



# Carmel Valley Manor Sewer Main Extension

## Initial Study – Mitigated Negative Declaration

*prepared by*

**Carmel Area Wastewater District**

3945 Rio Road

Carmel, California 93922

Contact: Rachél Lather, Principal Engineer

*prepared with the assistance of*

**Rincon Consultants, Inc.**

437 Figueroa Street, Suite 303

Monterey, California 93940

**August 2020**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)

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# Initial Study

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## 1. Project Title

Carmel Valley Manor Sewer Main Extension Project

## 2. Lead Agency Name and Address

Carmel Area Wastewater District  
3945 Rio Road  
Carmel, California 93922

## 3. Contact Person and Phone Number

Rachél Lather, Principal Engineer  
(831) 624-1248

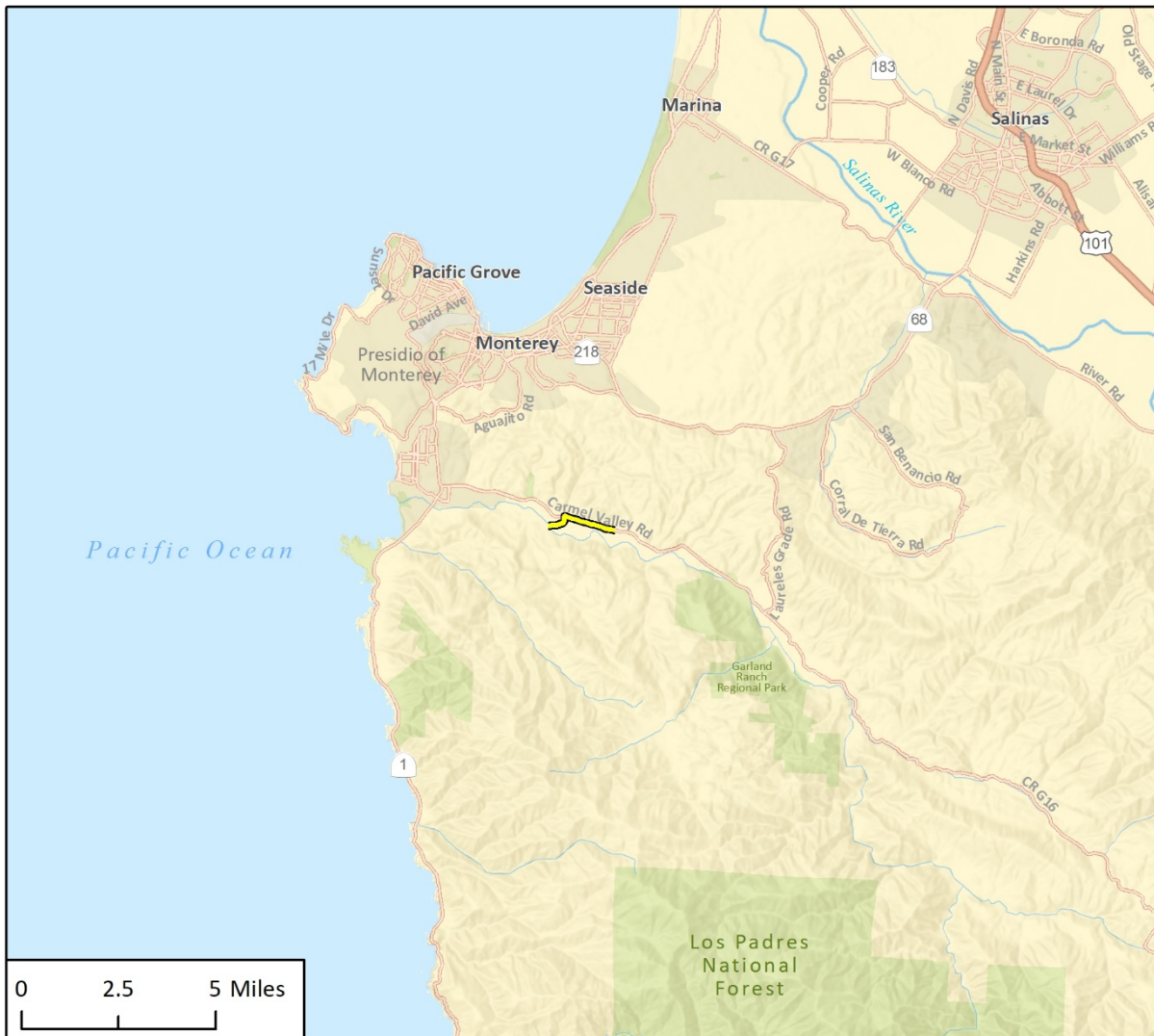
## 4. Project Location

The project is located in unincorporated Monterey County and consists of a linear pipeline alignment in the public right-of-way along portions of Valley Greens Drive and Carmel Valley Road. The project would extend the existing wastewater collection system from its current termination point on Valley Greens Drive to Carmel Valley Manor located at 8545 Carmel Valley Road. The project alignment begins at County Bridge Number 500 built in 1963, located approximately 360 feet west of Poplar Lane along Valley Greens Drive, continues northeast along Valley Greens Drive until the intersection with Carmel Valley Road, continues east along Carmel Valley Road, and terminates at the intersection of Carmel Valley Road and Carmel Valley Manor. The project site also encompasses a pump station site located on a 1,600-square foot portion of Assessor's Parcel Number 157-031-015-000, which is south of Valley Greens Drive in an undeveloped area across from Hole 14 and adjacent to Hole 13 of the Quail Lodge and Golf Club. The proposed pump station site would connect to the proposed pipeline alignment via incoming and outgoing pipelines. Figure 1 and Figure 2 provide the regional and local context of the project site and surrounding areas.

## 5. Project Sponsor's Name and Address

Rachél Lather, Principal Engineer  
Carmel Area Water District  
3945 Rio Road  
Carmel, California 93922

Figure 1 Regional Location



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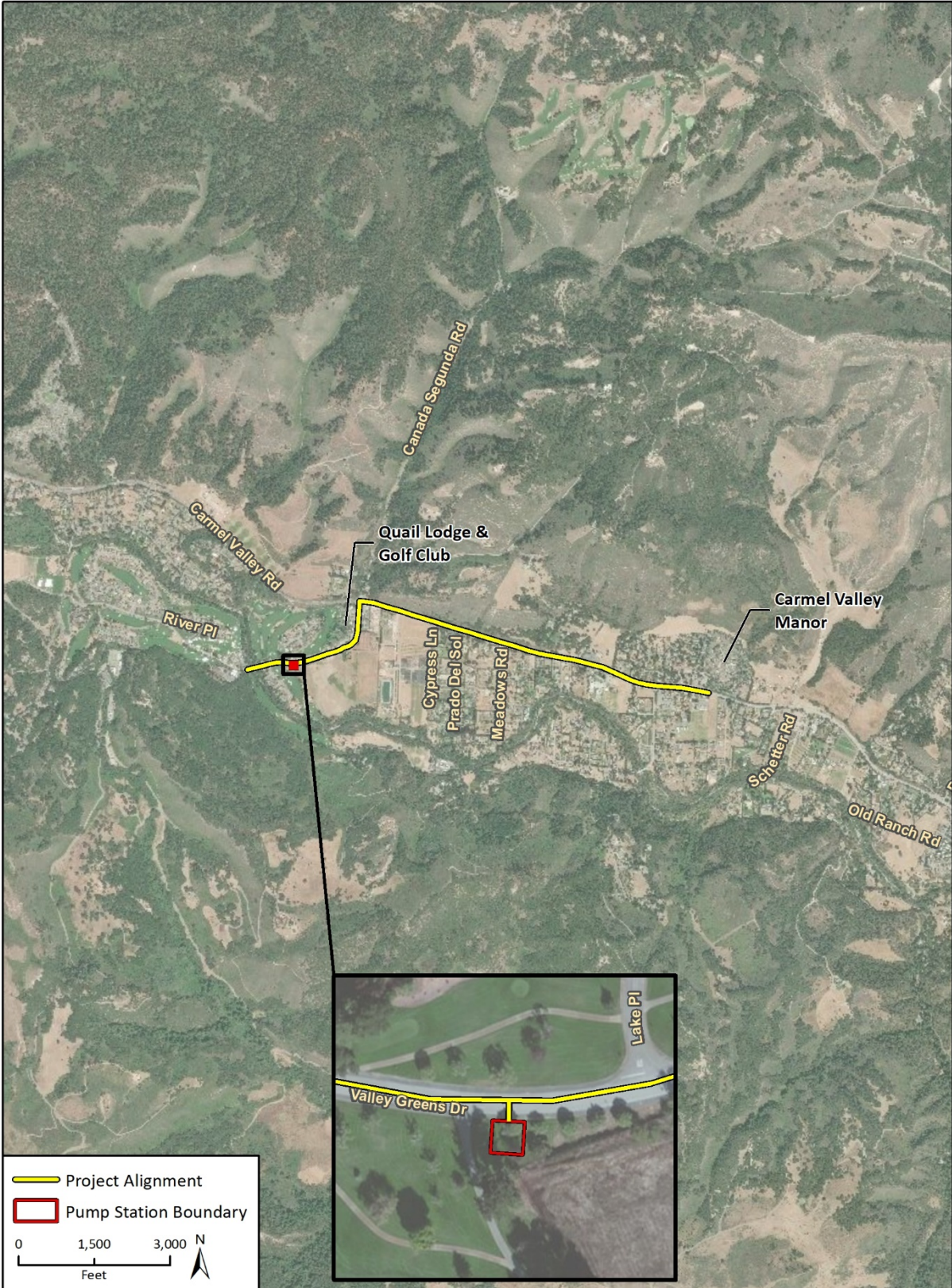
— Project Location



Fig 1 Regional Location



Figure 2 Project Location



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Fig. 2 Project Location



## 6. General Plan Designation

The pipeline alignment is located within existing public roadway rights-of-way and does not have a land use designation. Land adjacent to the alignment is designated in the Carmel Valley Master Plan as Residential Low Density, Commercial, Planned Commercial, Visitor Accommodations/Professional Offices, Resource Conservation, Open Space, and Public/Quasi-Public land uses (County of Monterey 2011). The proposed 1,600-square foot pump station site is within a parcel designated as Residential Low Density (County of Monterey 2011).

## 7. Zoning

The pipeline alignment is located within existing public roadway rights-of-way and is not zoned. The 1,600-square foot pump station site is zoned as LDR (2.5-D-S-RAZ) (Low Density Residential District) (County of Monterey 2020).

## 8. Description of Project

The Carmel Valley Manor Sewer Main Extension Project (herein referred to as “proposed project” or “project”) would extend sewer service to the existing Carmel Valley Manor senior living facility. This development is currently served by a failing septic system that is considered to be a health concern by the Monterey County Environmental Health Department. Additionally, previously developed parcels directly adjacent to the proposed pipeline alignment would have the opportunity and may be required to connect to the municipal sewer system, should their existing septic systems and/or leach fields fail or otherwise become unable to continue to operate. The project includes the installation and operation of approximately 9,900 linear feet (LF) of 8-inch diameter polyvinyl chloride (PVC) gravity sewer main, approximately 900 LF of 6-inch diameter force main, concrete manholes, and a 250 gallon per minute wastewater pump station. From the proposed gravity-fed sewer, wastewater would be pumped by the proposed pump station into the proposed force main, discharging to the existing collection system at the west abutment of the County Bridge Number 500 crossing over the Carmel River on Valley Greens Drive. Wastewater would be conveyed through the existing collection system to the CAWD Water Pollution Control Plant, which has a design capacity of 4.0 million gallons per day (MGD), a permitted capacity of 3.0 MGD, and an average dry weather flow of 1.2 MGD (CAWD 2020). The District’s plant has a remaining permitted capacity of 1.8 MGD. Figure 3 shows the proposed pipeline and pump station location.

Figure 3 Proposed Pipeline Alignment and Site Plan



Source: MNS ENGINEERS INC

- - - Proposed Force Main
- Proposed Gravity Sewer

0 750 1500 Feet



The wastewater pump station would be a small (approximately 1,600 square feet) fully developed municipal site, equipped with a back-up generator; new electrical service; wet well with submersible wastewater pumps; pipes, valves, etc.; electrical and communications facilities; pumps control unit; and surface improvements. The emergency generator would be installed within a sound attenuation enclosure that would reduce generator noise to 75 A-weighted decibels (dBA) and would be natural gas powered. The pump station includes two pumps, which would require no more than 4.47 kilowatts per pump, when running at full capacity. These pumps would be placed underground, submerged in a wet well. The pump station would be no more than 5 feet in height, and would be surrounded by a standard chain link fence (no more than 8 feet in height) and screened from public view with fence slats and by existing and new vegetation. Three existing trees are located in close proximity to the proposed pump station, two of which are between the roadway and pump station site. A 10-foot access driveway to the pump station would be located between these two trees.

Properties that would connect to the new wastewater collection infrastructure would abandon existing septic systems and leach fields in place.

## **Construction**

The project would be constructed from October 2020 to April 2021. Construction would be completed during workdays between 7:30 a.m. and 3:30 p.m. Construction would complete approximately 100 feet of pipeline per day, encompassed within a 300-foot section of roadway. Approximately six workers per day would be on site for construction of the pipeline, and four workers per day for construction of the pump station.

Construction of the pipeline would entail primarily open trench construction, with the extension of the new force main suspended from County Bridge Number 500 across the Carmel River and constructed from the bridge deck, outside the bed and banks of the Carmel River. The gravity sewer would be installed within public rights-of-way at approximately 8 feet in depth, and the force main would be at approximately 4 feet in depth. The open trench for installation of both the force main and gravity sewer would be 3 feet in width, and repaving over the open trench areas once pipeline installation is complete would be 4 feet in width. At the intersection of Valley Greens Drive and Carmel Valley Road the gravity pipeline would be installed at 25 feet in depth to avoid existing utilities in the intersection. This 25-foot depth installation is approximately 300 feet in length. Construction at the Valley Greens Drive and Carmel Valley Road intersection would use the jack and bore method to install the gravity pipeline. Pits of approximately 10 feet by 10 feet and 20 feet by 10 feet will be used to install the sewer by jack-and-bore construction.

Pipeline construction would require the use of a backhoe, concrete/industrial saw, compactor, paving equipment, and skid steer loader. Pump station construction would require the use of the same equipment, with no concrete/industrial saw required.

Excavated material acceptable for use as fill would be stockpiled and reused as backfill or loaded onto trucks and disposed of off site. The material to be stockpiled would be stored within construction staging areas to be determined by the contractor. Excavations would be backfilled once they are no longer needed and would typically remain open for one to five days, depending on the progression of work. Excavations would be plated nightly to allow for vehicle use of the affected lane.

Backfill material would be a combination of imported material and stockpiled excavated materials. Imported material would be used for fill material in the pipe zone and to resurface the roadways in accordance with County of Monterey standards (including the Roadway Design Standards).

Approximately 9,200 cubic yards of material would be excavated, 8,200 cubic yards of which can be reused as fill material. A total of 1,000 cubic yards of material would be imported for fill in the trench zone, and 1,000 cubic yards of excavated material unsuitable for use as fill material would be exported. This import and export of fill material, in addition to haul trips for pipeline and other materials deliveries, would require up to two haul trips per day.

The construction contractor would implement a County of Monterey-approved traffic control plan, which is anticipated to include a combination of public notification, steel plates, barricades, flagmen, and other traffic control devices. Closure of Carmel Valley Road is not anticipated to be required during construction, as traffic cones will be used to direct traffic into temporary lanes. Construction staging would occur in areas to be determined by the contractor, potentially including at Carmel Valley Manor or on site within public rights-of-way near active construction areas.

### **Maintenance**

The pipelines would not require maintenance for the first few years after installation, after which maintenance would occur annually. The pump station requires maintenance once per month during operation. The emergency generator at the pump station would be tested once per month for approximately 30 minutes at a time.

## 9. Surrounding Land Uses and Setting

The pipeline alignment is surrounded by a variety of uses, including residential, commercial, recreational, institutional, agricultural, and undeveloped land, with most of the surrounding land designated for residential uses. There are several residentially-designated undeveloped parcels located southeast of Valley Greens Drive near the proposed pump station. There are additional residentially-designated parcels located along Carmel Valley Road between Williams Ranch Road and Cypress Lane that are currently used for agriculture. The remaining residentially-designated parcels along the project alignment are currently developed with residential uses.

## 10. Other Public Agencies Whose Approval is Required

The following approvals would be required from the County of Monterey:

- Encroachment Permit for Work in Public Right-of-Way, including a traffic control plan
- Building Permit
- Environmental Health Permit
- Erosion Control Plan per Monterey County Code (MCC) Chapter 16.12

Additionally, the State Water Resources Control Board would approve coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, and the Monterey County Local Agency Formation Commission (LAFCO) would approve annexation of the pipeline's service area into CAWD service boundaries.

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## Environmental Factors Potentially Affected

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                                   |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Energy  |
| <input checked="" type="checkbox"/> Geology/Soils        | <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards & Hazardous Materials                 |
| <input type="checkbox"/> Hydrology/Water Quality         | <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                             |
| <input type="checkbox"/> Noise                           | <input type="checkbox"/> Population/Housing                 | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                      | <input type="checkbox"/> Transportation                     | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems       | <input type="checkbox"/> Wildfire                           | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

Carmel Area Wastewater District  
**Carmel Valley Manor Sewer Main Extension**

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

Rachel Lather  
Signature

July 20, 2020  
Date

Rachel Lather  
Printed Name

Principal Engineer  
Title

# Environmental Checklist

## 1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

A scenic vista is a view from a public place (roadway, designated scenic viewing spot, etc.) that is expansive and considered important. It can be obtained from an elevated position (such as from the top of a hillside) or it can be seen from a roadway with a longer-range view of the landscape. An adverse effect would occur if a proposed project would block or otherwise damage the scenic vista upon implementation. Generally, public views are those accessible from public spaces (i.e., not a private residence or someone’s back yard), including but not limited to roadways, parks and other recreation areas, and monuments.

The Carmel Valley Master Plan indicates that development “shall not be allowed to significantly block views of the viewshed, river, or distant hills as seen from key public viewing areas” (County of Monterey 2010). Carmel Valley Road is a proposed county scenic route that provides views of scenic ridgelines that define the Carmel Valley and feature prominently as viewers travel along this roadway in either direction. Most of the project components would ultimately be underground, with the exception of the pump station located above ground approximately 2,000 feet southwest

from Carmel Valley Road along Valley Greens Drive. The pump station would be situated in a vacant lot off Valley Greens Drive, in an area flanked by portions of the Quail Lodge & Golf Club public golf course greens. The vacant lot is unimproved, but trees are planted on two sides of the lot. The visual quality of the landscaped lot and surrounding area is high, characterized by natural open space on undeveloped residential parcels, cultivated golf greens, and intermittent residential development.

From the area of Valley Greens Drive where the pump station would be situated, the hillsides dominate the background, and the views from the roadway and the public golf course are unimpeded by intervening development. Figure 4 portrays examples of this existing view. The pump station includes a 40-foot by 40-foot chain-linked fence around the perimeter, no greater than 8 feet in height. As shown in Figure 5, the visual character of the proposed pump station would be similar to existing utility infrastructure near the golf course.

While some trees and shrubs shield the proposed pump station location from the street, aspects of the station would be visible, including the chain-linked fence and above-ground industrial components inside the fence. However, due to its low profile, the pump station would not block the view of the existing scenic ridgelines from public roadways, and impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

U.S. Highway 1 is the nearest State-designated scenic highway to the project alignment (California Department of Transportation 2017). The project site is more than three miles east of U.S. Highway 1. At this distance, the project site is not visible from U.S. Highway 1, and physical changes to Carmel Valley Road and Valley Greens Drive or the immediate vicinity as a result of the project would not have any effect on views of scenic resources from a State scenic highway. There would be no impact.

#### **NO IMPACT**

- c. *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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project includes the installation of new underground sewer pipelines and an aboveground pump station on an approximately 1,600 square foot site. The pump station site is currently undeveloped and would include several above-ground components, up to five feet in height, and surrounded by a chain-link fence (fitted with slats similar to those shown in Figure 5) no greater than eight feet in height. Under current conditions, the site is undeveloped with limited landscaped trees and shrubs nearest Valley Greens Drive (Figure 4) and adjacent to the existing golf course. Public views of the pump station site are available from vehicles traveling along Valley Greens Drive. This roadway has a speed limit of 35 miles per hour; therefore, views of the pump station would be limited in duration. The proposed pump station would be similar in visual character to existing utilities infrastructure located nearby that serves the adjacent golf course, as shown in Figure 5.



**Figure 4 Existing Views**



Source: Google Earth 2020

**Photograph 1:** View of proposed pump station site, facing south. Valley Greens Road in foreground.



**Photograph 2:** View of ridgeline north of Carmel Valley Road. Photograph was taken from north of the pump station site on Valley Greens Drive, facing north.



**Figure 5 View of Similar Utilities Infrastructure near the Golf Course**



The Monterey County 2010 General Plan includes policies to protect scenic resources in the county, such as prohibiting ridgeline development, and designating scenic corridors, including Carmel Valley Road, a proposed county scenic route (refer to item (a), above). The pump station site is within a relatively flat area and would not constitute development on a ridgeline. Therefore, the project would not degrade the existing visual character or quality of public views of the site and would not conflict with county zoning or other regulations governing scenic quality.

**LESS THAN SIGNIFICANT IMPACT**

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

For purposes of this analysis, light refers to light emissions (brightness) generated by a source of light. Stationary sources of light include exterior parking lot and building security lighting, and the headlights of cars driving on roadways near the project site. Streetlights and other security lighting also provide sources of light in the evening hours.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces are associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars. Nighttime glare occurs when direct, intense, focused light shines from mobile sources, such as automobiles.

The project would be implemented in an area characterized by limited residential development and golf course uses. Traffic is commensurate with the uses and light and glare from headlights and other sources are limited. The underground components of the project would have no effect on lighting or glare conditions. The project would not generate a substantial amount of new traffic and light from maintenance vehicles traversing the alignment at night would be further limited as most work would occur during the day. The pump station could have a limited amount of security lighting that would be designed consistent with the County of Monterey *Design Guidelines for Exterior Lighting*. The guidelines stipulate that lighting be shielded, directed toward the ground, and of limited wattage to reduce effects to neighboring properties or polluting the night sky, where applicable (County of Monterey 2016a). Furthermore, the guidelines indicate energy efficient best management practices, including turning off lights when they are not needed. Compliance with the provisions therein would ensure lighting impacts would be less than significant.

The proposed project would not include installation of windows or other features that would produce glare. Neither would operations create new sources of glare. There would be no impact regarding glare. The overall impact regarding light and glare would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*This page intentionally left blank.*

## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 
- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
  - b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
  - c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
  - d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

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

The proposed pipeline alignment is located within existing roadway rights-of-way and the proposed pump station is located on land zoned for residential uses. The project site is not zoned for agricultural use and is not located on or near land mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (DOC 2016). Furthermore, the project site is not on land enrolled under the Williamson Act or zoned for agricultural use (County of Monterey 2016c). Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use and would not conflict with zoning for agricultural use or a Williamson Act contract. In addition, due to the absence of agricultural land on or near the project site, the project would not involve changes to the existing environment that could result in conversion of designated Farmland to non-agricultural use. No impact to agricultural resources would occur.

The project site is not zoned for forest land or timberland and is not located on or near forest land. Therefore, the project would not involve changes to the existing environment that could result in the loss of forest land or the conversion of forest land to non-forest use. No impact to forestry resources would occur.

**NO IMPACT**



### 3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Air Quality Standards and Attainment

The project site is within the North Central Coast Air Basin (NCCAB), which consists of Monterey, Santa Cruz, and San Benito counties and forms an area of more than 5,100 square miles (Monterey Bay Air Resources District [MBARD] 2008). The NCCAB is under the regulatory jurisdiction of the MBARD, which is the local air quality management agency that is required to monitor air pollutant levels to ensure that National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether the standards are met or exceeded, the NCCAB is classified as being in “attainment” or “nonattainment” for a particular air pollutant. The MBARD’s 2016 Air Quality Management Plan (AQMP) assesses the attainment status of the NCCAB. The NAAQS and CAAQS attainment statuses for the NCCAB are listed in Table 1. As shown in the table, the NCCAB is in nonattainment only for the State standards for eight-hour ozone and particulate matter 10 microns in diameter or less in size (PM<sub>10</sub>; MBARD 2017). The NCCAB is in attainment or unclassified for all other State and federal ambient air quality standards.

**Table 1 North Central Coast Air Basin Attainment Status**

Pollutant	Standard	Designation
1-Hour Ozone	NAAQS	Attainment
	CAAQS	Attainment
8-Hour Ozone	NAAQS	Attainment
	CAAQS	<b>Nonattainment – Transitional<sup>1</sup></b>
CO	NAAQS	Attainment
	CAAQS	Attainment/Unclassified <sup>2</sup>
NO <sub>2</sub>	NAAQS	Attainment
	CAAQS	Attainment
SO <sub>2</sub>	NAAQS	Attainment
	CAAQS	Attainment
PM <sub>10</sub>	NAAQS	Attainment
	CAAQS	<b>Nonattainment</b>
PM <sub>2.5</sub>	NAAQS	Attainment
	CAAQS	Attainment
Lead	NAAQS	Attainment
	CAAQS	Attainment

NAAQS: National Ambient Air Quality Standards

CAAQS: California Ambient Air Quality Standards

CO: carbon monoxide

PM<sub>10</sub>: particulate matter 10 microns in diameter or less in size

PM<sub>2.5</sub>: particulate matter 2.5 microns in diameter or less in size

NO<sub>2</sub>: nitrogen dioxide

SO<sub>2</sub>: sulfur dioxide

<sup>1</sup> Areas are designated as nonattainment-transitional for ozone if no monitoring location in the nonattainment area has recorded more than three exceedance days during the previous calendar year (California Code Section 70303.5).

<sup>2</sup> Monterey County is classified as in Attainment and San Benito and Santa Cruz counties are classified as Unclassified.

Source: MBARD 2017

## Air Quality Management

Under California law, the MBARD is required to prepare a plan for air quality improvement for pollutants for which the NCCAB is in non-compliance. In March 2017, the MBARD adopted the *2012-2015 Air Quality Management Plan (2016 AQMP)*, which assesses and updates elements of the 2012 AQMP, including the air quality trends analysis, emission inventory, and mobile source programs. The 2016 AQMP addresses ways in which the MBARD can achieve attainment of the State 8-hour ozone standard in the NCCAB. In 2012, the United States Environmental Protection Agency (USEPA) designated the NCCAB as in attainment for the then-current national 8-hour ozone standard of 0.075 parts per million (ppm). In October 2015, the national standard was reduced to 0.070 ppm. However, the NCCAB continues to be in attainment with the federal ozone standard (MBARD 2017).

## Air Emission Thresholds

The MBARD has issued criteria for determining the level of significance for project-specific impacts within its jurisdiction in accordance with the NAAQS and CAAQS. To determine whether a significant air quality impact would occur, emissions generated by the proposed project were compared to the MBARD’s thresholds for both construction and operational emissions. The proposed project would be inconsistent with the 2016 AQMP, and therefore have a cumulatively considerable (significant) contribution to significant cumulative air quality impacts, if it would result in either of the following (MBARD 2008):

- Population growth generated by the proposed project would cause the population of Monterey County to exceed the population forecast for the appropriate five-year increment utilized in the 2016 AQMP; or<sup>1</sup>
- Construction and operational emissions of ozone precursors would exceed the significance thresholds established by the MBARD, which are intended to set the allowable limit that a project can emit without impeding or conflicting with the AQMP’s goal of attainment ambient air quality standards.

Based on criteria set forth in the MBARD’s (2008) *CEQA Air Quality Guidelines*, the proposed project’s impacts on criteria air pollution would be significant if the project would be inconsistent with the adopted AQMP or would result in air pollutant emissions during construction or operation that exceed the thresholds in Table 2.

**Table 2 Criteria Pollutant Thresholds of Significance**

Pollutant/ Precursor	Maximum Construction Emissions (lbs/day)	Maximum Operational Emissions (lbs/day)
VOC/NO <sub>x</sub>	N/A	137
CO	N/A	550
		LOS at intersection/road segment degrades from D or better to E or F or V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more
SO <sub>x</sub>	N/A	150
PM <sub>10</sub>	82 <sup>1</sup>	82 <sup>2</sup>

Notes: VOC = volatile organic compounds; NO<sub>x</sub> = oxides of nitrogen; lbs/day = pounds per day; CO = carbon monoxide; SO<sub>x</sub> = oxides of sulfur; PM<sub>10</sub> = particulate matter with a diameter of 10 microns or less; N/A = not available – the MBARD has not adopted thresholds for construction emissions of VOC/NO<sub>x</sub>, CO, and SO<sub>x</sub>.

<sup>1</sup> This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM<sub>10</sub> emissions may occur if a project uses equipment that is not “typical construction equipment” as specified in Section 5.3 of the MBARD’s *CEQA Air Quality Guidelines*.

<sup>2</sup> The MBARD’s operational PM<sub>10</sub> threshold of significance applies only to on-site emissions, such as project-related exceedances along unpaved roads. These impacts are generally less than significant.

Source: MBARD 2008

<sup>1</sup> In Monterey County, consistency with population forecasts is based on comparing a project’s population with countywide forecasts to avoid confusion related to declining population forecasts for cities on the Monterey Peninsula (MBARD 2008).

## **Methodology**

The analysis of air quality impacts conforms to the methodologies recommended in the MBARD's (2008) *CEQA Air Quality Guidelines*. The handbook includes thresholds for emissions associated with both construction and operation of land use projects. Construction emissions associated with the sewer pipeline were estimated using the Roadway Construction Emissions Model, version 9.0. The Roadway Construction Emissions Model was developed by the Sacramento Metropolitan Air Quality Management District to calculate emissions from linear projects such as roadways, levees, or pipelines. Construction and operational emissions associated with the pump station were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod was developed by the South Coast Air Quality Management District and is used by jurisdictions throughout the state to quantify criteria pollutant emissions.

### *Construction Emissions*

Project construction would generate temporary air pollutant emissions including fugitive dust and exhaust emissions from heavy construction equipment. The trenching/excavation phase of the project would involve the greatest use of heavy equipment and generation of fugitive dust. The proposed pipeline and pump station would be constructed from October 2020 to April 2021. For the purposes of modeling, the analysis relied upon the following assumptions:

- Pipeline corridor working area would extend up to 15 feet in width
- The road surface would be up to 12 inches deep
- The pipeline would be constructed at a rate of approximately 100 feet per day, encompassed within a 300-foot section of roadway
- The depth of pipeline installation would range from four to eight feet, with an increased depth of 25 feet for approximately 300 feet of alignment at the intersection of Valley Greens Drive and Carmel Valley Road
- Approximately 9,200 cubic yards of material would be excavated, 8,200 cubic yards of which would be reused as fill material
- Approximately 1,000 cubic yards of material would be imported for fill in the trench zone, and approximately 1,000 cubic yards of excavated material unsuitable for use as fill material would be exported
- Construction crews would work five days per week for eight hours a day (this does not account for breaks between the proposed construction hours of 7:30 a.m. and 3:30 p.m.)

### *Operational Emissions*

Operational emissions, estimated using CalEEMod, would be comprised of mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions, and stationary sources (i.e., emergency generator testing). Mobile source emissions consist of emissions generated by monthly maintenance trips monthly site visits to the pump station requiring two, one-way passenger vehicle trips by staff member(s). The pipelines would not require maintenance for the first few years after installation; however, maintenance trips would be required once per year after the first few years. Stationary source emissions would consist of emissions generated by monthly tests of the natural gas-powered emergency generator which would be operated for 30 minutes at a time.

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

A project may be inconsistent with the AQMP if it would generate population growth exceeding the forecasts used in the development of the AQMP. The project does not include new housing or businesses, and operation and maintenance of the project components would not require new employees. Therefore, the project would not directly result in population growth. The project would extend the existing wastewater collection system to serve existing residents who currently operate on septic systems. The project would not indirectly induce population growth because the extension of service is intended to serve existing residents, accommodate planned growth, and improve performance reliability throughout CAWD's service area rather than to serve additional new growth.

MBARD Rule 216, Permit Requirements for Wastewater and Sewage Treatment Facilities, requires that new or modified wastewater treatment facilities be consistent with the adopted AQMP. Consistency of wastewater treatment facilities is determined by comparing project forecasts for the proposed service area with applicable AQMP forecasts. The MBARD (2008) *CEQA Air Quality Guidelines* state that indirect emissions from a proposed non-residential project that is intended to meet the needs of the population are consistent with the AQMP if the current population of the county does not exceed the AQMP population forecasts. The current population of unincorporated Monterey County is approximately 445,414 residents, and according to the Association of Monterey Bay Area Governments (AMBAG), the population of Monterey County is forecast to reach 501,751 residents by 2040 (California Department of Finance 2019; AMBAG 2018). As described in Section 14, *Population and Housing*, the project would not add to the population through the direct or indirect construction of housing or an increase in employment opportunities. Therefore, the project would not indirectly induce population growth above that anticipated by the AQMP and would not conflict with or obstruct implementation of the AQMP. No impact would occur.

**NO IMPACT**

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?*

The project would generate short-term emissions associated with project construction and long-term emissions associated with operation and maintenance of the pipeline and pump station. Table 3 provides the estimated construction emissions for the proposed project.

As shown in Table 3, project construction emissions would not exceed the MBARD's construction emissions thresholds. Compliance with the MBARD's Rule 400 (Visible Emissions), Rule 403 (Particulate Matter), Rule 425 (Use of Cutback Asphalt), and Rule 426 (Architectural Coatings) would reduce emissions of dust particulates and VOCs during construction activity. During construction, the project site would be watered once daily to control fugitive dust emissions, which would further reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard, and impacts would be less than significant.



**Table 3 Estimated Maximum Construction Daily Emissions (pounds per day)**

	Maximum Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Pipeline Construction	1.4	12.4	14.4	< 0.1	1.7	0.8
Pump Station Construction	1.1	10.2	9.8	< 0.1	2.1	1.0
<b>Total Maximum Daily Emissions</b>	<b>2.5</b>	<b>22.6</b>	<b>24.2</b>	<b>&lt; 0.1</b>	<b>3.8</b>	<b>1.8</b>
MBARD Thresholds	N/A	N/A	N/A	N/A	82	N/A
Threshold Exceeded?	N/A	N/A	N/A	N/A	No	N/A

MBARD: Monterey Bay Air Resources District; VOC: volatile organic compounds; NO<sub>x</sub>: nitrogen oxides; CO: carbon monoxide; SO<sub>2</sub>: sulfur dioxides; PM<sub>10</sub>: particulate matter 10 microns or less in diameter; PM<sub>2.5</sub>: particulate matter 2.5 microns or less in diameter; N/A = not available – the MBARD has not adopted thresholds for construction emissions of VOC/NO<sub>x</sub>, CO, and SO<sub>x</sub>.

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding. All emissions were estimated using CalEEMod.

Source: Appendix A

Although construction-related air quality impacts would be less than significant, the MBARD recommends the use of the following best management practices (BMPs) for the control of short-term construction emissions (MBARD 2008). These measures were not included in CalEEMod in order to provide a more conservative estimate of air pollutant emissions. However, if adhered to, these BMPs would further reduce air pollutant emissions below the level of significance.

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 miles per hour).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas.
- Maintain at least two feet of freeboard on haul trucks.
- Cover all trucks hauling soil, sand, and other loose materials.
- Plant vegetative ground cover in disturbed areas as quickly as possible.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time.

### Operational Emissions

Operation of the proposed pipeline and pump station would require electricity for wastewater transport; however, CalEEMod only calculates direct emissions of criteria pollutants from energy sources that combust on site, such as natural gas used in a building (California Air Pollution Control

Officers Association [CAPCOA] 2017). CalEEMod does not calculate or attribute emissions of criteria pollutants from electricity generation to individual projects because fossil fuel power plants are existing stationary sources permitted by air districts and/or the USEPA, and they are subject to local, State, and federal control measures. Criteria pollutant emissions from power plants are associated with the power plants themselves, and not individual projects or electricity users.

Therefore, the primary source of operational emissions would be monthly site visits to the pump station for visual inspection, maintenance activities, and as-needed repairs. The pipelines would not require maintenance for the first few years after installation; however, maintenance trips would be required once per year after the first few years. Additionally, monthly testing of the emergency generator would generate stationary source emissions for 30 minutes at a time, to ensure its function. CalEEMod calculates emissions of criteria pollutants from individual projects based on mobile sources (i.e., vehicles) and on-site area sources (i.e., off-gassing of architectural coatings) and stationary sources (i.e., generator testing). Table 4 summarizes maximum daily pollutant emissions during operation of the project.

**Table 4 Operational Emissions (pounds per day)**

Emissions Source	Estimated Maximum Daily Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mobile	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Stationary (backup generator)	0.4	< 0.1	1.0	< 0.1	< 0.1	< 0.1
<b>Total Operational Emissions</b>	<b>0.4</b>	<b>&lt; 0.1</b>	<b>1.0</b>	<b>&lt; 0.1</b>	<b>&lt; 0.1</b>	<b>&lt; 0.1</b>
MBARD Thresholds	137	137	550	150	82	N/A
Threshold Exceeded?	No	No	No	No	No	N/A

MBARD: Monterey Bay Air Resources District; VOC: volatile organic compounds; NO<sub>x</sub>: nitrogen oxides; CO: carbon monoxide; SO<sub>x</sub>: sulfur oxides; PM<sub>10</sub>: particulate matter 10 microns or less in diameter; PM<sub>2.5</sub>: particulate matter 2.5 microns or less in diameter; N/A = not available – the MBARD has not adopted thresholds for operational emissions of PM<sub>2.5</sub>.

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding. Emission data is sourced from “mitigated” results, which include measures that would be implemented during project construction. All emissions were estimated using CalEEMod.

Source: Appendix A

As shown in Table 4, operational emissions from the proposed project would not exceed the MBARD thresholds for any criteria pollutant. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups, including health care facilities, retirement homes, school and playground facilities, and residential areas. The closest sensitive receptors to the project site are residences. The pipeline alignment is located in the public right-of-way that abuts several residential neighborhoods. Residences are adjacent to and in the immediate vicinity of both the pipeline alignment and the proposed pump station and three schools are located within 0.2 mile of the pipeline. Localized air quality impacts to sensitive receptors typically result from fugitive dust, carbon monoxide, and toxic air contaminants (TACs). As discussed under item (b) above, construction and operational emissions would not exceed the applicable MBARD thresholds, which are designed to be protective of public health. The proposed project's impacts related to carbon monoxide hotspots and TACs are detailed below.

### **Carbon Monoxide Hotspots**

Localized carbon monoxide concentrations are the result of the volume of cars along a road and the level of emissions generated by vehicles, rather than the flow of traffic, and vehicle carbon monoxide emissions have declined over time due to stringent State standards for vehicle emissions and would continue to decline as more stringent standards are put in place. Traffic-congested roadways and intersections have the potential to generate high localized carbon monoxide levels (i.e., carbon monoxide hotspots). In general, carbon monoxide hotspots occur in areas with poor circulation or areas with heavy traffic. The MBARD provides screening thresholds for carbon monoxide hotspot impacts, as shown above in Table 2.

As discussed above, operation of the project would require monthly and as-needed maintenance activities, which would result in a maximum daily trip rate of four one-way passenger trips per day if trips to inspect the pump station and pipeline occurred at once. This incremental increase in traffic volumes would not significantly impact congestion on local roadways, as discussed in Section 17, *Transportation*. Therefore, the project would not result in carbon monoxide hotspots on adjacent roadways. Additionally, these trips would generally not occur during peak travel periods when most congestion occurs. The project would not result in individually or cumulatively significant impacts from carbon monoxide emissions, and impacts would be less than significant.

### **Toxic Air Contaminants**

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The greatest potential for TAC emissions during construction would be from diesel particulate emissions associated with heavy equipment operations. As described under the *Methodology* section above, the construction schedule would occur over a six-month time frame. Construction activities for the project would only occur for a temporary duration, after which time all construction-related TAC emissions would cease. Further, because the pipeline would be constructed in segments and would move along the alignment at a rate of approximately 100 feet per day, the adjacent residential and school receptors would only be exposed to construction generated TACs for a short period of time. As a result, construction of the project would not result in a substantial, long-term source of TAC emissions.

The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses

near potential sources of air toxic emissions. Typical sources of acutely and chronically hazardous TACs identified by the CARB include distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. The MBARD also identifies additional common sources of TACs including diesel-fueled internal combustion engines and parking areas for diesel-fueled heavy-duty trucks and buses.

Operation of the project would include testing the backup generator for 30 minutes a month to ensure its functionality and use in the event of an outage to power the pumps. The project would be required to obtain an Authority to Construct and/or Permit to Operate from the MBARD pursuant to Rule 1000 and conduct a risk assessment of associated TAC emissions. As part of the permit process, the CAWD would be required to demonstrate compliance with the following requirements, which are designed to prevent TAC emissions from causing or contributing to an increase in mortality or an increase in serious illness or from posing a present or potential hazard to human health:

- The acute and chronic hazard indices for any target organ or organ system due to TAC emissions do not exceed 1.0 at any receptor location; and
- The cancer risk due to TAC emissions does not exceed 10 in one million at any receptor location.

Because stationary TAC sources would be required to comply with MBARD Rule 1000 and the project would not otherwise contain substantial TAC sources, the project would not result in the exposure of sensitive receptors to significant amounts of carcinogenic or TACs. Therefore, impacts related to TAC emissions from stationary sources would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

During construction, the project would generate oil and diesel fuel odors from use of heavy equipment as well as odors related to asphalt paving. The odors would be limited to the construction period and would therefore be temporary. In addition, because the pipeline would be constructed in segments and would move along the alignment at a rate of approximately 100 feet per day, the adjacent residential and school receptors would only be exposed to construction-generated odors for a short period of time. As a result, construction-related odor impacts would be less than significant.

The sewer pipeline would be located entirely below the ground surface and would not have the potential to generate odors during operation. In addition, the pump station would be electrically powered and enclosed in a structure. Wastewater would not be exposed to the air during pumping and therefore would not release odors to nearby receptors. Therefore, operation of the project would not generate objectionable odors, and impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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# 4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

In February 2020, Rincon Consultants, Inc. prepared a Biological Resources Assessment (BRA), including a literature review and field reconnaissance survey to document existing site conditions, the potential presence of special-status biological resources (including plant and wildlife species), observed plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The following summarizes the findings of the assessment. The complete BRA is contained in Appendix B of this document.

The proposed project would be developed on approximately five acres of land; however, a 23.7-acre study area was evaluated to identify potentially present sensitive biological resources. The topography of the project area and its immediate surroundings is characterized by low-lying, agricultural pasture lands, with an elevation range of approximately 80 to 100 feet above mean sea level. The study area occurs primarily along the northern edge of the Carmel Valley floor, with land to the north side of Carmel Valley Road steeply sloped up toward the ridge top.

Seven terrestrial vegetation communities or other land cover types were identified in the study area during the field survey. These include coast live oak woodland, California sagebrush – black sage scrub, black cottonwood riparian forest, landscaped, developed, agriculture, and ruderal. The vegetation community characterizations for this analysis were based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) but have been modified slightly to most accurately reflect the existing site conditions.

The study area and its surroundings provide habitat for wildlife species that commonly occur in Carmel Valley, urban, grassland, and agricultural habitats as well as the Carmel River and riparian corridor. Avian species observed/detected on or adjacent to the site include mallard (*Anas platyrhynchos*), cinnamon teal (*Spatula cyanoptera*), belted kingfisher (*Megaceryle alcyon*), American crow (*Corvus brachyrhynchos*), scrub jay (*Aphelocoma californica*), chestnut-backed chickadee (*Poecile rufescens*), yellow-rumped warbler (*Setophaga coronata*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), California quail (*Callipepla californica*), and great blue heron (*Ardea herodias*). Terrestrial species observed/detected include California ground squirrel (*Otospermophilus beecheyi*) and western fence lizard (*Sceloporus occidentalis*). One unidentified species of bumble bee (*Bombus* sp.) was observed in a landscaped area with ornamental flowers.

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

Local, State, and federal agencies regulate special-status species. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) species occurrence records in the vicinity of the study area, and previous reports for the study area. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).



- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

For the purpose of this analysis, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA); those listed or candidates for listing as Rare, Threatened, or Endangered under the California Endangered Species Act or Native Plant Protection Act; those identified as Fully Protected by the California Fish and Game Code (CFG; Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern by the CDFW; and plants occurring on lists 1 and 2 of the California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) system per the following definitions:

- **Rank 1A** = Plants presumed extinct in California
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent of occurrences threatened)
- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened or no current threats known)
- **Rank 2** = Rare, threatened or endangered in California, but more common elsewhere

Based on a query of the CNDDDB, there are 56 special-status plant species, 30 special-status wildlife species, and one sensitive natural community documented within the *Seaside, California* United States Geological Survey (USGS) 7.5-minute quad and the eight surrounding quads (CDFW 2019a, 2019b, 2020a). An additional special-status species observed during the reconnaissance survey was added to the evaluation. All 86 regulated resources have been evaluated for potential to occur within the study area (Appendix B).

Fifty-six special-status plant species known to occur in the region were evaluated for their potential to occur in the study area (Appendix B; CNPS 2020). None of these species would be expected to occur within the disturbance footprint of the paved roadway or ruderal shoulder. Impacts to CRPR 1B.1 or 1B.2 plant species would only be considered significant if the loss of individuals represented a population-level impact that would jeopardize the viability of a local or regional population. Based on the presence of two natural vegetation communities in areas adjacent to proposed work areas, 12 special-status plants have the potential to occur adjacent to the project, including;

- **Present adjacent to project site**
  - Monterey cypress (*Hesperocyparis macrocarpa*) 1B.2
  - Monterey pine (*Pinus radiata*) 1B.1

- **Moderate Potential adjacent to project site**
  - Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*) 1B.2
  - Carmel Valley bush-mallow (*Malacothamnus palmeri* var. *involucratus*) 1B.2
  - Carmel Valley malacothrix (*Malacothrix saxatilis* var. *arachnoidea*) 1B.2
- **Low Potential adjacent to project site**
  - Hickman's onion (*Allium hickmanii*) 1B.2
  - Pink Johnny-nip (*Castilleja ambigua* var. *insalutata*) 1B.1
  - Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) 1B.1
  - Jolon clarkia (*Clarkia jolonensis*) 1B.2
  - San Francisco collinsia (*Collinsia multicolor*) 1B.2
  - Hutchinson's larkspur (*Delphinium hutchinsoniae*) 1B.2
  - Marsh microseris (*Microseris paludosa*) 1B.2

No federally or State-listed plants are expected to occur in the study area. The remaining 44 special-status plant species known to occur in the region can be excluded based on known range and elevation, and the lack of the species' specific habitat requirements within the study area (e.g., sandy openings in maritime chaparral). The proposed project would occur primarily in developed, ruderal, or landscaped areas, and impacts to natural communities is not expected. Therefore, impacts to special-status plant species would be less than significant.

Rincon identified 30 special-status wildlife species that have been documented within the nine-quadrangle search radius. These species were reviewed for potential to occur within the study area (see Appendix B), and 14 species were found to have low to high potential to occur or were observed in the study area. None of these species would be expected to occur within the proposed work area on the existing paved road or ruderal shoulder or within the landscaped area at the pump station.

Some of the species have a low potential to incidentally occur within roadways when dispersing or foraging, and others may be present within the Carmel River under County Bridge 500 during construction. Potential impacts for each species with potential to occur on site are discussed below.

### **Species with Low Potential to Occur**

The BRA determined the following species have a low potential to occur: coast range newt, California legless lizard, two-striped garter snake, Monterey dusky-footed woodrat, and American badger. This determination was made on the basis that these species do not typically occur in the work area (developed road, ruderal, and landscaped areas). Impacts to these species would be less than significant and no mitigation is required.

### **Species with Moderate to High Potential to Occur**

#### *Western Bumble Bee*

Impacts to western bumble bee may occur if a colony is present in undeveloped areas adjacent to the work area. Since the sewer line would be installed in the existing right-of-way, a colony is not expected to occur in the work area, but foraging individuals at the pump station site could be injured or killed during construction. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-2 requiring a pre-construction survey

for western bumble bee, and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to western bumble bee would be reduced to less than significant with mitigation.

#### *Smith's Blue Butterfly*

No Smith's blue butterfly host plants were observed in the study area, therefore no impacts to the host plant or larva/eggs are expected. If work occurs during the adult flight period (mid-June through early-September) impacts through injury or mortality may occur if individuals enter the work area. With implementation of Mitigation Measure BIO-1 requiring a worker training program and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to Smith's blue butterfly would be reduced to less than significant with mitigation.

#### *Steelhead-South-Central California Coast DPS*

The sewer line crossing the Carmel River at Valley Greens Drive would be constructed on the underside of the existing bridge outside of the bed and bank of the Carmel River, therefore no direct impacts to steelhead are expected. However, impacts could occur if equipment, spills, or debris inadvertently enter the river. Prior to the issuance of a general construction permit, a Stormwater Pollution Prevention Plan (SWPPP) would be required and would reduce the potential for impacts to steelhead. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-3 requiring spill/debris prevention, and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to steelhead would be reduced to less than significant with mitigation.

#### *California Tiger Salamander*

Impacts to the California tiger salamander could include injury or mortality if individuals fall into open excavations or take refuge under equipment or construction materials. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-4 requiring prevention of entrapment, and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to California tiger salamander would be reduced to less than significant with mitigation.

#### *Foothill Yellow-Legged Frog*

Foothill yellow-legged frog is not expected to occur outside of the Carmel River and the riparian corridor. Therefore, impacts to this species would only occur if equipment, spills, or debris inadvertently enter the river during construction. Prior to the issuance of a general construction permit, a SWPPP would be required and would reduce the potential for impacts to foothill yellow-legged frog. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-3 requiring spill/debris prevention, and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to foothill yellow-legged frog would be reduced to less than significant with mitigation.

#### *California Red-Legged Frog*

There is a high potential for California red-legged frog to occur in the Carmel River; however, no impacts to the river or riparian corridor are expected as the extension of the new force main would be suspended from County Bridge Number 500 across the Carmel River and constructed from the bridge deck, outside the bed and banks of the Carmel River. There is a low potential for California red-legged frog to occur in the work area during upland movement, which could occur overnight

during rain events. Impacts could include injury or mortality if individuals fall into open excavations or take refuge under equipment or construction materials. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-3 requiring spill/debris prevention, and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to California red-legged frog would be reduced to less than significant with mitigation.

#### *Western Pond Turtle*

There is a high potential for western pond turtle to occur in the Carmel River; however, no impacts to the river or riparian corridor are expected. Because the surrounding area is heavily managed as a golf course, there is a low potential for western pond turtle to nest in landscaped areas adjacent to the river. Impacts could include injury or mortality if individuals fall into open excavations or nests are unearthed during excavations. Western pond turtle is a non-listed species but is identified as a Species of Special Concern, however, due to the regional significance of this species impacts to individuals would be considered significant. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-3 requiring spill/debris prevention, Mitigation Measure BIO-4 requiring the prevention of entrapment, and Mitigation Measure BIO-5 requiring proper disposal of construction debris, impacts to western pond turtle would be reduced to less than significant with mitigation.

#### *Townsend's Big-Eared Bat*

There is a moderate potential for Townsend's big-eared bat to use the bridge at Valley Greens Drive as a night roost; however, this species requires cave or cave like structures for day roosting. The bridge does not provide suitable day roosting habitat, and construction would occur between 7:30 a.m. and 3:30 p.m. Impacts to Townsend's big-eared bat would only occur if active construction occurred at night, or construction lighting was left on overnight and directed at the underside of the bridge. Because nighttime construction would not occur, impacts would be less than significant.

#### *Nesting Birds*

Native bird nests protected by CFGC Section 3503 are likely to occur within the site. Impacts may occur through removal of vegetation if active nests are present. Impacts may also occur if active nests are present in undeveloped and landscaped areas adjacent to active construction or staging through disturbance and nest abandonment. With the implementation of Mitigation Measure BIO-1 requiring a worker training program, Mitigation Measure BIO-5 requiring proper disposal of construction debris, and Mitigation Measure BIO-6 requiring a preconstruction survey, impacts to nesting birds would be reduced to less than significant with mitigation.

### **Mitigation Measures**

Implementation of the following measures would reduce potential impacts to special-status wildlife species and nesting birds to less than significant levels:

#### *BIO-1 Worker Environmental Awareness Program*

Prior to initiation of construction activities (including staging and mobilization) all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status resources that may occur in the construction area. The specifics of this program shall include identification of the special-status species and their habitats, a description of the regulatory status

and general ecological characteristics of special-status resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees shall sign a form provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to CAWD to document compliance.

#### *BIO-2 Western Bumble Bee Preconstruction Survey*

A qualified biologist(s) shall conduct a pre-construction survey prior to the onset of work activities at the pump station site. The pre-construction survey effort shall be conducted for a minimum of one hour. If bumble bees of any species are observed, they shall be photographed for identification following the USFWS guidance in *Appendix A Standardized Bee Photography in the Survey Protocols for the Rusty Patched Bumble Bee (Bombus affinis)* (USFWS 2019d).<sup>2</sup> If construction begins between March 1 and November 1, the ground shall also be searched during the survey for active bumble bee colonies. No capture or handling of bumble bees shall be conducted, and western bumble bee shall be avoided. Foraging bees shall be allowed to leave work areas undisturbed, and bee colonies shall be avoided during the active season from March 1 through November 1.

#### *BIO-3 Spill/Debris Prevention*

All refueling, maintenance, and staging equipment and vehicles shall occur at far from the Carmel River, riparian habitat, and the ephemeral drainage/ ditch as feasible, and in a location from which a spill would not drain directly toward these habitats (e.g., on a slope that drains away from the water), or in a containment structure. Prior to the onset of work, a plan shall be developed for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. Should any debris or equipment from the work area fall into the river or riparian corridor it shall be removed immediately.

#### *BIO-4 Wildlife Entrapment Prevention*

To prevent the inadvertent entrapment of individuals, all excavated, steep-walled holes or trenches shall be covered at the end of each workday with plywood or similar materials. If this is not possible, one or more escape ramps constructed of earth fill or wooden planks (no greater 45 degrees) shall be established in the hole. Before such holes or trenches are filled, they shall be thoroughly inspected for any animals. Any wildlife observed shall be allowed to leave the excavation of its own accord. If listed species are observed in excavations, all work shall stop and USFWS and/or CDFW shall be contacted immediately. Take of listed species, including disturbance, handling, or relocating, is illegal without State and/or federal take authorization.

#### *BIO-5 Trash Disposal*

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

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<sup>2</sup> Please note, survey protocol for the western bumble bee has not been published by the USFWS; therefore, protocol for a similar species, the rusty patched bumble bee, is recommended.

*BIO-6 Nesting Bird Survey*

If construction requires any vegetation trimming or tree removals that are scheduled to occur during the nesting bird season (February 1 through September 1), pre-construction surveys shall be conducted by a qualified biologist no more than one week prior to construction to determine the presence/absence of nesting birds within the project site. The survey shall be repeated if a lapse in construction activity of two weeks or greater has occurred. If active nests are found the qualified biologist shall establish an appropriate buffer, taking into account the species sensitivity and physical location of the nest (line of site to the work area), to be in compliance with CFGC 3503 and 3503.5. In no cases shall the buffer be smaller than 50 feet for non-raptor bird species and 200 feet for raptor species. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. The CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in the CNDDDB. The CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2019 sensitive natural communities list under the CDFW's revised ranking methodology (CDFW 2019c).

The black cottonwood forest is considered a sensitive vegetation community by the CDFW with a rank of G5 S5. The black cottonwood arroyo willow alliance is also considered sensitive.

The Carmel River (Hydrologic Unit 3307) was federally designated as critical habitat for South-Central California (SCCC) steelhead in 2005 (National Marine Fisheries Service 2005). The Carmel River (Core Population 1) is one of five major watersheds containing SCCC steelhead. This watershed provides suitable spawning and rearing sites, with adequate water quality, shade, and submerged logs and debris, which are essential for the conservation of the species. The Carmel River and its lower reaches are identified in the south central California coast steelhead recovery plan as an important corridor for movement between estuarine and marine habitats and extensive spawning and rearing habitats in the upper watershed (National Marine Fisheries Service 2013).

No project elements are proposed within the black cottonwood riparian habitat or the Carmel River (SCCC steelhead critical habitat); however, impacts may occur if construction equipment, workers, debris, or spills inadvertently enter the riparian area or active channel. With the implementation of Mitigation Measures BIO-1 and BIO-3, requiring a worker training program and spill/debris prevention, impacts to sensitive natural communities and critical habitat would be reduced to less than significant with mitigation.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- 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?*

Two potentially jurisdictional features were mapped within the study area: the Carmel River (including the associated riparian corridor) and an ephemeral drainage/ditch (Appendix B, Figure 3).

The Carmel River is approximately 35 feet wide within the study area and was actively flowing during the site visit; 0.06 acre of the Carmel River and 0.28 acre of the riparian area were mapped within the study area. The Carmel River and riparian corridor are subject to United States (U.S.) Army Corps of Engineers jurisdiction under the federal Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) jurisdiction under the federal CWA and State Porter-Cologne Water Quality Control Act, and CDFW jurisdiction under the CFGC.

No project elements are proposed within the Carmel River; however, impacts may occur if construction equipment, workers, debris, or spills inadvertently enter the riparian area. With the implementation of Mitigation Measures BIO-1 and BIO-3, requiring a worker training program and spill/debris prevention, impacts to the Carmel River would be reduced to a less than significant level.

The ephemeral drainage/ditch channels surface water from a steep canyon north of the Valley Greens Drive Carmel Valley Road Intersection, east of Valley Greens Drive/Tehama road. The drainage is channelized just before flowing through a culvert under Carmel Valley Road into a roadside ditch. This ditch then flows south along the east side of Williams Ranch Road and into the Carmel River. In total, 0.02 acre of ephemeral drainage/ditch was mapped within the study area. The ephemeral drainage/ditch may potentially be jurisdictional under the federal CWA, Sections 1600 et seq. of the CFGC, and/or the Porter-Cologne Water Quality Control Act.

The proposed project includes jack and bore drilling at 25 feet deep near the Valley Greens Drive and Carmel Valley Road intersection to install the sewer line. This drilling method is required to avoid the potentially jurisdictional ephemeral drainage. Due to the depth of the drilling (25 feet deep) and construction of the culvert (concrete) the potential for an inadvertent release of drilling fluid (frac-out) is very low. There would be no permanent or temporary impacts to this feature; therefore, impacts to State or federally protected wetlands would be less than significant.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Other corridors may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Habitats within a habitat linkage do not necessarily need to be identical to those habitats being linked. Rather, the linkage needs only to contain sufficient cover and forage to allow temporary utilization by species moving between core habitat areas. Habitat linkages are typically contiguous



strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Some species may require specific physical resources (such as rock outcroppings, vernal pools, or oak trees) within the habitat link for the linkage to serve as an effective movement corridor, while other more mobile or aerial species may only require discontinuous patches of suitable habitat to permit effective dispersal and/or migration. Wildlife movement corridors may occur at either large or small scales.

Wildlife movement corridors can be both large and small scale. Riparian corridors and waterways including the Carmel River provide local scale opportunities for wildlife movement through the project area. Undeveloped areas within the study area also act as corridors for wildlife movement, particularly for relatively disturbance-tolerant species such as fox, coyote, raccoon, skunk, deer, and bobcat. On a larger scale an Essential Connectivity Area is mapped within the study area in the Biogeographic Information and Observation System (Spencer et al. 2010). This linkage connects Point Lobos State Reserve along the coastline with Big Sur and Los Padres National Forest along the Santa Lucia Mountain Range. The project site is located primarily within developed areas and Carmel Valley Road, which is currently considered a significant local barrier for wildlife movement. Additionally, the project would not construct new barriers to wildlife movement in the area.

While wildlife movement corridors are present in the study area, the relatively small size of the project footprint and its location within existing development ensures that the project would not interfere substantially with the movement of wildlife species. Impacts to wildlife movement would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

The Monterey County 2010 General Plan Conservation and Open Space Element provide goals, policies, and objectives pertaining to biological resources applicable to this project (County of Monterey 2010). Goal OS-5 is focused on the avoidance, minimization and mitigation of significant impacts to biological resources. The associated policies with this goal include the promotion of conservation of listed species; conservation and maintenance of critical habitat; and avoidance, minimization, and mitigation of impacts to listed species and critical habitat. The Carmel Valley Master Plan (County of Monterey 2013) Policy CV-3.11 discourages the removal of native oak, madrone and redwood tree in the Carmel Valley Master Plan Area and requires a permit for the removal of these species.

Some resources are afforded protection through local ordinances such as those that protect trees, riparian corridors, and environmentally sensitive habitats. The County of Monterey Zoning Ordinance 21.64.260 calls for the protection and preservation of oaks and other types of native trees. The proposed project would occur in a completely disturbed right-of-way and would therefore not require the removal of existing trees.

The Carmel Valley Master Plan includes policies to protect biological resources and open space such as the Carmel River. The proposed project would occur entirely within the developed road and adjacent landscaped or ruderal areas and would avoid impacts to the Carmel River. Therefore, the proposed project would not conflict with local policies or ordinances protecting biological resources. No impact would occur.

#### **NO IMPACT**

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

The study area is not within any applicable habitat conservation plan areas; therefore, the proposed project would not conflict with State, regional, or local habitat conservation plans. No impact would occur.

**NO IMPACT**

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# 5 Cultural Resources

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

This section provides an analysis of the project’s impacts on cultural resources, including historical and archaeological resources, as well as human remains.

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

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

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

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

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Rincon conducted a search of the California Historical Resources Information System at the Northwest Information Center (NWIC) located at Sonoma State University on January 29, 2020. The search was performed to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.8-kilometer (0.5-mile) radius surrounding it. The records search included a review of available records at the NWIC, as well as the National Register of Historic Places, CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historical maps.

The NWIC records search identified 41 cultural resources studies conducted within a 0.5-mile radius of the project site, none of which include the project site. The records search identified nine cultural resources recorded within a 0.5-mile radius of the project site, none of which have recorded boundaries that extend onto the project site.

On January 22, 2020, Rincon contacted the Native American Heritage Commission (NAHC) and requested a search of the Sacred Lands File (SLF). The NAHC provided a response on January 27, 2020, stating that the SLF results were negative as well as the Native American contacts traditionally and culturally affiliated with the geographic area of the project. Rincon prepared and mailed letters to the NAHC-listed Native American contacts to request information on potential cultural resources in the project vicinity that may be impacted by project development on January 29, 2020. On February 6, 2020, Chairman Bob Burton of the Costanoan Rumsen Carmel Tribe responded to Rincon's outreach letter stating that the project area does not appear to contain cultural or Native American resources. The tribe requested immediate contact should any cultural or Native American resources be discovered through project construction. No other responses have been received.

Rincon conducted a pedestrian survey of the project site on February 18, 2020. The project site was paved, obscuring ground visibility. In areas where ground surface was exposed, such as road shoulders, a Rincon archaeologist inspected soils for evidence of cultural material and no materials were observed.

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

While County Bridge 500 is 57 years of age, it was recommended as ineligible as a historic resource in the Caltrans *Historic Bridge Inventory*, and does not possess historical or cultural significance. No other structures greater than 50 years of age are located in the project alignment. No archaeological resources have been recorded within the project site. However, the results of the NWIC records search indicate the presence of nine previously recorded cultural resources within a 0.5-mile radius of the project site. The resources are sensitive in nature, including prehistoric and historic sites. The presence of nine resources in close proximity suggests that the project site is sensitive for

archaeological resources. Impacts to previously unidentified archaeological resources are potentially significant. Mitigation would be required to reduce impacts to a less than significant level.

### **Mitigation Measures**

Implementation of the following measures would reduce potential impacts to archaeological resources encountered during construction to a less than significant level:

#### *CR-1 Archaeological and Native American Monitoring*

During ground disturbance of native soils (soils not consisting of artificial fill) for the construction of the project, a qualified archaeologist working under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) and a locally affiliated Native American monitor shall be retained to observe construction activities within the project site. If, during initial monitoring, the qualified archaeologist determines that the construction activities have little or no potential to impact cultural resources, the qualified archaeologist, in consultation with the Native American monitor, may recommend that monitoring be reduced or eliminated. If cultural resources are identified during initial monitoring, work within 50 feet of the find shall halt and Mitigation Measure CR-2 shall be implemented.

#### *CR-2 Unanticipated Archaeological Resources*

If archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983), shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

In the event that archaeological resources of Native American origin are identified during project construction, a qualified archaeologist will consult with CAWD to begin Native American consultation procedures. As part of this process, it may be determined that archaeological monitoring is required. A Native American monitor may also be required in addition to the archaeologist.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

No human remains are known to exist on the project site; however, the discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. This code stipulates that in the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant, who shall complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access. These requirements set forth in Public Resources Code Section

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5097.98 would ensure that any potential disturbance to previously undiscovered human remains would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**



# 6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Electricity and Natural Gas

In 2018, California used 285,488 gigawatt-hours (GWh) of electricity, of which 31 percent were from renewable resources, such as wind, solar photovoltaic, geothermal, and biomass (California Energy Commission [CEC] 2020a). Adopted on September 10, 2018, Senate Bill (SB) 100 accelerates the State’s Renewables Portfolio Standards Program by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

California also consumed approximately 12,638 million U.S. therms (MMthm) of natural gas in 2018. Electricity and natural gas for the project site would be provided by Pacific Gas and Electric (PG&E). Table 5 and Table 6 show PG&E’s total electricity and natural gas consumption for its service area as well as consumption by sector. In 2018, PG&E provided approximately 27.9 percent of the total electricity and approximately 37.9 percent of the total natural gas usage in California.

**Table 5 Electricity Consumption in the PG&E Service Area in 2018 (GWh)**

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
5735.1	29,650.0	4,195.1	10,344.7	1,567.3	27,964.8	318.6	79,775.7

Notes: (CEC 2018a)

**Table 6 Natural Gas Consumption in PG&E Service Area in 2018 (MMThm)**

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
37.2	899.1	59.0	1,776.0	190.2	1832.8	4,794.4

Notes: CEC 2018b

## **Petroleum**

In 2018, approximately 28 percent of the State’s energy consumption was used for transportation activities (U.S. Energy Information System 2019). Californians presently consume over 19 billion gallons of motor vehicle fuels each year. Though California’s population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 to 22 percent reduction. This forecast decline is due to both the increasing use of electric vehicles and improved fuel economy for new gasoline vehicles (CEC 2020b).

## **Methodology**

The project’s construction and operational energy usage were estimated using CalEEMod, version 2016.3.2 (see Appendix A). CalEEMod uses project-specific information, including the project’s land uses, square footages for different uses (e.g., utilities), and location, to estimate a project’s construction and operational emissions and energy consumption. Consumption factors were drawn from CalEEMod for project natural gas and electricity consumption. Energy demand for off-road construction equipment is based on anticipated equipment, usage hours, horsepower, load factors, and construction phase duration provided by the CalEEMod output, as well as “Exhaust and Crankcase Emission Factors for Nonroad Compression Ignition Engines.”

Operational energy demand considers transportation-based fuel consumption as well as electricity and natural gas consumption associated with the project. Transportation fuel demand for operation of the project was estimated based on the annual vehicle miles travelled (VMT) generated after project buildout. Electricity and natural gas consumption were also based on CalEEMod outputs and compared to existing consumption in the PG&E service areas.

- 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?*

## **Construction**

Construction activity would use energy in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would involve site preparation and grading, including hauling material off site; pavement and asphalt installation; pipeline installation and building construction; architectural coating; and landscaping and hardscaping.

Total project consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod (Appendix A). Table 7 summarizes the estimated construction energy consumption for the project. Diesel fuel consumption, including construction equipment operation, hauling trips, and vendor trips, would consume an estimated 7,831 gallons of fuel over the project construction period. Worker trips would consume an estimated 540 gallons of petroleum fuel during project construction. Refer to Table 7 for the overall estimated fuel consumption during construction.

**Table 7 Estimated Fuel Consumption during Construction**

Fuel Type	Gallons of Fuel	MMBtu <sup>4</sup>
Diesel Fuel (Construction Equipment) <sup>1</sup>	7,155	912
Diesel Fuel (Hauling & Vendor Trips) <sup>2</sup>	676	85
Other Petroleum Fuel (Worker Trips) <sup>3</sup>	540	59
<b>Total</b>	<b>8,371</b>	<b>1,056</b>

<sup>1</sup> Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment’s horse power, the equipment’s load factor, and the equipment’s fuel usage per horse power per hour of operation, which are all taken from CalEEMod outputs (see Appendix A), and from compression-ignition engine brake-specific fuel consumptions factors for engines between 0 to 100 horsepower and greater than 100 horsepower (USEPA 2018). Fuel consumed for all construction equipment is assumed to be diesel fuel.

<sup>2</sup> Fuel demand rate for hauling and vendor trips (cut material imports) is derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from “Trips and VMT” Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix A). The fuel economy for hauling and vendor trip vehicles is derived from the United States Department of Transportation (USDOT 2018). Fuel consumed for all hauling trucks is assumed to be diesel fuel.

<sup>3</sup> The fuel economy for worker trip vehicles is derived from USDOT National Transportation Statistics (24 miles per gallon) (USDOT 2018). Fuel consumed for all worker trips is assumed to be gasoline fuel.

<sup>4</sup> CaRFG CA-GREET 2.0 fuel specification of 109,786 British thermal units per gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (CARB 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 British thermal units per gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2015). Totals may not add up due to rounding.

Source: Appendix C

The above construction energy estimates represent a conservative estimate as the construction equipment used in each phase of construction were assumed to be operating every day of construction. Construction equipment would be maintained to all applicable standards as required, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is also reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. In addition, energy demand associated with project construction would be temporary and typical of similar utilities projects. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction and construction-related energy impact would be less than significant.

## Operation

During operation, the project would require approximately 78,314 kilowatt hours (kWh) of electricity per year to power the pump station at maximum capacity. The pipeline itself would not generate new demand for electricity.

Operation of the project would include routine inspections and maintenance of facilities, periodic testing, and emergency repairs. The pipelines would not require maintenance for the first few years after installation, after which would be visited once per year for maintenance. The pump station would require maintenance once per month during operation, with the emergency generator being tested once per month for approximately 30 minutes at a time. The operation of the emergency generator to test its function as well as vehicle trips by maintenance staff would require the consumption of energy resources in the form of electricity and gasoline fuels. However, electricity and fuel consumption would not be wasteful, inefficient, or unnecessary because maintenance activities would only occur monthly for pump station operation, and such visits could be combined

with existing maintenance trips CAWD conducts to its existing infrastructure in the area. Therefore, operational energy impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

As mentioned above, SB 100 mandates 100 percent clean electricity for California by 2045. Because the proposed project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Additionally, the project area is served by Monterey Bay Community Power (MBCP), which provides carbon-free electricity (MBCP 2019). CAWD has not adopted specific renewable energy or energy efficiency plans with which the project could comply. Nonetheless, the project would not conflict with or obstruct the State plan for renewable energy; therefore, no impact would occur.

**NO IMPACT**

# 7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

The San Andreas Fault system, which is the most active fault system in California, runs approximately 20 miles to the east of the project site. Two other active faults, the Palo Colorado-San Gregorio Fault zone and the Monterey Bay-Tularcitos Fault zone, also occur in the county (Monterey County Office of Emergency Services 2020). From 2007 to 2014, Monterey County experienced 47 earthquakes (County of Monterey 2015a). Earthquakes are classified by magnitude; magnitudes up to 5.9 may be felt but cause only minor damage (USGS 2020). Research by the USGS reported that the San Andreas Fault has a 22 percent probability of a magnitude 6.7 or greater earthquake by 2043, at which could cause structural damage (USGS 2016).

The project site could be subject to seismic ground shaking during an earthquake of this magnitude from the San Andreas Fault, or any other active fault in the region. The proposed project would involve the construction of sewer pipelines and a pump station on the project site. Design and construction of the proposed project would conform to the current seismic design provisions of the California Building Code (CBC). While the project would be susceptible to seismic activity given its location within a seismically active area, the project would be required to minimize this risk, to the extent feasible, through the incorporation of applicable CBC standards. A large seismic event, such as a fault rupture, seismic shaking, or ground failure, could result in breakage of the proposed pipelines, failure of joints, and/or underground leakage from the pipelines. In the event an earthquake compromised any project component during operation, CAWD would temporarily shut-off the water supply and conduct emergency repairs as soon as possible. Therefore, the project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking. Impacts related to fault rupture and seismic ground shaking would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project site is not located within a liquefaction zone (California Geological Survey [CGS] 2020). The project would not involve any activities (such as fracking or mining) that could trigger an earthquake that would in turn lead to damage from liquefaction. Therefore, the project would not directly or indirectly cause potential adverse effects related to seismic ground failure or liquefaction. Impacts related to seismic ground failure and liquefaction would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project site is not located in an earthquake-induced landslide hazard zone (CGS 2020); however, the project site is located near hillside areas which may have some risk of landslides. The proposed pipeline would be located within existing paved roadways that are not steeply sloped, and the pump station site is in a flat area with elevations ranging from approximately 20 to 21 meters above sea



level. Therefore, landslides are not expected within the project site. In addition, the project does not include habitable structures and would therefore not expose people to loss, injury, or death involving landslides. Additionally, implementation of the project would not exacerbate the existing risk of earthquake-induced landslides in the immediate vicinity because the project would not directly result in a seismic event or destabilize soils prone to landslide. In the event an earthquake compromised any project component due to landslides during operation, CAWD would temporarily shut-off the system and conduct emergency repairs. Therefore, because the project site is not located in an earthquake-induced landslide hazard zone and the project would not introduce new infrastructure to the site that would exacerbate landslide hazards, the proposed project would not directly or indirectly cause potential adverse effects involving earthquake-induced landslides. Impacts related to landslides would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. Construction of the proposed pipeline would require trenching within existing paved roadways, which have been previously disturbed in conjunction with construction of Carmel Valley Road. No significant erosion or loss of topsoil would occur from pipeline construction and operation because the project would repave Carmel Valley Road and other connecting roads and restore any unpaved road shoulders upon completion of pipeline construction.

Construction of the proposed pump station would occur on currently undeveloped land, which could result in some soil erosion during ground disturbing activities. Compliance with Monterey County Code (MCC) Chapter 16.12, *Erosion Control*, would require the project to prepare an Erosion Control Plan and minimize runoff from the project site. In addition, construction would require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit and the submittal a Stormwater Pollution Prevention Plan (SWPPP) pursuant to MCC Chapter 16.14, *Urban Stormwater Quality Management and Discharge Control*. The SWPPP is intended to minimize the amount of sediment and other pollutants associated with construction sites which are discharged in stormwater runoff. The SWPPP would include BMPs for erosion control, such as preventing runoff from unprotected slopes, keeping disturbed areas to a minimum, and installing check berms and desilting basins during construction activities, as necessary. With adherence to the contractor specifications and required SWPPP, potential adverse impacts associated with erosion and loss of topsoil would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*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?*

Although the proposed project would be located in a seismically active area, the project is not located in an earthquake-induced landslide hazard zone or liquefaction zone (CGS 2020). As discussed under item (b) above, the proposed pipeline would be installed within existing, paved rights-of-way. In addition, trenched areas would be repaved and essentially returned to existing conditions following construction completion. The proposed pump station would be located on an undeveloped, flat parcel of land located adjacent to an existing golf course. The pump station would not be constructed on or adjacent to a hillside or other unstable natural feature. In addition, in

accordance with MCC Section 16.08.110, *Permit—Soil engineering and engineering geology reports*, the project would be required to furnish a soil engineering and geology report that would include conclusions and recommendations for grading procedures and design criteria given the site’s geologic conditions, which would inform project design and permit requirements. Therefore, the proposed project is not anticipated to significantly affect soil stability or increase the potential for local or regional landslides or liquefaction. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project site contains soils composed of channery loam, fine sandy loam, channery clay loam, and fine sand with moderately high to very low infiltration rates (U.S. Department of Agriculture 2020). Due to the clay content of the soils, there is potential for expansive soils to occur on-site. However, as discussed under item (c) above, the project would require the completion of a soil engineering and geology report prior to the issuance of a grading permit. The investigation would contain recommendations to minimize potential impacts for expansive soils, which would be implemented during project construction. Additionally, as described under *Project Description*, all pipeline trenches would be backfilled with native soils, crushed miscellaneous bases, or cement slurry, which would meet proper compaction and shear strength requirements established in the MCC Chapter 15.24, *County Service Areas—Sewage System*. The use of select bedding material and approved trench soil material would prevent impacts from expansive soil along the pipeline alignment. The proposed project would also be designed and constructed to meet CBC requirements. In addition, the proposed project would not add residential or commercial structures and there would be no residents, visitors, or permanent on-site employees associated with the project; therefore, the proposed project would not expose people to risks related to expansive soils. As a result, the project would not create substantial direct or indirect risks to life or property as a result of expansive soil, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

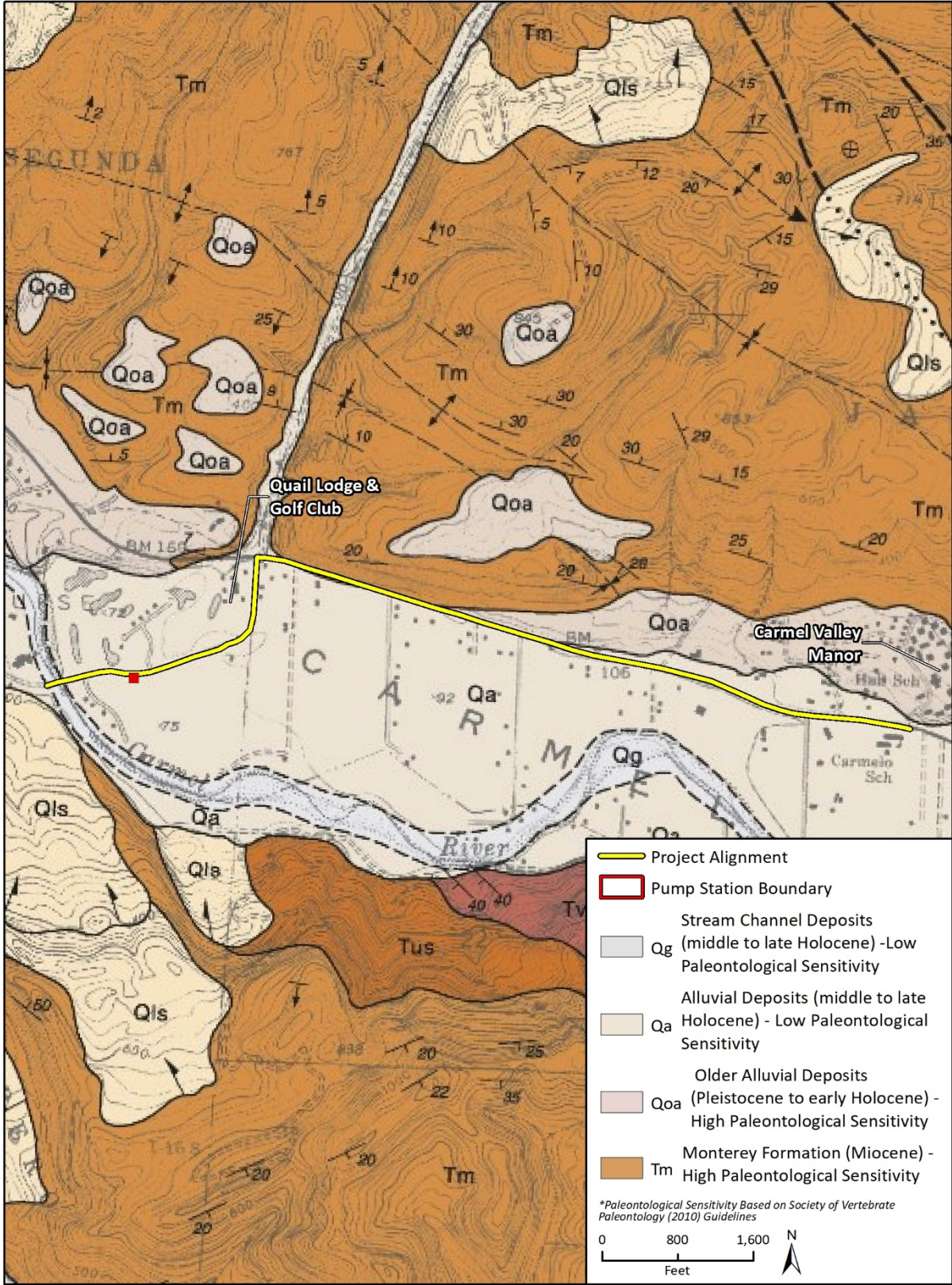
The proposed project would install sewer pipelines to extend the service area of CAWD and would not include the construction of septic tanks or alternative wastewater disposal systems. No impact would occur.

**NO IMPACT**

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

The paleontological sensitivity of the geologic units underlying the project site was evaluated based on a desktop review of existing data, including geologic maps, published literature, and online fossil locality and collections databases, and is shown in Figure 6. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

**Figure 6 Paleontological Sensitivity of the Project Site**



Imagery provided by Microsoft Bing and its licensors © 2020.  
 Geologic Map provided by Dibble and Minch, "Geologic map of the Monterey and Seaside quadrangles, Monterey County, California", 2007.

Fig X Project Geology and Paleontological Sensitivity

The Society of Vertebrate Paleontology (SVP) has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources (SVP 2010). This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

The project site is situated on the Monterey Peninsula in the Coast Ranges geomorphic province (CGS 2002). The surface geology of the project site is mapped as younger Quaternary (middle to late Holocene) stream channel deposits (Qg), middle to late Holocene alluvial deposits (Qa), older Quaternary (Pleistocene to early Holocene) alluvial deposits (Qoa), and Miocene Monterey Formation (Tm) (Dibblee and Minch 2007). Middle to late Holocene stream channel deposits (Qg) consist of gravel and sand of the modern Carmel River and are mapped only at the project area's intersection with the Carmel River in the western portion of the project area. Middle to late Holocene alluvial deposits (Qa) consist of unconsolidated, poorly-sorted gravel, sand, and silt of valley areas and floodplains and are mapped along most of the project area. Pleistocene to early Holocene alluvial deposits (Qoa) consist of more heavily dissected alluvial deposits and are present along the northern edge of the central and eastern portions of the project area along the base of the neighboring hillsides. Miocene Monterey Formation (Tm), consists of pale buff to white fine-grained deposits, with dark brown to black siliceous laminations and common fossils (Berndmeyer et al. 2012) and is present along the intersection of Carmel Valley Road and Valley Greens Drive, extending outside of the project area to the north in the neighboring hills.

Middle to late Holocene (e.g., Qg, Qa) deposits are typically too young (i.e., less than 5,000 years old) to preserve paleontological resources and are determined to have a low paleontological resource potential according to SVP (2010) standards. However, at an indeterminate depth within the project area, middle to late Holocene deposits (e.g., Qg, Qa) may grade downward into Pleistocene and early Holocene deposits (i.e., greater than 5,000 years old) and/or may unconformably overlie Miocene Monterey Formation (Tm). Accurately assessing the boundaries between middle to late Holocene units and Pleistocene and early Holocene units is generally not possible without site-specific stratigraphic data, some form of radiometric dating, or fossil analysis; however, older alluvial deposits are likely present at very shallow depths (i.e., less than five feet below ground surface) in areas mapped as younger alluvium (Qg, Qa) based on their proximity to older alluvial deposits (Qoa) exposed at the surface along the base of the nearby hills adjacent to the project area. Numerous fossil localities have been recorded from Pleistocene to early Holocene alluvial deposits throughout the Coast Ranges of California and have yielded fossil camel, horse, ground sloth, whale, dolphin, fish, and shark (Jefferson et al. 2010; Woodring et al. 1946; Paleobiology Database 2020). As a result, Pleistocene to early Holocene older alluvial deposits (Qoa), whether at the surface or at depth, are assigned a high paleontological resource potential. Additionally, numerous vertebrate localities have also been documented from the Miocene Monterey Formation (Tm) from the Coast Ranges of California, which have yielded specimens of large sea turtle, whale, dolphin, sea lion, shark, sea cows, desmostylians, fish, birds, and many other fauna (Bramlette 1946; Koch et al. 2004; Paleobiology Database 2020). Therefore, the Monterey Formation (Tm) is also assigned a high paleontological resource potential.

A review of the museum records maintained in the University of California Museum of Paleontology (UCMP) online collections database did not result in records of vertebrate fossil localities within the project boundary; however, locality V6279 was reported from Miocene Monterey Formation (Tm) in an unspecified location along Carmel Valley Road, which yielded pinniped (seal) limb bone fragments (UCMP 2020).

As proposed, project ground disturbance would reach a maximum depth of four to eight feet during open cut trenching for the gravity sewer and force main pipeline and approximately 25 feet during jack and bore horizontal drilling for the gravity pipeline at the intersection of Carmel Valley Road and Valley Greens Drive.

Most of the proposed project activity would be to install new wastewater infrastructure and would require ground disturbance of previously disturbed areas. This activity would not result in any potential impacts to paleontological resources. However, portions of the site are undeveloped (e.g., the pump station site) or would expand ground disturbance beyond the limits of previously disturbed areas. If native (i.e., previously undisturbed) sediments or geologic units with a high paleontological sensitivity (Qoa and Tm units shown on Figure 6) at the surface and shallow subsurface are disturbed, impacts to paleontological resources could occur. Construction activities may result in the destruction, damage, or loss of undiscovered paleontological resources. Therefore, impacts to paleontological resources would be potentially significant. Implementation of Mitigation Measure GEO-1 during project construction would reduce potential impacts related to paleontological resources to a less than significant level by providing for the recovery, identification, and curation of previously unrecovered fossils. Impacts would be less than significant with mitigation.

### **Mitigation Measure**

Implementation of the following measure would reduce potential impacts to paleontological resources to a less than significant level:

#### *GEO-1 Paleontological Resources Monitoring*

Prior to the commencement of project construction, a qualified paleontological monitor (i.e., a paleontologist who meets the SVP [2010] standards as a Paleontological Resource Monitor) shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of intact (i.e., previously undisturbed) Qoa and Tm geologic units, located along the western half of the proposed pipeline alignment along Carmel Valley Road. Monitoring shall be supervised by a Qualified Paleontologist (i.e., a paleontologist who meets the SVP [2010] standards as a Qualified Professional Paleontologist).

Full-time monitoring shall be conducted for all ground-disturbing activities, excluding jack and bore horizontal drilling, that impact native previously undisturbed geologic units mapped at the surface as Pleistocene and early Holocene older alluvium (Qoa) and Miocene Monterey Formation (Tm), which have a high paleontological sensitivity. Additionally, initial part-time monitoring (i.e., spot-checking) shall be conducted for all ground-disturbing activities, excluding jack and bore horizontal drilling, that impact previously undisturbed geologic units mapped at the surface as middle to late Holocene stream channel deposits (Qg) and middle to late Holocene alluvial deposits (Qa) to check for the presence of geologic units of high sensitivity (i.e., Pleistocene and early Holocene older alluvium [Qoa] and Miocene Monterey Formation [Tm]). If Pleistocene and early Holocene older alluvium (Qoa) and Miocene Monterey Formation (Tm) are observed at depth, then full-time monitoring shall be conducted. Ground-disturbing activities that impact previously disturbed sediments only do not require paleontological monitoring. Additionally, jack and bore horizontal drilling does not require monitoring; however, spoils from these sediments should be spot-checked for paleontological resources.



The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time or part-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the UCMP). Curation fees are the responsibility of the project owner.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to CAWD. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

## 8 Greenhouse Gas Emissions

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

Project implementation would generate greenhouse gas (GHG) emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to climate change. In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented Assembly Bill (AB) 32, the “California Global Warming Solutions Act of 2006.” AB 32 codifies the statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed SB 32 into law, which requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing the CARB to ensure that GHGs are reduced to 40 percent below 1990 levels by 2030.

On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e) by 2030 and two MT of CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the state.

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

## Significance Thresholds

The State of California, MBARD, and County of Monterey have not adopted GHG emissions thresholds. Where the MBARD is the lead agency, it has adopted a threshold of 10,000 MT of CO<sub>2</sub>e per year for stationary source projects or compliance with an adopted GHG Reduction Plan/Climate Action Plan (MBARD 2016). However, the MBARD does not have formally adopted thresholds for projects where it is not the lead agency.

Since the MBARD (formerly known as the Monterey Bay Unified Air Pollution Control District [MBUAPCD]) has not adopted thresholds, it encourages lead agencies to consider a variety of metrics for evaluating GHG emissions and related mitigation measures as they best apply to the specific project (MBUAPCD 2016). The MBARD has recommended using the adopted San Luis Obispo Air Pollution Control District (SLOAPCD) quantitative threshold for land use projects. The SLOAPCD is the air district immediately south and adjacent to the MBARD. The use of GHG thresholds developed by the adjoining SLOAPCD is considered appropriate by the MBARD because of the broad similarities between the two adjacent air basins. The NCCAB comprises the counties of Santa Cruz, Monterey and San Benito, with a substantial portion of the air basin located within Santa Cruz and Monterey Counties. The portion of the South Central Coast Air Basin that is managed by the SLOAPCD consists of San Luis Obispo County, which is located immediately south of and adjacent to NCCAB. The areas managed by the two air districts, SLOAPCD and MBARD, are located in the central coast region of California and have generally similar levels of urbanization and similar economies that include agriculture, forestry, fishing; utilities; recreation; educational services; and construction. Given the similarities between the two regions and direction from the MBARD, CAWD has determined that the thresholds set forth by the SLOAPCD are appropriate to use for the project.

The SLOAPCD designed its thresholds to achieve consistency with the statewide 2020 GHG reduction target set by AB 32 (SLOAPCD 2012) and has not yet updated the thresholds to achieve consistency with the statewide 2030 GHG reduction target set by SB 32, which requires that the State's 2030 emissions be reduced to 40 percent below 1990 emissions levels.

The project would be operational by 2021. Because emissions associated with the project would occur primarily in the years after 2020, to evaluate the project's impact, CAWD developed a conservative bright-line threshold that is consistent with the direction provided by SB 32. According to SB 32, the State's GHG emissions in 2030 should be 40 percent below 1990 levels. Using the existing SLOAPCD bright-line threshold of 1,150 MT of CO<sub>2</sub>e per year and the relationship between the targets set forth in AB 32 and SB 32, a bright-line threshold for year 2030 was calculated at 690 MT of CO<sub>2</sub>e per year<sup>3</sup>. This threshold is a linear interpolation between the 2020 and 2030 targets and would ensure that the project would be consistent with the updated statewide GHG reduction targets.

## Methodology

Project emissions were estimated using the Roadway Construction Emission Model and CalEEMod. Emission estimates are based on the assumptions outlined in Section 3, *Air Quality*. Calculations of carbon dioxide, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects. The analysis focuses on carbon monoxide, methane, and nitrous oxide because these comprise 98.9 percent of all GHG emissions by volume and are the GHG emissions

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<sup>3</sup> The threshold was calculated as a 40 percent reduction in the bright-line threshold meant to achieve 2020 targets (1,150 MT of CO<sub>2</sub>e per year\*0.6 = 690 MT of CO<sub>2</sub>e per year). This approach is considered by the Association of Environmental Professionals in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (2016).



that the project would emit in the largest quantities (Intergovernmental Panel on Climate Change 2007). Calculations are based on the methodologies discussed in the CAPCOA (2008) *CEQA and Climate Change* white paper.

### *Construction Emissions*

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and through combustion of diesel and gasoline in on-road construction vehicles and in the commute vehicles of construction workers. Smaller amounts of GHGs are also emitted indirectly through the energy use embodied in any water use for fugitive dust control and lighting for construction activity. Every phase of the construction process, including demolition, grading, paving, and building, emits GHG emissions in volumes proportional to the quantity and type of construction equipment used. Heavier equipment typically emits more GHGs per hour of use than lighter equipment due to greater fuel consumption and engine design.

Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* technical advisory, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA 2008). The Association of Environmental Professionals (2016) Climate Change Committee white paper *Beyond Newhall and 2020* recommends evaluating construction emissions using one of two methods:

**Using Best Management Practices (BMPs).** Construction-related emissions would be less than significant if a project implements all feasible BMPs, including using alternatively-fueled vehicles, reducing worker trips, and sourcing construction materials from local sources when possible (without substantial cost implications).

**Amortizing Construction Emissions over the Operational Lifetime.** Construction-related emissions are quantified and amortized over the lifetime of a project. The amortized construction emissions are added to the operational emissions to calculate the total annual emissions. If the annual emissions are below quantitative thresholds, construction-related GHG emissions would be less than significant.

The SLOAPCD has recommended amortizing construction-related emissions over a 25-year period for non-residential projects in conjunction with a project’s operational emissions (SLOAPCD 2012). In accordance with the SLOAPCD’s recommendation, GHG emissions from project construction were amortized over a 25-year period and added to annual operational emissions to determine the proposed project’s total annual GHG emissions over the life of the project.

### *Operational Emissions*

CalEEMod calculates operational emissions of carbon dioxide, methane, and nitrous oxide associated with energy use, area sources, waste generation, water use and conveyance. CalEEMod also calculates emissions of carbon dioxide and methane generated by project-generated vehicle trips (i.e., mobile sources). Because CalEEMod does not calculate nitrous oxide emissions from mobile sources, emissions were quantified using guidance from the CARB and the EMFAC2017 Emissions Inventory for the Monterey County region for the year 2030 (the next State milestone target year for GHG emission reductions) using the EMFAC2011 categories (CARB 2018, 2019; see Appendix D for calculations). It was assumed that all operational vehicle trips to the site would be

gasoline (passenger and light duty trucks) fueled vehicles and that approximately 12 maintenance trips by CAWD staff would occur per year.

Emissions from energy use include electricity and natural gas use. Because CalEEMod does not provide an appropriate proxy for the pump station, these energy emissions were calculated separately using CalEEMod energy emissions factors for PG&E as adjusted for the 2030 Renewable Portfolio Standard requirement (see Table 8). Further, it was conservatively assumed that electricity is provided by PG&E, although all electrical customers are auto-enrolled with the MBCP, which provides carbon neutral energy. MBCP provides electricity to 97 percent of accounts in its service area (MBCP 2019).

**Table 8 PG&E Energy Intensity Factors**

	2009 (lbs/MWh)	2030 (lbs/MWh) <sup>2</sup>
Percent procurement	14% <sup>1</sup>	60%
Carbon dioxide	641.35	298.35
Methane	0.029	0.014
Nitrous oxide	0.006	0.003

lbs/MWh = pounds per megawatt-hour

<sup>1</sup> Source: California Public Utilities Commission 2011

<sup>2</sup> Renewable Portfolio Standard goal established by SB 100

Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kWh (CAPCOA 2017). PG&E would serve the project and, therefore, PG&E's specific energy intensity factors (i.e., the amount of carbon dioxide, methane, and nitrous oxide per kWh) are used in the calculations of GHG emissions. The energy intensity factors included in CalEEMod are based on 2009 data by default at which time PG&E had only achieved a 14.1 percent procurement of renewable energy. Per SB 100, the statewide Renewable Portfolio Standard Program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030. To account for the continuing effects of the Renewable Portfolio Standard, the energy intensity factors included in CalEEMod were reduced based on the percentage of renewables reported by PG&E. PG&E energy intensity factors that include this reduction are shown above in Table 8.

The purpose of the proposed project is to extend the existing wastewater collection system to residents who currently use septic systems. On-site septic systems use microbial processes to eliminate organic wastes and nutrients such as nitrogen, which contributes to GHG emissions due to the carbon dioxide, methane, and nitrous oxide released as the wastes breakdown. The new wastewater collection system would be transported to a CAWD wastewater treatment plant that uses anaerobic digesters that use microbial processes for treatment. An existing septic tank use was modeled using CalEEMod to consider the existing CO<sub>2</sub>e per year produced to compare with emissions of the CAWD wastewater treatment plant. These separate treatment scenarios are presented in Appendix E.

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

### Construction Emissions

Project construction would generate GHG emissions from the operation of heavy equipment, motor vehicles, and worker trips to and from the site. Construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project because the total construction period would only last approximately five months. As shown in Table 9, emissions from project construction would be approximately 265 MT of CO<sub>2</sub>e total over the entire construction period, or approximately 10.6 MT of CO<sub>2</sub>e per year when amortized over a 25-year period.

**Table 9 Estimated Construction GHG Emissions**

<b>Emission Source</b>	<b>Project Emissions (MT/year CO<sub>2</sub>e)</b>
Pipeline	179.3
Pump Station 2020	39.0
Pump Station 2021	46.9
<b>Total Construction Emissions</b>	<b>265.2</b>
<b>Total Per Year Amortized over 25 Years</b>	<b>10.6</b>

MT = metric tons, CO<sub>2</sub>e = carbon dioxide equivalents

See Appendix A for CalEEMod worksheets.

### Operational Emissions

In addition to construction emissions, operation of the proposed project would generate GHG emissions from electricity usage and maintenance activities. As discussed in Section 6, *Energy*, the pump station would require approximately 78,314 kWh of electricity per year for operation. The pipeline itself would not generate new demand for electricity.

Maintenance activities would occur monthly for the pump station, requiring approximately 12 vehicle round trips by maintenance staff per year. During maintenance operations, the backup generator would be tested, generating emissions of 0.1 MT CO<sub>2</sub>e per year. The pipelines would not require maintenance for the first few years after installation, after which would be visited once per year for maintenance. Mobile source emissions of N<sub>2</sub>O would be less than 0.001 MT of CO<sub>2</sub>e per year.

### Combined Annual Emissions

Table 10 summarizes the combined annual emissions of GHGs, including construction and operation of the pump station and sewer pipeline. Combined construction and operational GHG emissions would be approximately 10.6 MT of CO<sub>2</sub>e per year (see Appendix A for CalEEMod worksheets).

**Table 10 Combined Annual Emissions of Greenhouse Gases**

<b>Emission Source</b>	<b>Annual Emissions (MT of CO<sub>2</sub>e)</b>
<b>Amortized Construction</b>	10.6
<b>Operational</b>	
Area	< 0.1
<b>Energy</b>	
Pump Station	10.7
Backup Generator	0.1
<b>Mobile</b>	
Carbon dioxide and methane	< 0.1
Nitrous oxide	0.2
<b>Total</b>	<b>21.6</b>
Threshold of Significance	690
<b>Exceed Threshold?</b>	<b>No</b>

See Appendix A for CalEEMod worksheets and Appendix D for nitrous oxide emissions calculation sheets.

As discussed above, the proposed project would have a significant impact related to GHG emissions if project-related emissions would exceed 690 MT of CO<sub>2</sub>e per year. The project’s combined construction and operational GHG emissions would be approximately 22 MT of CO<sub>2</sub>e per year; therefore, the proposed project would not exceed the threshold.

Additionally, the purpose of the proposed project is to extend the existing wastewater collection system to residents who currently use septic systems. Based on CalEEMod modeling results, anaerobic digestors with biogas combustion for cogeneration emit fewer GHG emissions than septic systems on a per-gallon basis. Therefore, converting treatment of wastewater from septic systems to the CAWD wastewater treatment plant would decrease emissions from treatment of wastewater generated by these properties. Impacts related to construction and operational GHG emissions would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

As described in Section 6, *Energy*, SB 100 mandates 100 percent clean electricity for California by 2045. Because the proposed project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100. Project emissions due to vehicle trips would be minimal and would be below the threshold of significance designed to be consistent with the 40 percent reduction from 1990 emissions levels, per SB 32. CAWD does not have a qualified GHG reduction plan; therefore, there are no local GHG reduction plans that would apply to the proposed project. Nonetheless, the project would be consistent with the 2017 Scoping Plan and would not conflict with SB 32 emissions targets. Therefore, the project would not conflict

with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Given the above analysis, impacts related to GHG emissions would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 9 Hazards and Hazardous Materials

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

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

Construction of the project would temporarily increase the transport and use of hazardous materials in the project area through the operation of vehicles and equipment. Such substances include diesel fuel, oil, solvents, and other similar materials brought onto the construction site for use and storage during the construction period. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities which would pose a significant hazard to the public or construction workers themselves. Furthermore, project construction would require the excavation and transport of paving materials (e.g., asphalt, concrete, roadbed fill materials) and soils which could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). All such paving, roadbed materials, and soils removed during construction would be transported and disposed of in accordance with applicable codes and regulations to ensure no significant hazard to construction workers or the surrounding community would occur.

Operation of the project would involve the conveyance of wastewater and would not require the use, storage, or disposal of hazardous materials. Although, the project would include a connection for a natural gas-powered back-up generator in the event of an electrical service outage or other disruption to the pumps, the use of the generator would be temporary and would not require the storage of fuel on site. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

The use, transport, and storage of hazardous materials during construction of the project (e.g., diesel fuel, oil, solvents, and other similar materials) could introduce the potential for an accidental spill or release to occur. As discussed under item (a) above, operation and maintenance of the project would not involve the routine transport, use, or disposal of hazardous materials. The backup generator would be powered by natural gas, which does not have the potential to leak into the soil similar to diesel fuel. Therefore, potential impacts are limited to the construction period.

The presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities such as grading, and excavation could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. Hazardous materials used during project construction would be disposed of offsite in accordance with all applicable laws and regulations, including but not limited to the California Building and Fire Codes, as well regulations of the federal and State Occupational Safety and Health Administrations. Therefore, impacts related to the release of hazardous materials due to reasonably foreseeable upset or accident conditions during project construction would be less than significant.

Operation of the project would involve the conveyance of wastewater and would not require the use, storage, or disposal of hazardous materials. Although, the project would include a connection for natural gas-powered back-up generator in the event of an electrical service outage or other disruption to the pumps, the use of the generator would be temporary and would not require the storage of fuel on site. Furthermore, the backup generator would be powered by natural gas, which



does not have the potential to leak into the soil similar to diesel fuel. Impacts related to the release of hazardous materials due to reasonably foreseeable upset or accident conditions during project operation would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

All Saints Day School and Carmelo School are located at 8060 and 8460 Carmel Valley Road, respectively (immediately south of the pipeline alignment) and Carmel Valley High School is located at 27335 Schulte Road (680 feet south of the pipeline location). As described under items (a) and (b) above, an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels could occur during project construction. Hazardous materials used during project construction would be disposed of offsite in accordance with all applicable laws and regulations, including but not limited to the California Building and Fire Codes, as well regulations of the federal and State Occupational Safety and Health Administrations. Therefore, potential impacts associated with an accidental emission or release of hazardous materials in proximity to a school would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List. The California Department of Toxic Substance Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List (DTSC 2020a). The analysis for this section included a review of the following resources on February 20, 2020 to provide hazardous material release information:

- **USEPA**
  - Comprehensive Environmental Response, Compensation, and Liability Information System/Superfund Enterprise Management System/Envirofacts database search (USEPA 2020a, 2020b)
- **State Water Resources Control Board (SWRCB)**
  - GeoTracker search for leaking underground storage tanks and other cleanup sites (SWRCB 2020)
- **DTSC**
  - EnviroStor search for hazardous facilities or known contamination sites (DTSC 2020b)
  - Cortese List of Hazardous Waste and Substances Sites (DTSC 2020a)
  - Cleanup Site and Hazardous Waste Facilities Database

Based on review of these databases, it was determined that the pipeline alignment and pump station location are not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the Carmel Valley Manor site immediately to the

north of the pipeline alignment is listed by the SWRCB as a leaking underground storage tank (LUST) cleanup site. The site was listed in 1999 for motor oil and fuel contamination to soil and groundwater and was closed in November of 2007 (SWRCB 2020). No additional listed sites were identified within 0.25 mile of the project site. Therefore, this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The closest public or private airport to the project site is the Monterey Regional Airport, located approximately four miles northwest of the project site. The project site is not located within an airport land use plan or within two miles of an airport. As a result, the project would have no impact related to safety hazards for people residing or working in the project area due to proximity to an airport.

**NO IMPACT**

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

The County of Monterey has an Emergency Operations Plan that establishes policies, procedures, and identifies responsibilities of key officials and agencies to ensure the effective management of emergencies and disasters within the Monterey County Operational Area. The plan provides information on the County emergency management structure, the protocols for when the Monterey County Emergency Operations Center is activated and the procedures for notification and activation. The Emergency Operations Plan does not include policies specific to the project site (County of Monterey 2014); therefore, this analysis focuses on the proposed project's potential to generally interfere with emergency response activities in the project vicinity.

Construction of the proposed project may require temporary lane or road closures that could impede emergency response. As described in Section 17, *Transportation*, a Traffic Control Plan (TCP) (required as part of the encroachment permit approval process through the County of Monterey) would implement safe and effective traffic control measures at the construction sites and would address any potential interference with emergency response and/or evacuation plans. Operation of the pipelines would not interfere with emergency response because they would be entirely underground, and the aboveground pump station would be located in an area of open space that does not obstruct access to any roadways or structures. Potential impacts related to the impairment of implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

According to the California Department of Forestry and Fire Protection (CAL FIRE), the pipeline alignment along Carmel Valley Road is immediately adjacent to High and Very High Fire Hazard Severity Zones (FHSZ) to the north in a State Responsibility Area and Very High FHSZs to the south in a Local Responsibility Area (CAL FIRE 2007). Although the pump station is not located within a Very High FHSZ it would be located adjacent to open space associated with the nearby golf course. The

nearest fire station, Monterey County Regional Fire District, Mid Valley Station #5, is located at Carmel Valley Manor at the eastern terminus of the pipeline alignment.

During construction activities, the use of spark-producing construction machinery within or adjacent to areas of moderate and high fire hazard could potentially create hazardous fire conditions and expose people to risk of wildland fires. However, California Public Resources Code (PRC) Section 4442 mandates the use of spark arrestors, which prevent the emission of flammable debris from exhaust, on earth-moving and portable construction equipment with internal combustion engines operating on any forest-covered, brush-covered, or grass-covered land, such as the pump station site. Therefore, compliance with applicable regulations would ensure impacts related to potential risk of loss, injury, or death associated with wildland fires are less than significant. Operation of the project would not increase the population or introduce any project elements that would potentially increase the risk of loss, injury, or death associated with wildland fires. Therefore, this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 10 Hydrology and Water Quality

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

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*
- 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 Central Coast hydrological region, within the Carmel Valley Alluvial Groundwater Basin. The nearest surface water body is the Carmel River, which the project crosses over near the western terminus of the pipeline alignment. The Monterey Peninsula area currently relies heavily on the Carmel River and Carmel Valley Aquifer located within the Carmel Valley Alluvial Groundwater Basin for its water supply (U.S. Bureau of Reclamation 2017). The Monterey Peninsula Water Management District (MPWMD) is the Groundwater Sustainability Agency for the Carmel Valley Alluvial Groundwater Basin. In the spring of 2016, the California Department of Water Resources agreed with the SWRCB determination that water in the basin flows through known and definite subterranean channels and is, therefore, not subject to Sustainable Groundwater Management Act (SGMA) requirements. As a result, there is no available groundwater sustainability management plan for this basin.

The project involves the construction of wastewater collection infrastructure to convey wastewater to the CAWD Wastewater Treatment Plant (WWTP). No groundwater supplies would be utilized for this project and groundwater recharge would not be reduced due to increased impervious surfaces due to the pipe installation being located within the existing paved right-of-way. The construction of the pump station would increase impervious surface by roughly 1,800 square feet. This would minimally reduce groundwater recharge and would not, therefore, substantially interfere with groundwater recharge.

Construction would occur within the right-of-way of Camel Valley Road and Valley Greens Drive, with the exception of the pump station site, which would occur on an undeveloped parcel located south of Valley Greens Drive. No groundwater was encountered during the geotechnical investigation for this project; therefore, construction activities are not anticipated to impact groundwater quality. The pump station would be a small (approximately 1,800 square feet of impervious surface) fully developed municipal site, equipped with a back-up generator; new electrical service; wet well with submersible wastewater pumps; miscellaneous other vaults, pipes, valves, etc.; odor control facilities; electrical and communications facilities; and surface improvements. CAWD or its contractor would be required to comply with water quality standards outlined in the NPDES Municipal General Permit for construction of the wastewater infrastructure, which would ensure that construction of the proposed sewer extension and pump station would not have adverse impacts to the water quality of the adjacent river or subbasin. In addition, during construction, the project must comply with Section 16.14.140 of the MCC, which states the project must meet best management practice guidance series requirements to control the discharge of pollutants to the maximum extent practicable, comply with the State construction general permit and eliminate non-stormwater discharges that are not in compliance with the NPDES permit. In addition, as described in Section 9, *Hazards and Hazardous Materials*, accidental leaks or accidental spills of hazardous materials that may occur during project construction would be cleaned up and disposed of in accordance with applicable regulations. Therefore, project construction would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

During operation of the project, the pipeline and pump station would convey wastewater to the CAWD WWTP. The pipeline would not require maintenance for the first few years after installation,

after which maintenance would occur annually. The pump station requires maintenance once per month during operation. The emergency generator at the pump station would be tested once per month for approximately 30 minutes at a time. In addition, the Overflow Emergency Response Plan ensures any accidental failures of the wastewater collection system facilities would be handled quickly and efficiently (CAWD 2020b). Therefore, the project would not violate any water quality standards or waste discharge requirements or substantially degrade surface or groundwater quality. Impacts are less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c.(i) 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 result in substantial erosion or siltation on- or off-site?*
- c.(ii) 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) 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 that would 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 project would consist of expanding the wastewater system through underground pipelines generally located within an existing paved public right-of-way with the exception of the pump station which would be located within an existing vacant lot adjacent to Valley Greens Drive. Development of the project would cross the Carmel River on Valley Greens Drive. The project would not alter the course of a stream or river as pipelines are proposed to be located within the existing paved right-of-way, crossing the Carmel River at County Bridge 500, and the pump station would be located adjacent to the right-of-way within a vacant lot.

Although construction activities for pipeline installation would involve possible trenching and other pipeline installation methods that would disturb both paved roadways and unpaved land within the project site, this disturbance would be temporary. All construction activities would be required to comply with Monterey County's Construction Site BMP Handbook and the Construction BMPs-Plan Sheet which would reduce impacts related to erosion, surface runoff, dust control, and waste/material management (County of Monterey 2015b). After construction, the project area would be restored to its original condition, and any drainage pattern within the right-of-way would be returned to existing conditions following project construction activities. Due to the location of the project being within the right-of-way, no substantial erosion or siltation would occur on or off site as a result of the project.

The development of the pump station would incrementally increase impervious surface in the immediate vicinity through the construction of a 1,600 square foot concrete slab surrounded by a chain-link fence with a roughly 200 square foot driveway. The area surrounding the proposed pump station would remain undeveloped open space. Development of the pump station would add minimal additional impervious surfaces and would not result in substantial erosion or siltation on or off site. The increase in impervious surfaces at the pump station site would incrementally increase

runoff flows in the area; however, runoff would continue to be directed to the existing stormwater drainage system on Valley Greens Drive and would be adequately handled by existing infiltrating vegetated swales located along Valley Greens Drive. The project would include a connection for a natural gas-powered back-up generator and in the event of an electrical service outage or other disruption to the pumps, the use of the generator would be temporary and would not require the storage of fuel on site. As mentioned in items (a) and (b) above, development and operation of the pump station would be required to comply with all applicable local regulations which would include implementation of BMPs and design features to control stormwater runoff quality. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c.(iv) 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 impede or redirect flood flows?*

The construction of the pipeline component of the project would take place within the public right-of-way. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, portions of the project pipeline alignment along Valley Greens Drive are location within a 100-year flood hazard area (Zone AE) with a base flood elevation of 76.79 feet. Because the pipeline would be located entirely underground, the pipeline would not risk release of pollutants due to project inundation. In addition, Monterey County Zoning Code Section 16.16.050(F) sets standards for utilities including that sanitary sewage systems are designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters. All pipelines would be undergrounded, designed to minimize or eliminate infiltration, and would not increase impervious surfaces in a manner which would impede or redirect flood flows.

The proposed pump station would be roughly 1,600 square feet of concrete slab surrounded by a chain-link fence with several individual above-ground components and an approximately 200 square foot driveway. The proposed pump station is also located within the 100-year flood hazard area (Zone AE). The Monterey County Zoning Code regulations for floodplains (Section 16.16) includes requirements for structures related to utilities located or constructed within flood hazard areas. The project would be required to follow all applicable zoning code requirements for construction of the pump station including anchoring of all permanent project components, constructing project components with materials and utility equipment resistant to flood damage, and elevating project components at least one foot above the base flood elevation of 76.79 feet (FEMA 2009). Implementation of existing requirements would reduce impacts to less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

See item (c)(iv) above. Though components of the project are located in a flood hazard area (Zone AE), regulations for development within this zone would reduce the risk of release of pollutants to less than significant. The project is not located in any tsunami or seiche zones and is located roughly five miles from the closest tsunami inundation area (County of Monterey 2016b).

**LESS THAN SIGNIFICANT IMPACT**



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

In September 2014, SGMA was enacted to provide a framework for sustainable management of groundwater supplies by local authorities, with a limited role for intervention when necessary to protect the resource. As mentioned previously, the MPWMD is the Groundwater Sustainability Agency for the Carmel Valley Alluvial Groundwater Basin. In the spring of 2016, DWR agreed with the SWRCB determination that water in the basin flows through known and definite subterranean channels and is, therefore, not subject to SGMA requirements. As a result, there is no sustainable groundwater management plan or water quality control plan for this basin. Therefore, no impact would occur.

**NO IMPACT**

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# 11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*a. Would the project physically divide an established community?*

The proposed pipeline would be located entirely below the ground surface within the existing public right-of-way and would not have the potential to physically divide an established community. In addition, the proposed pump station would not have the potential to physically divide an established community as it would be contained on an approximately 1,600-square foot site located south of Valley Greens Drive. Although the proposed pump station is located on an undeveloped parcel, it is located near the Quail Lodge and Golf Club, across from Hole 14 and adjacent to Hole 13, which is currently developed. Further, the project site is included in the Carmel Valley Master Plan, which is part of the Monterey County 2010 General Plan, and is not designated as a Special Treatment Area nor is envisioned for development (County of Monterey 2011). As a result, the proposed project would not physically divide an established community, and there is no impact.

**NO IMPACT**

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

The proposed project would be located within Monterey County. Per California Government Code 53091, building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. Therefore, the project is only evaluated for consistency with the Monterey County 2010 General Plan and the Carmel Valley Master Plan.

The proposed pipeline alignment would be constructed below roadway rights-of-way and would not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the project. The pump station would be consistent with the Residential Low Density land use classifications (County of Monterey 2011).

The proposed project would be consistent with the following applicable goals, policies, and objectives of the Carmel Valley Master Plan and Monterey County 2010 General Plan (County of Monterey 2011):

- **Policy CV-1.18:** Facilities classified as either Public/Quasi-Public or Special Use (such as schools, churches, hospitals, convalescent homes, rehabilitation centers, hospice facilities, emergency facilities, and public facilities such as community halls) may be considered in any land use category provided that they meet the following criteria:
  - a. Low visibility.
  - b. Safe and unobtrusive access away from pedestrian traffic areas.
  - c. Low noise impact on surrounding uses.
  - d. Development should follow a rural architectural theme with design review.
  - e. Conform to all other Plan requirements.
- **Policy CV-1.20:** Design (“D”) and site control (“S”) overlay district designations shall be applied to the Carmel Valley area. Design review for all new development throughout the Valley, including proposals for existing lots of record, utilities, heavy commercial, and visitor accommodations, but excluding minor additions to existing development where those changes are not conspicuous from outside of the property, shall consider the following guidelines:
  - a. Proposed development encourages and furthers the letter and spirit of the Master Plan.
  - b. Development either shall be visually compatible with the character of the valley and immediate surrounding areas or shall enhance the quality of areas that have been degraded by existing development.
  - c. Materials and colors used in construction shall be selected for compatibility with the structural system of the building and with the Monterey County General Plan Carmel Valley Master Plan October 26, 2010 – Amended as of February 12, 2013 Page, Carmel Valley Master Plan -5 appearance of the building’s natural and man-made surroundings.
  - d. Structures should be controlled in height and bulk in order to retain an appropriate scale.
  - e. Development, including road cuts as well as structures, should be located in a manner that minimizes disruption of views from existing homes.
  - f. Minimize erosion and/or modification of landforms.
  - g. Minimize grading through the use of step and pole foundations.
- **Policy LU-5.7:** Industrially designated areas shall be compatible with surrounding land uses.
- **Policy LU-1.11:** Development proposals shall be consistent with the General Plan Land Use Map designation of the subject property and the policies of this plan.
- **Policy PS-13.2:** All new utility lines shall be placed underground, unless determined not to be feasible by the Director of the Resource Management Agency.

As noted throughout this document, the project would result in no impact, less than significant impacts, or less than significant impacts with the incorporation of mitigation measures for all issue areas evaluated, including aesthetics, noise, and biological resources. As such, the project would be consistent with the above policies of the Carmel Valley Master Plan and Monterey County 2010 General Plan.

As a result, the proposed project would be consistent with the goals, policies, and objectives of the Carmel Valley Master Plan and the Monterey County 2010 General Plan, and would not conflict with underlying land use plan and zoning designations and the impact is less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

# 12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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 Conservation and Open Space Element of the Monterey County 2010 General Plan recognizes State classification and designation of mineral resource areas (County of Monterey 2010). According to Mineral Land Classification Maps prepared by the DOC, the project site is not underlain by a known mineral resource. Additionally, the proposed pipeline would be constructed in the existing rights-of-way along Carmel Valley Road and Valley Greens Drive and would not impact the availability of mineral resources in the vicinity of the pipeline alignment. The proposed pump station would be constructed on a vacant lot adjacent to and south of Valley Greens Drive on a site that is not underlain by a known mineral resource (DOC 1989). As such, construction and operation of the proposed project would not preclude the potential for future mineral recovery activities that may occur near the project site. In addition, the majority of land use and zoning designations in the vicinity of the project site are residential and commercial, which would not be compatible with mineral mining activities. Therefore, no impact associated with mineral resources would occur.

**NO IMPACT**

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# 13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Crocker 2007).

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called “A-weighting” is used to filter noise frequencies that are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the “A-weighted” levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A-weighted, and the abbreviation “dBA” identifies the A-weighted decibel.

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB increase is a 100-fold intensity increase, a 30 dB increase is a 1,000-fold intensity increase, etc. Similarly, a doubling of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the noise source would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA (increase or decrease); that a change of 5 dBA is readily perceptible; and that an increase or decrease of 10 dBA sounds twice (half) as loud (California Department of Transportation [Caltrans] 2013a).

### *Descriptors*

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level ( $L_{eq}$ ) and the community noise equivalent level (CNEL).

The  $L_{eq}$  is the level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example,  $L_{eq(1h)}$  is the equivalent noise level over a 1-hour period, and  $L_{eq(8h)}$  is the equivalent noise level over an 8-hour period.  $L_{eq(1h)}$  is a common metric for limiting nuisance noise, whereas  $L_{eq(8h)}$  is a common metric for evaluating construction noise.

The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional +5 dBA penalty to noise occurring during evening hours (i.e., 7:00 p.m. to 10:00 p.m.) and an additional +10 dBA penalty to noise occurring during nighttime hours (i.e., 10:00 p.m. to 7:00 a.m.). These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

There is no precise way to convert a peak hour  $L_{eq}$  to DNL or CNEL – the relationship between the peak hour  $L_{eq}$  value and the DNL/CNEL value depends on the distribution of traffic volumes during the day, evening, and night. However, in urban areas near heavy traffic, the peak hour  $L_{eq}$  is typically 2 to 4 dBA lower than the daily DNL/CNEL. In less heavily developed areas, such as suburban areas, the peak hour  $L_{eq}$  is often roughly equal to the daily DNL/CNEL. For rural areas with little nighttime traffic, the peak hour  $L_{eq}$  will often be 3 to 4 dBA greater than the daily DNL/CNEL value (SWRCB 1999). The project site is located in a rural area; therefore, the DNL/CNEL in the area would be approximately 3 to 4 dBA lower than the peak hour  $L_{eq}$ .

### *Propagation*

Sound from a small, localized source (approximating a “point” source) decreases or drops off at a rate of 6 dBA for each doubling of distance. Traffic noise is not a single, stationary point source of sound. Over a time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

### **Vibration**

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most



groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise may result in adverse effects, such as building damage, when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz). Vibration may also damage infrastructure when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

### *Descriptors*

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. Particle velocity is the velocity at which the ground moves. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the greatest magnitude of particle velocity associated with a vibration event. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2013b).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2018). Vibration significance ranges from approximately 50 VdB (the typical background vibration-velocity level) to 100 VdB, the general threshold where minor damage can occur in fragile buildings (FTA 2018). The general human response to different levels of groundborne vibration velocity levels is described in Table 11.

**Table 11 Human Response to Different Levels of Groundborne Vibration**

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

VdB = vibration decibels

Source: Federal Transit Administration 2018

## Regulatory Setting

CAWD does not provide noise thresholds for construction or operation activities; therefore, the Monterey County 2010 General Plan and MCC thresholds are described below. It should be noted that CAWD is not required to comply with Monterey County noise requirements, and CAWD, as Lead Agency, has elected to use the county's thresholds for this project.

The Monterey County 2010 General Plan contains a land use and noise compatibility matrix (shown in Table 12), which summarizes the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses. The pipeline alignment is adjacent to residential uses, a golf course, and commercial uses. According to the County’s noise standards shown in Table 12, ambient noise levels up to 60 dBA CNEL or less are normally acceptable for residential uses, which is the most stringent of the adjacent land uses to the pipeline alignment.

**Table 12 Land Use Noise Compatibility Matrix**

Land Use Categories	Community Noise Equivalent Levels (DNL or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential (Low-Density Single-Family, Duplex, Mobile Homes)	<60	55-70	70-75	75+
Residential (Multi-Family)	<65	60-70	70-75	75+
Transient Lodging (Hotels, Motels)	<65	60-70	70-75	75+
Schools, Libraries, Churches, Hospitals, Nursing Homes	<70	60-70	70-80	80+
Auditoriums, Concert Halls, Amphitheaters	N/A	<70	65+	N/A
Sports Arena, Outdoor Spectator Sports	N/A	<75	70+	N/A
Playgrounds, Neighborhood Parks	<70	67.5-75	72.5+	N/A
Golf Courses, Riding Stables, Water Recreation, Cemeteries	<75	70-80	N/A	80+
Office Buildings, Business Commercial and Professional	<70	67.5-77.5	75+	N/A
Industrial, Manufacturing, Utilities, Agriculture	<75	70-80	75+	N/A

Notes: N/A = Not Applicable (The County of Monterey has not established noise level ranges for these categories.)

**Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

**Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply or air conditioning will normally suffice.

**Normally Unacceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**Clearly Unacceptable:** New construction or development should generally not be undertaken.

Source: County of Monterey 2010

The following noise-related policies are provided in the Monterey County 2010 General Plan:

- Policy S-7.4: New noise generators may be allowed in areas where projected noise levels (Figure 10) are “conditionally acceptable” only after a detailed analysis of the noise reduction requirements is made and needed noise mitigation features are included in project design.
- Policy S-7.5: New noise generators shall be discouraged in areas identified as “normally unacceptable.” Where such new noise generators are permitted, mitigation to reduce both the indoor and outdoor noise levels will be required.
- Policy S-7.6: Acoustical analysis shall be part of the environmental review process for projects when:
  - Noise sensitive receptors are proposed in areas exposed to existing or projected noise levels (Figures 9 and 10) that are “normally unacceptable” or higher according to Table S-2 (“Land Use Compatibility for Community Noise”).
  - Proposed noise generators are likely to produce noise levels exceeding the levels shown in the adopted Community Noise Ordinance when received at existing or planned noise-sensitive receptors.
- Policy S-7.8: All discretionary projects that propose to use heavy construction equipment that has the potential to create vibrations that could cause structural damage to adjacent structures within 100 feet shall be required to submit a pre-construction vibration study prior to the approval of a building permit. Projects shall be required to incorporate specified measures and monitoring identified to reduce impacts. Pile driving or blasting are illustrative of the type of equipment that could be subject to this policy.
- Policy S-7.9: No construction activities pursuant to a County permit that exceed “acceptable” levels listed in Policy S-7.1 shall be allowed within 500 feet of a noise sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays, prior to completion of a noise mitigation study. Noise protection measures, in the event of any identified impact, may include but not be limited to:
  - Constructing temporary barriers, or
  - Using quieter equipment than normal.
- Policy S-7.10: Construction projects shall include the following standard noise protection measures:
  - Construction shall occur only during times allowed by ordinance/code unless such limits are waived for public convenience;
  - All equipment shall have properly operating mufflers; and
  - Lay-down yards and semi-stationary equipment such as pumps or generators shall be located as far from noise-sensitive land uses as practical.

The following policies are included in the Carmel Valley Master Plan (County of Monterey 1996), which is a supplement to the Monterey County 2010 General Plan:

- Policy 22.2.1.1 (CV): Where development is proposed in a conditionally acceptable noise environment, construction shall be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Multi-family housing proposed where the Ldn exceeds 60 dB shall provide a report per the

requirements of Title 24 of the California Administrative Code delineating how interior noise levels would be reduced to an Ldn (or CNEL) of 45 dB or less.

- Policy 22.2.4.1 (CV): Noise generating construction activities should be restricted to the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, where such noise would impact existing development. All construction equipment utilizing internal combustion engines shall be required to have mufflers which are in good condition. An exception to the above stated hours and days of operation is to be allowed for heavy equipment and other noise generating equipment operating to protect life and property in emergency conditions such as fire, flood or seismic emergencies.

Chapter 10.60 of the MCC enforces construction and operational noise regulations. Section 10.60.030 prohibits the operation of machinery that exceeds 85 dBA at 50 feet. MCC Section 10.60.040 limits nighttime noise to 45 dBA  $L_{eq}$  and 65 dBA  $L_{max}$  at 50 feet between 9:00 p.m. and 7:00 a.m.

The MCC does not include quantitative standards for operational groundborne vibration impacts.

### **Existing Noise Setting**

The primary noise sources in the project site vicinity are motor vehicles (e.g., automobiles, buses, and trucks) along Carmel Valley Road and Valley Greens Drive. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create sustained noise levels. Ambient noise levels are generally highest during the daytime and rush hour unless congestion slows traffic speeds substantially. Other sources of noise in the project vicinity include general conversations from passers-by activities associated with adjacent residential and commercial development.

To determine ambient noise levels at the project site, four 15-minute noise measurements were taken between 3:40 p.m. and 5:00 p.m. (evening peak hour) on February 25 and 26, 2020. Table 13 summarizes noise measurement activities and results, and Figure 7 shows the noise measurement locations. As shown in Table 13, measured ambient noise levels range from 59 to 76 dBA  $L_{eq}$ .

Figure 7 Sound Level Measurement Locations



**Table 13 Project Sound Level Monitoring Results**

Measurement Location	Measurement Location	Sample Times	Primary Noise Source	Approximate Distance to Primary Noise Source <sup>1</sup>	L <sub>eq[15]</sub> (dBA) <sup>2</sup>	L <sub>min</sub> (dBA)	L <sub>max</sub> (dBA)
1	Valley Greens Drive and Lake Place	2/25/2020 3:56 to 4:11 p.m.	Traffic on Valley Greens Drive	20 feet	58	37	79
2	Valley Greens Drive and Carmel Valley Road	2/25/2020 4:28 to 4:43 p.m.	Traffic on Carmel Valley Road	20 feet	76	47	88
3	Carmel Valley Road and Meadows Road	2/26/2020 3:49 to 4:04 p.m.	Traffic on Carmel Valley Road	20 feet	76	52	98
4	Carmel Valley Road and Los Arboles Drive	2/26/2020 4:43 to 4:58 p.m.	Traffic on Carmel Valley Road	35 feet	71	44	86

See Appendix F for noise monitoring data.

dBA = A-weighted decibels

<sup>1</sup>Approximate distance to roadway centerlines.

<sup>2</sup>The equivalent noise level (L<sub>eq</sub>) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement, the L<sub>eq</sub> was over a 15-minute period (L<sub>eq[15]</sub>).

Source: Rincon Consultants, Inc. field measurements on February 25 and 26, 2020, using ANSI Type II integrating sound level meter

## Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise-sensitive receivers generally include single- and multi-family residences, hotels, motels, schools, libraries, places of worship, hospitals, and nursing homes. While the County does not define specific noise-sensitive land uses, the County’s most stringent noise compatibility standards are for the following land uses: residential (low-density, single-family, duplex, mobile homes), residential (multi-family), transient lodging (hotels, motels), schools, libraries, churches, hospitals, and nursing homes. Noise-sensitive land uses in the area of the project site are predominantly residences along both Valley Greens Drive and Carmel Valley Road. The residential noise-sensitive receivers closest to the project site are single-family residences along Poplar Lane approximately 40 feet from the proposed pipeline alignment and single-family residences along Los Arboles Drive approximately 50 feet from the proposed pipeline alignment.

## Methodology

### Construction Noise

Construction noise was estimated using the Federal Highway Administration’s Roadway Construction Noise Model (RCNM). RCNM predicts construction noise levels for a variety of

construction operations based on empirical data and the application of acoustical propagation formulas. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile construction equipment are assessed from the center of the equipment activity area (e.g., construction site).

Typical construction projects have long-term noise averages that are lower than louder short-term noise events due to equipment moving from one point to another on the site, work breaks, and idle time. Additionally, due to the dynamic nature of a construction site, noise levels are calculated from the center of the activity. Thus, noise generated by pump station construction is evaluated from the center of the pump station site. To provide a conservative estimate of construction noise, the three loudest pieces of equipment that would be used during pump station construction (a backhoe, compactor, and paver) were modeled. The nearest residential receivers to the pump station location are located along Lake Place north of Valley Greens Drive at a distance of approximately 300 feet from the center of pump station construction activities. The hourly noise level at 300 feet from the center of pump station construction area is calculated to be 64 dBA  $L_{eq}$ , with a maximum instantaneous noise level of 68 dBA  $L_{max}$ . Pump station construction activities would generate noise up to 84 dBA  $L_{eq}$  at 50 feet (Appendix G).

Unlike pump station construction, which would be centered at a single location, pipeline construction activities would be mobile and would be constantly moving in a linear path along the pipeline alignment. Construction equipment used for site preparation and excavation activities would travel throughout the work areas, which would be approximately 300 feet in length by approximately 20 feet in width. Therefore, the average distance of sensitive receivers from mobile equipment would be approximately 150 feet. To provide a conservative estimate of construction noise, the three loudest pieces of equipment that would be used during pipeline construction (a compactor, paver, and concrete saw) were modeled. Pipeline construction activities would generate noise up to 80 dBA  $L_{eq}$  at 50 feet (Appendix G).

### *Roadway Noise*

Existing daily traffic on Valley Greens Drive and Carmel Valley Road was estimated based on the industry standard assumption that peak hour traffic volumes are equal to ten percent of the roadway average daily trips (ADT) (Precision Traffic and Safety 2020). Therefore, the 15-minute traffic count taken during the evening peak hour noise measurements were multiplied by four to obtain hourly traffic for the evening peak hour, and then multiplied by 10 to obtain an estimate of daily traffic. Traffic volumes are approximately 720 ADT on Valley Greens Drive and 11,520 ADT on Carmel Valley Road.<sup>4</sup>

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<sup>4</sup> Valley Greens Drive 15-minute traffic count found 18 trips (18 15-minute trips \* 4 15-minute periods per hour \* 10 = 720 ADT). Carmel Valley Road 15-minute traffic counts found a minimum of 288 trips (323 15-minute trips \* 4 15-minute periods per hour \* 10 = 11,520 ADT).

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

## **Construction Noise**

Temporary noise levels caused by construction activity would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of noise-generating activities. If construction activities would generate noise above 85 dBA  $L_{eq}$  at 50 feet, a significant impact would occur.

The residential receivers nearest to the pipeline alignment would be located adjacent to Valley Greens Drive and Carmel Valley Road. The loudest phase of pipeline construction activities (site preparation) would generate maximum hourly noise levels up to 84 dBA  $L_{eq}$  at 50 feet. Similarly, pump station construction would generate noise levels up to 80 dBA  $L_{eq}$  at 50 feet. Construction of the pipeline in conjunction with construction of the pump station would result in noise levels of 85 dBA  $L_{eq}$  at 50 feet. Construction noise levels would not exceed the threshold of 85 dBA at 50 feet established by Section 10.60.030 of the MCC.<sup>5</sup> Pipeline construction noise would be approximately 86 dBA at 40 feet, the distance to the nearest residence from the pipeline alignment. Construction noise impacts at any one residence during pipeline construction would be temporary and short-term because construction would be moving along the pipeline alignment at a rate of approximately 100 feet per day. Pump station construction would be approximately 65 dBA at 275 feet, the distance to the nearest residence from the pump station site. Additionally, construction activities would only occur between 7:30 a.m. and 3:30 p.m. Therefore, construction noise impacts would be less than significant.

## **Operational Noise**

Operation of pump station equipment would result in a significant noise impact if it exceeds the MCC noise threshold for operational machinery of 85 dBA at 50 feet.

The pipeline would be located entirely underground and would not result in operational noise. The pump station includes two pumps that would be installed underground and submerged in a wet well. Therefore, the pumps would not generate noise.

The project would include a back-up generator for emergency power that would be used only during an emergency when electricity cannot be supplied by PG&E. Additionally, periodic testing and maintenance for the generator would occur monthly to ensure the generator is in proper working order. The back-up generator would be tested once per month for 30 minutes (i.e., 6 hours annually) and would be surrounded by a sound attenuation enclosure. The emergency generator would be located approximately 300 feet from the nearest sensitive receiver. Based on data provided by the applicant, the generator would produce a noise level of up to 75 dBA at 50 feet with the sound enclosure. Generator noise would not exceed the MCC noise threshold for operational machinery of 85 dBA at 50 feet. Therefore, noise impacts from the proposed emergency generator would be less than significant.

## **Off-Site Roadway Noise**

A doubling of a noise source (such as doubling roadway traffic) would result in a 3 dBA increase in the ambient noise level. If a doubling of traffic would occur with implementation of the project, this

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<sup>5</sup> The MCC threshold is used for construction noise because CAWD does not have noise construction thresholds.



would be considered a significant roadway noise impact. Monthly and as-needed maintenance trips by CAWD staff would incrementally increase existing traffic noise on Valley Greens Drive, Carmel Valley Road, and other local roadways. On the days of monthly and as-needed maintenance activities, project-related trips would increase ADT on both roadways by approximately two, one-way trips, which would incrementally increase traffic by less than 0.01 percent. Therefore, maintenance activities associated with project operation would not increase ambient noise levels by 3 dBA, and the increase in roadway noise on the days of maintenance activities would not be perceptible. As a result, impacts related to roadway noise would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Per Policy S-7.8 of the Monterey County 2010 General Plan, construction equipment that creates vibrations that could cause structural damage to structures within 100 feet of the construction area require additional vibrational analysis. The following vibration thresholds established by the FTA were applied to the project, which include the vibration levels at which structural damage could occur.

- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 78 VdB for residences during daytime hours
- 100 VdB for minor cosmetic damage to fragile buildings

Certain types of construction equipment can temporarily generate high levels of groundborne vibration. Construction of the proposed project would utilize skid steer loaders and loaded trucks. Structures within 100 feet of project construction areas include residences located along Poplar Lane approximately 40 feet from the pipeline alignment, and a church located along Carmel Valley Road approximately 90 feet from the pipeline alignment. Table 14 shows typical vibration levels associated with standard construction equipment that could be used for the project.

**Table 14 Groundborne Vibration for Typical Construction Equipment**

Equipment	Vibration Level (VdB) at 25 Feet	Approximate Vibration Level (VdB) at 40 Feet <sup>1</sup>	Approximate Vibration Level (VdB) at 90 feet <sup>1</sup>
Small Bulldozer <sup>2</sup>	58	52	42
Loaded Truck	86	80	70

VdB: vibration decibels

<sup>1</sup> Distance to nearest residence along Poplar Lane. Calculated using the following formula:  $VdB(X \text{ feet}) = VdB(25 \text{ feet}) - 30 * \log(X \text{ feet}/25 \text{ feet})$

<sup>2</sup> A small bulldozer was used in place of a skid steer loader, as these pieces of equipment generate similar vibration levels.

Source: Federal Transit Administration 2018

As shown in Table 14, construction equipment would generate a vibration level of up to 80 VdB at buildings within 100 feet of the pipeline alignment, such as the nearest residence located at a distance of 40 feet. Such vibration levels would exceed the FTA recommended threshold of 72 VdB for residences during normal sleep hours and would not exceed the 94 VdB threshold for fragile

buildings. As stated previously, construction activities would occur between 7:30 a.m. and 3:30 p.m., outside of normal sleep hours. Vibration levels would exceed 78 VdB for residences during daytime hours; however, construction vibration impacts would be short-term and temporary as the active construction site moves along the length of the pipeline alignment. Construction along each 100-foot segment of pipeline would only result in vibration impacts above 78 VdB at the closest residences, which would only be affected for a few days of the entire pipeline construction.

As shown in Table 14, construction equipment would generate a vibration level of up to 70 VdB at buildings within 100 feet of the pipeline alignment, such as the nearest church located at a distance of 90 feet. Such vibration levels would not exceed the FTA recommended threshold of 75 VdB for institutional land uses with primary daytime use, such as churches and schools.

As described above, construction equipment would generate vibration up to 80 VdB at the nearest structure to the pipeline alignment and pump station. This is below the 100 VdB threshold for structural damage within 100 feet of construction activities; therefore, vibration impacts would be less than significant.

As a pipeline and pump station, the proposed project would not generate significant stationary sources of vibration during operation, such as heavy equipment operations. Therefore, operational vibration impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

The nearest airport to the pipeline alignment is the Monterey Regional Airport located approximately four miles north of the project site. Because the project site is not located in the vicinity of a private airstrip, airport land use plan, or within two miles of a public or public use airport, the project would not expose people residing or working in the project area to excessive aircraft-related noise. There would be no impact.

#### **NO IMPACT**

# 14 Population and Housing

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

- 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 proposed project would annex the area served by the proposed pipeline into the CAWD service area and extend sewer service to the existing Carmel Valley Manor senior living facility. No direct growth would occur as a result of the project because it does not include the construction of new homes, businesses, or other land uses which would generate population growth.

A project has the potential for indirect growth-inducing impacts if it would remove an obstacle to additional growth and development, such as removing a constraint to development. Currently, most of the surrounding area is already developed, and growth inducement does not typically occur in an already developed area. However, previously developed parcels directly adjacent to the proposed pipeline alignment would have the opportunity to connect to the municipal sewer system, should their existing septic systems and/or leach fields fail or otherwise become unable to continue to operate.

MCC Section 15.20.040 requires connection to a public sewer if a proposed building or structure is within 200 feet of an approved sanitary sewer. Of the 51 parcels zoned residential and within 200 feet of the proposed pipeline, 48 are already developed with residences or other structures, meaning those who are required to connect to the pipeline (within 200 feet) would most likely not be new development, but rather failing existing septic systems. Further, the MCC Section 15.20.040 also provides exceptions to the requirement to connect to sanitary sewer, such as if the owner of the property cannot obtain the necessary easement to connect or topographical conditions would make it impossible for a connection.

Since the placement of future potential structures on the few undeveloped lots adjacent to the pipeline has not been pre-determined, it would be speculative to assume that these lots would be required to connect to the proposed pipeline and would not have the choice to opt for septic. Therefore, the development of these few undeveloped lots is not currently constrained by the

availability of a sanitary sewer, as they may potentially be able to opt for septic. Further, any future development would still require its own individual CEQA compliance, County permitting, and any other required approvals.

In addition, annexation and development of the proposed pipeline would not remove the only potential constraint on undeveloped parcels as there is currently a major constraint to development in the valley from water availability for new growth as well as Carmel Valley Master Plan policy CV 1.6 which limits new residential subdivisions in Carmel Valley to 190 new units, of which most are already developed. Because the availability of sanitary sewer is not the constraining factor to development on adjacent undeveloped parcels, the proposed project does not meet the criteria for removing a constraint to development.

The potential for Carmel Valley Manor's failing septic system and other potentially failing septic systems within the Carmel Valley to connect to the expanded sanitary sewer line is considered a public health benefit. Further, the additional transport of wastewater to the CAWD WWTP could provide for additional reclaimed water available for landscape irrigation, thereby reducing the strain on local potable water resources.

As a result, impacts related to population growth from the proposed pipeline and pump station would be less than significant because the project would not directly or indirectly induce population growth.

**LESS THAN SIGNIFICANT IMPACT**

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

The proposed pipeline would be constructed in existing public rights-of-way, and the pump station would be constructed on undeveloped land. The project does not propose demolition of existing housing. Therefore, the project would not displace substantial numbers of existing people or housing. No impact would occur.

**NO IMPACT**

# 15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1	Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

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

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

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

As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the population in Monterey County. Therefore, service ratios for facilities and staff for public services, including fire protection, police protection, schools, parks, or other public facilities, would not be impacted. There would be no impact to public services.

**NO IMPACT**

# 16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the population in Monterey County. Therefore, the project would not increase the population served by local recreation facilities or otherwise result in increased demand for or degradation of those facilities. Additionally, the project does not include the construction of new or expanded recreational facilities. There would be no impact to recreational facilities.

**NO IMPACT**

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# 17 Transportation

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

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

The Transportation Agency for Monterey County is the designated Congestion Management Agency responsible for the development and implementation of the Congestion Management Program in the project area. In August 2018, Monterey County commissioned the Carmel Valley Road Corridor Study to identify potential opportunities for traffic capacity and/or safety improvements along the approximately 8.1-mile study corridor of Carmel Valley Road. According to this report, two roadway segments of Carmel Valley Road identified along the project area were operating at level of service (LOS) A and C in 2013 (Monterey County 2018). These segments were operating above the County's LOS standard of LOS D for all County roads and intersections (Monterey County 2010). The Monterey County 2010 General Plan Circulation Element includes goals to facilitate traffic movement and alleviate congestion by protecting public transportation facilities, encouraging land use patterns that reduce automobile dependence, and requiring new development be located and designed with convenient access to efficient transportation options.

Project construction would result in temporary transportation impacts. Construction staging would occur in the roadway along the pipeline alignment and at the pump station location as well as at Carmel Valley Manor, which would minimize travel between equipment staging areas and work zones. Pipeline construction activities would install approximately 100 linear feet of pipeline per day before moving to the next segment of pipeline, with no more than 300 linear feet of open trench at a given time. Lane closures during pipeline construction activities may be necessary, though are not anticipated. Project construction would result in temporary disruption to vehicular, bicycle, and pedestrian circulation. Pursuant to Section 14.04.080 of the MCC, during the application process for the required encroachment permit for construction in County roadways, a TCP is also required. The

TCP would include traffic control measures in the event of a lane closure and would give priority access to emergency vehicles. Through the required TCP, traffic flow impacts during construction would be less than significant.

Construction-related vehicle trips would include construction workers traveling to and from the project work zones and staging areas, haul trucks (including for import and export of excavated materials, as needed), and other trucks associated with equipment and material deliveries. During peak construction months, construction-related vehicle trips would total up to eight trips per day. Such trips would occur on area roadways, such as Carmel Valley Road, which is the primary access route to the project site. Existing daily traffic on Valley Greens Drive and Carmel Valley Road was estimated based on the industry standard assumption that peak hour traffic volumes are equal to ten percent of the roadway ADT. The approximate traffic volume estimate on Valley Greens Drive was 720 ADT and 11,520 ADT on Carmel Valley Road.<sup>6</sup> Therefore, construction trips would account for less than 0.07 percent of existing roadway traffic. Because construction is a short-term, temporary activity and trips would account for a relatively small portion of existing traffic on area roadways, construction-related traffic impacts would not be substantial. Roadways would be repaved and restored to existing conditions in accordance with all applicable Monterey County Department of Public Works standards once construction is complete. Traffic control measures required by the TCP would further reduce temporary transportation impacts associated with project construction. Therefore, construction-related transportation impacts would be less than significant.

The proposed project involves construction and operation of wastewater infrastructure, which would not conflict with adopted policies, plans, or programs addressing the circulation system, including public transit, bicycle, or pedestrian facilities. The proposed pipeline alignment would be placed underground along an existing roadway, while the proposed pump station would be placed adjacent to the south side of Valley Greens Drive. Project operation would involve monthly maintenance trips, which would represent an incremental increase in the base traffic volume of approximately 11,520 average daily trips on Carmel Valley Road and 720 ADT on Valley Greens Drive on the days during which maintenance activities occur. Given the minimal number of trips generated, operational transportation impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

*b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic if existing models or methods are not available to estimate the VMT for the particular project being considered. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. Pursuant to Section 15064.3(c), the provisions of this section do not apply statewide until July 1, 2020, although a lead agency may elect to immediately apply the provisions of the updated guidelines. Neither CAWD nor Monterey County have established VMT thresholds. The 2018 Monterey County Active Transportation Plan includes Policy C-2.4, which encourages a reduction in

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<sup>6</sup> During noise measurement evaluations, 15-minute traffic counts were taken during the afternoon peak hour noise measurement on February 25 and 26, 2020. This was multiplied by four to obtain hourly traffic for the evening peak hour, and then multiplied by 10 to obtain an estimate of daily traffic. Valley Greens Drive 15-minute traffic count found 18 trips (18 15-minute trips \* 4 15-minute periods per hour \* 10 = 720 ADT). Carmel Valley Road 15-minute traffic counts found a minimum of 288 trips (323 15-minute trips \* 4 15-minute periods per hour \* 10 = 11,520 ADT).

the number of VMT per person (Transportation Agency of Monterey County 2018). However, as discussed below, the project is not expected to affect VMT in the project area.

A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. As discussed under item (a) above, traffic on local roadways would be temporarily increased during project construction due to worker trips and the necessary transport of construction vehicles and equipment to the project site. Increases in VMT from construction would be short-term, minimal, and temporary. In addition, maintenance of the proposed project would consist of monthly and as-needed site visits. However, such visits could be combined with existing trips CAWD conducts to maintain its infrastructure in the area, and would not substantially contribute to VMT in the project area. Less than significant impact associated with VMT per CEQA Guidelines Section 15064.3 would occur.

**LESS THAN SIGNIFICANT IMPACT**

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

The project would involve installation of a pipeline within the existing Carmel Valley Road and Valley Greens Road rights-of-way and a pump station adjacent to Valley Greens Road. The project would not involve reconfiguration of any roadways or intersections that could result in a substantial increase in traffic hazards. No impact would occur.

**NO IMPACT**

- d. *Would the project result in inadequate emergency access?*

Lane closures and other potential traffic impacts caused by construction activities on Carmel Valley Road and Valley Greens Road would have the potential to impede emergency response to the project area, or to areas accessed via the roadway. As discussed in item (a) of this section, the project would implement a TCP in coordination with County of Monterey to maintain existing traffic flows and prioritize emergency vehicle access in the work area. Therefore, impacts related to emergency access during project construction would be less than significant.

Project operation and maintenance would not introduce new activities that could result in inadequate emergency access. Therefore, impacts related to emergency access during project operation would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</p>   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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

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

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

Carmel Area Wastewater District  
**Carmel Valley Manor Sewer Main Extension**

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

CAWD is the lead agency for this project and therefore is responsible for AB 52 notification. CAWD sent AB 52 consultation letters on April 2, 2020, to the following tribes: Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Esselen Tribe of Monterey County, Indian Canyon Mutsun Band of Costanoan, and Ohlone/Costanoan-Esselen Nation, and followed up with each of the tribes via phone call and email. Responses were received from Amah Mutsun Tribal Band of Mission San Juan Bautista and Ohlone/Costanoan-Esselen Nation. Tribal consultation files are available in Appendix H.

Irene Zwierlein, Chairperson for the Amah Mutsun Tribal Band of Mission San Juan Bautista requested CAWD provide sensitivity training to the work crew if there are no known sites, and contact an archaeologist and tribal monitor if there are known sites. Louise Miranda-Ramirez, Chairperson for the Ohlone/Costanoan-Esselen Nation requested the tribe be included in mitigation and recovery programs, ancestral remains be reburied, cultural items be placed with the tribe, and a Native American monitor from the tribe be used for construction in their territory. Additionally, as described in Section 5, *Cultural Resources*, the Costanoan Rumsen Carmel Tribe identified the project site to be within their ancestral tribal lands; however, the chairman did not identify tribal cultural resource within the area during Rincon's informal outreach. The mitigation measures provided in Section 5, *Cultural Resources*, satisfy the requests from these tribes to provide a tribal monitor during construction, and consultation was completed on July 1, 2020. Therefore, impacts would be less than significant following implementation of Mitigation Measures CR-1 and CR-2.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

## **Water**

The proposed project would not expand the potable water system or increase potable water pipeline capacity to serve additional customers. The project is a wastewater expansion project to connect an existing development with CAWD sewer services. No changes to the potable water system are proposed. No additional impact related to water facilities would occur.

## **Wastewater Treatment**

CAWD collects and processes wastewater from Carmel-by-the-Sea and surrounding areas. CAWD provides collection, treatment, and disposal of wastewater for 11,000 residents within its service area and treatment and disposal for an additional 4,500 people in Del Monte Forest through a contract agreement with Pebble Beach Community Services District. CAWD maintains 81 miles of sewers within the existing service area, comprised of approximately 5.5 square miles (CAWD 2020a).

The proposed project would extend sewer service to the existing Carmel Valley Manor senior living facility. This development is currently served by a failing septic system considered to be a health concern by the Monterey County Environmental Health Department. Additionally, previously developed parcels directly adjacent to the proposed pipeline alignment would have the opportunity to connect to the municipal sewer system, should their existing septic systems and/or leach fields fail or otherwise become unable to continue to operate. With the implementation of the proposed pipeline and pump station, wastewater would be conveyed through the existing collection system to the CAWD Water Pollution Control Plant, which has a design capacity of 4.0 million gallons per day (MGD), a permitted capacity of 3.0 MGD, and an average dry weather flow of 1.2 MGD (CAWD 2020b). The plant has a remaining permitted capacity of 1.8 MGD.

Carmel Valley Manor is comprised of 146 independent living units, 24 assisted living units and 36 beds in a skilled nursing facility. The connection of the new pipeline would serve approximately 226 total residents and 157 employees from the Carmel Valley Manor development (Carmel Valley Manor 2019). The most recent Municipal Services Update for CAWD in 2016 estimated the WWTP has surplus capacity to accommodate an additional 7,000 to 8,000 residential units within the service area, plus volume equivalent to 3,000 to 4,000 additional units in Pebble Beach. Full buildout of the CAWD service area would add approximately 520 connections (County of Monterey 2016b). Therefore, CAWD has adequate capacity to treat the wastewater generated by the additional 226 residents and 157 employees of Carmel Valley Manor. The project itself would not generate wastewater, and no new or expanded wastewater treatment facilities would be required. In addition, CAWD would have capacity to meet the needs of previously developed parcels directly adjacent to the proposed pipeline alignment. Further, the additional conveyance of wastewater to the CAWD treatment plant could provide for additional reclaimed water available for landscape irrigation, thereby reducing the strain on the local potable water resources. Therefore, impacts to wastewater treatment and demand would be less than significant.

## **Stormwater Drainage**

As discussed in Section 10, *Hydrology and Water Quality*, construction of the proposed pipeline would not increase the amount of impervious surfaces along the pipeline alignment because the pipeline would be installed under an existing paved and impervious roadway that would be restored to its existing condition upon completion of construction. Therefore, the proposed pipeline would not alter the drainage pattern along the pipeline alignment and would not increase stormwater flow such that new or expanded stormwater drainage systems would be necessary.



Construction of the pump station and driveway would incrementally increase the amount of impervious surface at the pump station location by less than 1,800 square feet. The area surrounding the pump station location would remain undeveloped open space as part of the Quail Lodge and Golf Club. The increase in impervious surfaces on site would incrementally increase runoff flows in the area; however, the increase in runoff would be directed to the existing vegetated stormwater infiltration areas and would be adequately handled by existing facilities. Therefore, the project would not create or contribute runoff water such that new or expanded stormwater drainage systems would be necessary, and impacts would be less than significant.

### **Electric Power and Natural Gas**

The pump station would be a small fully developed municipal site, equipped with a back-up generator; new electrical service; wet well with submersible wastewater pumps; miscellaneous other vaults, pipes, valves, etc.; odor control facilities; electrical and communications facilities; and surface improvements. The back-up generator would be natural gas powered. Electricity and natural gas for the project site would be provided by PG&E. As discussed in Section 6, *Energy*, the project would require approximately 78,314 kWh of electricity per year to power the pump station. The pump station would be served by existing PG&E infrastructure, including transmission lines and natural gas pipelines currently available within the right-of-way adjacent to the project area. No new electric or gas infrastructure would be required that could cause significant environmental effects due to the proximity of existing connections.

### **Telecommunications**

The project would require telecommunications to remotely monitor the pump station. However, the requisite telecommunication infrastructure would be constructed as part of the pump station building and would not involve the relocation of existing telecommunications facilities. The impacts of the pump station are analyzed throughout this IS-MND. Therefore, no further impact related to telecommunications facilities would occur.

### **LESS THAN SIGNIFICANT IMPACT**

- 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 consists of the construction and operation of wastewater infrastructure. The project is designed to extend CAWD sewer service to the existing Carmel Valley Manor senior living facility. Small quantities of water would be required during construction for dust suppression, which would be potable water provided by the MPWMD (MPWMD 2020). Water consumption associated with dust suppression would be temporary and minimal because only disturbed areas would need to be watered. Operation of the proposed project would not increase water consumption. Therefore, less than significant impacts to water supplies would occur.

### **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?*

Construction activities may temporarily generate solid waste, including soil spoils, pavement debris, or other construction waste, which would be disposed of in accordance with all applicable federal, , and local statutes and regulations. While most soil is expected to be reused as backfill material within the project area, roughly 1,000 cubic yards of soils would be disposed of at the Johnson Canyon Landfill. The landfill had a remaining capacity of 6,923,297 cubic yards as of 2007 (CalRecycle 2018). Due to the temporary nature of construction and minimal amount of construction waste anticipated to require disposal, the project would not generate quantities of solid waste that would account for a substantial percentage of the total daily regional permitted capacity available at Johnson Canyon Landfill. Therefore, waste generated by demolition and construction activities would not exceed the available capacity at the landfill serving the project area that would accept debris generated by the project.

The project would be required to comply with all applicable laws and regulations related to solid waste generation, collection, and disposal. The project would result in a short-term and temporary increase in solid waste generation during construction, but would not substantially affect standard solid waste operations of any landfill accepting waste. Recycling and reuse activities during construction would comply with the California Integrated Waste Management Act of 1989 (AB 939). Once operational, the project would include unmanned facilities and would not generate solid waste. Therefore, solid waste impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

According to mapping by CAL FIRE, Valley Greens Drive is not located in a State Responsibility Area or Local Responsibility Area Very High FHSZ. Land north of Carmel Valley Road is within a State Responsibility Area, with some portions of land in a High FHSZ and some in a Very High FHSZ. Additionally, a few parcels located south of Carmel Valley Road and adjacent to the pipeline alignment are within a Very High FHSZ of a Local Responsibility Area (CAL FIRE 2007).

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

The proposed project would not add residents or visitors to the project site and would not add structures that would increase wildfire exposure or hazards. As discussed in Section 17, *Transportation*, an increase in traffic near the project site would occur during the project's construction phase. The construction contractor would implement a County of Monterey-approved TCP, which is anticipated to include a combination of public notification, steel plates, barricades, flagmen, and other traffic control devices. Closure of Carmel Valley Road is not anticipated to be

required during construction, as traffic cones would be used to direct traffic into temporary lanes. This change would be minor and temporary and would not impair emergency response or evacuation. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Heavy duty equipment used during project construction may produce sparks with the potential to ignite vegetation. However, California Public Resources Code (PRC) Section 4442 mandates the use of spark arrestors, which prevent the emission of flammable debris from exhaust, on earth-moving and portable construction equipment with internal combustion engines operating on any forest-covered, brush-covered, or grass-covered land, such as the pump station site. Furthermore, PRC Sections 4427 and 4431 specify standards for conducting construction activities on days when a burning permit is required, and PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land. Therefore, with compliance with applicable PRC provisions, project construction would not exacerbate wildfire risk.

The proposed project would involve the construction of an underground pump station with ancillary aboveground equipment and a new pipeline and would not include housing or employment offices and would not accommodate occupants. All proposed infrastructure, including the backup generator, would be enclosed in structures, which would minimize potential for ignition of surrounding vegetation in the rare event of an electrical equipment malfunction during operation. Regular maintenance of the pump station would further ensure proper operation of equipment and would reduce potential fire risk. The project would not exacerbate existing fire hazards or increase the exposure of people to fire hazards. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- 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?*

The proposed project would construct a new pipeline within existing roadway rights-of-way, which not require the installation or maintenance of any fire prevention infrastructure, such as new roads or fuel breaks. Therefore, the project would not exacerbate existing fire hazards, and there would be no impact.

**NO IMPACT**

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

The proposed project would not add residents or visitors to the project site and would not add structures that would increase wildfire exposure or hazards. Additionally, the proposed pipeline

would be located within existing paved roadways that are not steeply sloped, and the proposed pump station site is located in a flat area with elevations ranging from approximately 20 to 21 meters above sea level. Project construction activities would conclude after an estimated duration of six months, and surfaces above the pipeline and surrounding the proposed pump station would be restored to stable conditions similar to the existing conditions. Therefore, impacts would be temporary and would not substantially increase hazards or expose people or structures to flooding or landslides as a result of post-fire runoff, slope instability, or drainage changes. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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?*

The pipeline alignment would be constructed within an existing roadway right-of-way that does not contain suitable habitat for fish and wildlife species. Therefore, the project would not substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Section 4, *Biological Resources*, Mitigation Measures BIO-1 through BIO-6 are recommended to address potential direct and indirect impacts to special-status species that may be present on the project site.

The pipeline alignment would be constructed within an existing roadway right-of-way that does not contain important examples of the major periods of California history or prehistory. Therefore, the project would not eliminate these resources. In addition, as discussed in Section 5, *Cultural Resources*, Mitigation Measure CR-1 requires monitoring during ground disturbing activities of native soils. Should unanticipated archaeological resources be discovered, Mitigation Measure CR-2 requires that work stop and the find be evaluated. Furthermore, Section 5, *Cultural Resources*, indicates that County Bridge 500, while 57 years of age, is ineligible as a historic resource and impacts to historic resources would not occur.

#### **LESS THAN SIGNIFICANT IMPACT**

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

As described in the discussion of environmental checklist Sections 1 through 20, with respect to all environmental issues, the proposed project would not result in significant and unmitigable impacts to the environment; all anticipated impacts associated with project construction and operation would be either less than significant or less than significant with mitigation incorporated. This is largely due to the fact that project construction activities would be temporary, and project operational activities would not significantly alter the environmental baseline condition.

Cumulatively considerable impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same vicinity, such that the effects of similar impacts of multiple projects combine to expose adjacent sensitive receptors to greater levels of impact than would occur under the proposed project. For example, if the construction of other projects in the area occurs at the same time as construction of the proposed project, potential impacts associated with noise and traffic to residents in the project area may be more substantial. There are no major construction projects currently planned in the vicinity of the proposed pipeline alignment and pump station and the majority of parcels in the vicinity of the pipeline are already developed. Therefore, construction-related impacts to sensitive receptors are not anticipated.

In addition, cumulative impacts could occur due to indirect growth-inducing impacts, which includes consideration of whether the project would remove an obstacle to additional growth and development. A majority of the area surrounding the proposed pipeline is already developed, and the proposed pipeline would not induce growth in this built up area. Further, the proposed project does not meet the criteria for removing a constraint to development, as currently undeveloped parcels are not constrained by the lack of availability of a sanitary sewer system. The few undeveloped parcels in the vicinity of the pipeline can be served by on-site septic systems.

The majority of project impacts are temporary, localized effects that would occur during the approximately six-month construction period. Once operational, the project would not have significant adverse environmental impacts or induce new development in the area that could combine with other projects' effects to create cumulatively significant impacts. Therefore, the proposed project is not anticipated to result in a cumulatively considerable contribution to a significant cumulative impact.

#### **LESS THAN SIGNIFICANT IMPACT**



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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the Section 3, *Air Quality*, the project would not result, either directly or indirectly, in substantial adverse effects related to air quality through construction or operation. As discussed in Section 9, *Hazards and Hazardous Materials*, project operation would not involve the routine use of extremely hazardous materials. The backup generator would be powered by natural gas, which does not have the potential to leak into the soil similar to diesel fuel. Compliance with applicable regulations and the identified mitigation measures during project construction would reduce potential impacts on human beings related to hazards and hazardous materials to a less than significant level. Operation of the proposed pump station would generate minimal noise from the pumps and periodic testing of the backup generator. The pumps would be buried below ground in a wet well and the backup generator would be placed in a sound attenuation enclosure. Consequently, operational noise levels would be minimal and would not significantly impact nearby sensitive receivers. During project construction, noise impacts would be limited to the daytime hours of 7:30 a.m. to 3:30 p.m.; therefore, construction noise impacts would be temporary and less than significant. Therefore, the project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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## List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to the Carmel Area Wastewater District. Persons involved in data gathering analysis, project management, and quality control are listed below.

### **RINCON CONSULTANTS, INC.**

Jennifer Haddow, PhD, Principal-in-Charge  
Megan Jones, Principal  
Aileen Mahoney, Project Manager  
Elizabeth Wilson, Associate Planner  
Amanda Ross, Associate Planner  
Emily Marino, Associate Planner  
Ashley Quackenbush, Associate Planner  
April Durham, Associate Planner  
Hannah Haas, MA, RPA, Senior Archaeologist  
Steven Treffers, Senior Architectural Historian  
Courtney Montgomery, Archaeologist  
David Daitch, Senior Supervisor Biologist  
Samantha Kehr, Biologist  
Mathew Carson, MS, Paleontologist  
Jorge Mendieta, Associate Environmental Scientist

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