7562	0.0000	1.7562	0.2660	0.0000	0.2660			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**1.7562**	**0.2821**	**2.0383**	**0.2660**	**0.2698**	**0.5358**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0431	1.5175	0.4669	5.8200e-003	0.1380	4.0300e-003	0.1420	0.0378	3.8500e-003	0.0417		630.8810	630.8810	0.0376		631.8218
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0293	0.2612	7.9000e-004	0.0989	5.8000e-004	0.0994	0.0262	5.3000e-004	0.0268		78.9451	78.9451	2.0600e-003		78.9968
Total	**0.0834**	**1.5468**	**0.7281**	**6.6100e-003**	**0.2369**	**4.6100e-003**	**0.2415**	**0.0640**	**4.3800e-003**	**0.0684**		**709.8262**	**709.8262**	**0.0397**		**710.8186**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0201	0.0146	0.1306	4.0000e-004	0.0494	2.9000e-004	0.0497	0.0131	2.7000e-004	0.0134		39.4726	39.4726	1.0300e-003		39.4984
Total	**0.0201**	**0.0146**	**0.1306**	**4.0000e-004**	**0.0494**	**2.9000e-004**	**0.0497**	**0.0131**	**2.7000e-004**	**0.0134**		**39.4726**	**39.4726**	**1.0300e-003**		**39.4984**

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0201	0.0146	0.1306	4.0000e-004	0.0494	2.9000e-004	0.0497	0.0131	2.7000e-004	0.0134		39.4726	39.4726	1.0300e-003		39.4984
Total	**0.0201**	**0.0146**	**0.1306**	**4.0000e-004**	**0.0494**	**2.9000e-004**	**0.0497**	**0.0131**	**2.7000e-004**	**0.0134**		**39.4726**	**39.4726**	**1.0300e-003**		**39.4984**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7761	0.0000	0.7761	0.4164	0.0000	0.4164			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**0.7761**	**0.2821**	**1.0582**	**0.4164**	**0.2698**	**0.6862**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5100e-003	0.1587	0.0488	6.1000e-004	0.0144	4.2000e-004	0.0149	3.9600e-003	4.0000e-004	4.3600e-003		65.9941	65.9941	3.9400e-003		66.0925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0293	0.2612	7.9000e-004	0.0989	5.8000e-004	0.0994	0.0262	5.3000e-004	0.0268		78.9451	78.9451	2.0600e-003		78.9968
Total	**0.0448**	**0.1880**	**0.3101**	**1.4000e-003**	**0.1133**	**1.0000e-003**	**0.1143**	**0.0302**	**9.3000e-004**	**0.0311**		**144.9392**	**144.9392**	**6.0000e-003**		**145.0892**

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					0.7761	0.0000	0.7761	0.4164	0.0000	0.4164			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**0.7761**	**0.2821**	**1.0582**	**0.4164**	**0.2698**	**0.6862**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5100e-003	0.1587	0.0488	6.1000e-004	0.0144	4.2000e-004	0.0149	3.9600e-003	4.0000e-004	4.3600e-003		65.9941	65.9941	3.9400e-003		66.0925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0293	0.2612	7.9000e-004	0.0989	5.8000e-004	0.0994	0.0262	5.3000e-004	0.0268		78.9451	78.9451	2.0600e-003		78.9968
Total	**0.0448**	**0.1880**	**0.3101**	**1.4000e-003**	**0.1133**	**1.0000e-003**	**0.1143**	**0.0302**	**9.3000e-004**	**0.0311**		**144.9392**	**144.9392**	**6.0000e-003**		**145.0892**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.9200e-003	0.2947	0.0953	7.6000e-004	0.0186	4.6000e-004	0.0190	5.3500e-003	4.4000e-004	5.7900e-003		80.8336	80.8336	4.5200e-003		80.9465
Worker	0.0362	0.0263	0.2351	7.1000e-004	0.0890	5.2000e-004	0.0895	0.0236	4.8000e-004	0.0241		71.0506	71.0506	1.8600e-003		71.0971
Total	**0.0452**	**0.3210**	**0.3304**	**1.4700e-003**	**0.1076**	**9.8000e-004**	**0.1085**	**0.0290**	**9.2000e-004**	**0.0299**		**151.8842**	**151.8842**	**6.3800e-003**		**152.0435**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.9200e-003	0.2947	0.0953	7.6000e-004	0.0186	4.6000e-004	0.0190	5.3500e-003	4.4000e-004	5.7900e-003		80.8336	80.8336	4.5200e-003		80.9465
Worker	0.0362	0.0263	0.2351	7.1000e-004	0.0890	5.2000e-004	0.0895	0.0236	4.8000e-004	0.0241		71.0506	71.0506	1.8600e-003		71.0971
Total	**0.0452**	**0.3210**	**0.3304**	**1.4700e-003**	**0.1076**	**9.8000e-004**	**0.1085**	**0.0290**	**9.2000e-004**	**0.0299**		**151.8842**	**151.8842**	**6.3800e-003**		**152.0435**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**		**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	8.4600e-003	0.2880	0.0896	7.5000e-004	0.0186	4.2000e-004	0.0190	5.3500e-003	4.0000e-004	5.7500e-003		80.3887	80.3887	4.5400e-003		80.5022
Worker	0.0343	0.0238	0.2166	6.9000e-004	0.0890	5.1000e-004	0.0895	0.0236	4.7000e-004	0.0241		68.2886	68.2886	1.6700e-003		68.3303
Total	**0.0427**	**0.3118**	**0.3062**	**1.4400e-003**	**0.1076**	**9.3000e-004**	**0.1085**	**0.0290**	**8.7000e-004**	**0.0298**		**148.6773**	**148.6773**	**6.2100e-003**		**148.8325**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**	**0.0000**	**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	8.4600e-003	0.2880	0.0896	7.5000e-004	0.0186	4.2000e-004	0.0190	5.3500e-003	4.0000e-004	5.7500e-003		80.3887	80.3887	4.5400e-003		80.5022
Worker	0.0343	0.0238	0.2166	6.9000e-004	0.0890	5.1000e-004	0.0895	0.0236	4.7000e-004	0.0241		68.2886	68.2886	1.6700e-003		68.3303
Total	**0.0427**	**0.3118**	**0.3062**	**1.4400e-003**	**0.1076**	**9.3000e-004**	**0.1085**	**0.0290**	**8.7000e-004**	**0.0298**		**148.6773**	**148.6773**	**6.2100e-003**		**148.8325**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8524**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0475	0.4332	1.3700e-003	0.1780	1.0200e-003	0.1790	0.0472	9.4000e-004	0.0481		136.5772	136.5772	3.3300e-003		136.6605
Total	**0.0685**	**0.0475**	**0.4332**	**1.3700e-003**	**0.1780**	**1.0200e-003**	**0.1790**	**0.0472**	**9.4000e-004**	**0.0481**		**136.5772**	**136.5772**	**3.3300e-003**		**136.6605**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8524**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0475	0.4332	1.3700e-003	0.1780	1.0200e-003	0.1790	0.0472	9.4000e-004	0.0481		136.5772	136.5772	3.3300e-003		136.6605
Total	**0.0685**	**0.0475**	**0.4332**	**1.3700e-003**	**0.1780**	**1.0200e-003**	**0.1790**	**0.0472**	**9.4000e-004**	**0.0481**		**136.5772**	**136.5772**	**3.3300e-003**		**136.6605**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**2.0023**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.6100e-003	5.2800e-003	0.0481	1.5000e-004	0.0198	1.1000e-004	0.0199	5.2400e-003	1.0000e-004	5.3500e-003		15.1753	15.1753	3.7000e-004		15.1845
Total	**7.6100e-003**	**5.2800e-003**	**0.0481**	**1.5000e-004**	**0.0198**	**1.1000e-004**	**0.0199**	**5.2400e-003**	**1.0000e-004**	**5.3500e-003**		**15.1753**	**15.1753**	**3.7000e-004**		**15.1845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**2.0023**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.6100e-003	5.2800e-003	0.0481	1.5000e-004	0.0198	1.1000e-004	0.0199	5.2400e-003	1.0000e-004	5.3500e-003		15.1753	15.1753	3.7000e-004		15.1845
Total	**7.6100e-003**	**5.2800e-003**	**0.0481**	**1.5000e-004**	**0.0198**	**1.1000e-004**	**0.0199**	**5.2400e-003**	**1.0000e-004**	**5.3500e-003**		**15.1753**	**15.1753**	**3.7000e-004**		**15.1845**

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 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 Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299

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 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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other 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	0.0104	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.7800e-003	4.7800e-003	1.0000e-005		5.0900e-003
Unmitigated	0.0104	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.7800e-003	4.7800e-003	1.0000e-005		5.0900e-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	2.5000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.7300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.7800e-003	4.7800e-003	1.0000e-005		5.0900e-003
Total	**0.0104**	**2.0000e-005**	**2.2300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.7800e-003**	**4.7800e-003**	**1.0000e-005**		**5.0900e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.7300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.7800e-003	4.7800e-003	1.0000e-005		5.0900e-003
Total	**0.0104**	**2.0000e-005**	**2.2300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.7800e-003**	**4.7800e-003**	**1.0000e-005**		**5.0900e-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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation