District 5 Maintenance Station and Equipment Shop Relocation Project

SAN LUIS OBISPO COUNTY, CALIFORNIA
DISTRICT 5 – San Luis Obispo
05-1K680/0518000234
State Clearinghouse Number, 2022030621

Draft Environmental Impact Report



Prepared by the
State of California Department of Transportation

November 2023

Caltrans

General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Environmental Impact Report, which examines the potential environmental impacts of the alternatives being considered for the proposed project in San Luis Obispo County in California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans District Office at 50 Higuera Street, San Luis Obispo, California 93401, Monday through Friday from 8:00 a.m. to 5:00 p.m. This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-5
- Attend the public information meeting. Meeting details are provided in the Notice of Availability and on the Caltrans website.
- We'd like to hear what you think. If you have any comments regarding the proposed project, please attend the public meeting, and/or send your written comments to Caltrans by the deadline.
- Submit comments via U.S. mail to: Lucas Marsalek, Environmental Coordinator, California Department of Transportation, 50 Higuera Street, San Luis Obispo, California 93401.
- Submit comments via email to: lucas.marsalek@dot.ca.gov.
- Submit comments by the deadline provided in the Notice of Availability.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Lucas Marsalek, Environmental Coordinator, California Department of Transportation, 50 Higuera Street San Luis Obispo, California 93401.; phone number 805-458-5408 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

State Clearinghouse Number 2022030621
05-SLO
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Replace and relocate the District 5 Maintenance Station and Equipment Shop facilities to 4485 Vachell Lane in San Luis Obispo County, California

DRAFT ENVIRONMENTAL IMPACT REPORT

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agencies: California Transportation Commission, California Department of Fish and Wildlife, Central Coast Regional Water Quality Control Board, San Luis Obispo Air Pollution Control District, County of San Luis Obispo, City of San Luis Obispo, San Luis Obispo Local Agency Formation Commission

Scott Eades
District Director
California Department of Transportation
CEQA Lead Agency

11/21/2023
Date

The following individual can be contacted for more information about this document: Lucas Marsalek, Environmental Coordinator, California Department of Transportation, 50 Higuera Street, San Luis Obispo, California 93401; phone number 805-458-5408 (Voice); email lucas.marsalek@dot.ca.gov

Executive Summary

PURPOSE

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of Caltrans District 5 Project Maintenance Station and Equipment Shop Relocation Project (State Clearinghouse Number 2022030621). This document is prepared in conformance with CEQA (Public Resources Code [PRC] § 21000, et seq.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, et seq.).

The purpose of this Draft EIR is to inform decision makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed project. This Draft EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be mitigated or avoided.

PURPOSE AND NEED

Purpose

The purpose of the project is to:

- Construct facilities that meet Caltrans District 5 programming requirements for existing and future Maintenance Station and Equipment Shop operations (building sizing, employee staffing, parking, storage space, etc.).
- Improve daily functions by separating the Maintenance Station and Equipment Shop facilities as industrial-type facilities from the conflicting uses of the District 5 Administrative Offices and the Material and Testing Laboratory.
- Consolidate the Maintenance Station and Equipment shop facilities into a single location.
- Construct a facility in District 5 that provides efficient access to the state highway system.
- Construct a facility that meets the standards of the Americans with Disabilities Act (ADA) and the California Code of Regulations Title 24.
- Decrease flood risk by relocating the Maintenance Station and Equipment Shop facilities outside or above potential flood zones.

Need

The Caltrans District 5 Maintenance Station and Equipment Shop facilities currently consist of a combination of aging and undersized facilities at problematic locations. Past, present, and predicted future problems with these facilities include:

- Current facilities are inadequate in size and function and do not meet the needs for existing staff and equipment.
- Fragmented work locations.
- Conflicting industrial-type and administrative-type workspaces.
- Escalating operational costs of maintaining aging facilities.
- Recurring flooding events causing damage to buildings and equipment.
- Existing buildings do not meet current seismic structural building standards nor modern green building practices that maximize efficient use of energy and water resources.

PROJECT LOCATION

The project site consists of two state-owned parcels—Assessor's Parcel Number (APN) 076-071-021 and APN 076-071-022—totaling approximately 56.5 acres. APN 076-071-022 is 5 acres, encompasses the area of the new Buckley Road Extension and some improvements along Vachell Lane; it bisects APN 076-071-021, which will contain most of the project's new proposed development, within 34 acres, south of the Buckley Road Extension. The site is currently unincorporated in the county but sits within the City of San Luis Obispo's adopted Sphere of Influence. A Sphere of Influence is defined by Government Code 56425 as "…a plan for the probable physical boundary and service area of a local agency or municipality." The project site is just south of the city limits between South Higuera and Vachell Lane and just west/southwest of the city limits adjacent to Vachell Lane and Buckley Road.

The existing Maintenance Station and Equipment Shop are about 2 miles north of the project site and within the city limits on state-owned parcels at 50 Higuera Street and 66 Madonna Road (APNs 004-511-020 and 053-011-001), totaling 5.8 acres. Figures ES-1 and ES-2 show the locations of the existing facilities and the location of the project. Figures ES-3 and ES-4 show the existing conditions and the zoning at and adjacent to the project site

SUMMARY OF THE PROJECT

The project involves the construction and operation of a replacement District 5 Maintenance Station, Equipment Shop, and associated site improvements. Two Build Alternatives and a No-Build Alternative are under consideration. To supply the project with water and sewer services, Alternative 1 includes constructing an onsite water well and septic system, while Alternative 2 includes constructing new water and sewer utility infrastructure that would connect to existing City of San Luis Obispo infrastructure. The two Build Alternatives differ mainly on the source of water and the locations of new water and sewer infrastructure, which will be constructed and used to support long-term operations at the project site.

The project would include a developed area of approximately 24 acres within 34 total acres south of Buckley Road and owned by Caltrans. Approximately 18 acres of this would be impervious surfaces; the remaining 6 acres of the site would be unpaved, including landscaping and stormwater management elements. The total impervious surface area includes roadways and driveway-related impermeable surface areas, as well as other impervious surfaces related to the proposed structures and paved areas.

Project Facilities

The project would include buildings, staff and visitor parking areas, utility improvements, and other ancillary improvements. General descriptions of these facilities are included in this section.

Structures

Both Build Alternatives include new structures, including a regional maintenance office with a Transportation Management Center (TMC), Structure Crews building, Special Crews building, Road Crews building, warehouse building, and equipment shop building.

Miscellaneous Site Elements

Vehicle Fueling Area: The vehicle fueling area would include an approximately 20,000-gallon aboveground split-fuel gasoline fuel and diesel fuel storage tank, a canopy over the fueling area, and temporary parking for a fuel tanker truck while refilling the tanks.

Waste Enclosure: A waste enclosure would be constructed in the project site. The enclosure would contain covered areas for trash dumpsters, used tire racks, and recycling bins.

Waste Oil Containment: Waste oil tank(s) would be in or adjacent to the equipment shop building.

Heating, Ventilation, and Air Conditioning Equipment Areas: Heating, ventilation, and air conditioning (HVAC) systems would be used to provide fully automated and continuous space heating, ventilation, and cooling to all areas of buildings designed for human occupancy. The HVAC systems and equipment would be protected from weather conditions.

Standby Backup Generator and Tank Area: The partially walled generator area would contain a standby backup diesel generator, exhaust system, cooling system, diesel fuel supply and storage system, engine control system, and miscellaneous cables and equipment to support the generator's operation. The generator would be used as a backup power source for the facilities, as necessary, if primary power sources were to fail.

Parking Areas

Parking and Carport Areas: Both build alternatives would have a visitor parking area and secured parking areas for district employees, vehicles, and equipment. Most parking areas would be surfaced with asphalt paving.

Ancillary Improvements

Fencing and Gates: The project site would be enclosed with fencing. Fencing along Buckley Road and other areas visible from public viewpoints would be wrought iron-style; fencing not within public view along the southern limits of the project would be expanded metal or chain-link fence.

Retaining Walls: The project proposes approximately 1,570 linear feet of retaining walls, varying in height from approximately 8 feet to 20 feet above the new grade.

Fire Suppression Equipment/Hydrants: Fire hydrants would be installed in accordance with applicable requirements of the Office of the State Fire Marshal and local fire department. A designated firewater tank and pump house could be required for both Build Alternatives, but the sizing of the tank would vary.

Landscape and Irrigation: Landscaping requiring minimal maintenance and an automatic irrigation system would be installed on the project site.

Exterior Lighting: Exterior lighting would be installed throughout the site for security purposes; lighting would be located along the site perimeter, but it would be directed downward and shielded to reduce light dispersion. Lighting must meet Caltrans safety protocols, which require 24-hour lighting of the facility with lights.

Driveways and Circulation: Two driveways are proposed from the Buckley Road Extension into the project site, located approximately 400 feet apart. The main driveway proposed is the most easternly entrance to the site and is approximately 500 feet from the intersection at Buckley Road and Vachell Lane. A secondary driveway is also proposed west of the main entrance, approximately 550 feet from the intersection at Buckley Road and South Higuera Street.

Sidewalk and Street Improvements: Currently no sidewalk or curb exists along the southern side of the Buckley Road Extension adjacent to the project development. Along Buckley Road at the project site, a separated pedestrian and bike path runs along the northern side of the road. The project would include new curbs, gutters, and sidewalks along the main driveway and at its intersection with Buckley Road.

Flagpoles and Monument: Three metal flagpoles, each approximately 30 feet high, would be installed near the main entrance from Buckley Road. A Caltrans monument sign would also be installed at this location.

Stormwater Drainage: Site runoff in the northern half of the project site would be directed toward underground vaults. Depending on groundwater level and site conditions, the vaults would range from 3 feet to 10 feet below new grade elevation and 12,000 square feet to 40,0000 square feet in size. Site runoff at the southern half of the project site would be directed to a large retention basin approximately 23,000 square feet in size and 4.5 feet in depth below the new grade elevation.

Utilities: Both Build Alternatives share the same proposed utility connections for electricity, natural gas, and communications. The project is being designed as an electric facility and will accommodate the future potential of all-electric maintenance fleet. Although the project includes only electric features for operation of the facility, a connection to the nearby natural gas line and stub-out within the state property will be constructed. A natural gas connection and stub-out as described will ensure that the new facilities are not precluded from any unforeseeable future natural gas needs. More detail regarding the water and sewer utilities for the Build Alternatives is included in the "Unique Features of the Build Alternatives" section in this Executive Summary.

Communications: A radio/microwave dish and equipment will be constructed to access the Caltrans mobile radio systems throughout District 5.

Water Monitoring Well: A water monitoring well will be drilled on the project site prior to the final environmental document. The monitoring well is currently in the permitting process with the County of San Luis Environmental Health Department.

Unique Features of the Build Alternatives

Alternative 1:

To support long-term operation at the site, Alternative 1 would construct a permanent onsite water well and septic system for potable water and sewer services.

An approximately 475,00-gallon designated aboveground firewater tank would be used and connected to an automatic pumphouse to provide high pressure water to fire hydrants and building sprinkler systems. The approximate dimensions of the tank are 65 feet in diameter by 22 feet in height.

Alternative 2:

Alternative 2 would construct new utility infrastructure to connect to water and sewer services from the City of San Luis Obispo. New utility lines would likely enter the project site within or near the main driveway at Buckley Road, and it is expected that the new utility lines would be constructed under the existing road prism of South Higuera Road, the Buckley Road Extension, and Vachell Lane.

PUBLIC INVOLVEMENT PROCESS

Draft EIR Public Review and Comment Period

This Draft EIR is being circulated for a 45-day public review and comment period. The review period began on the date specified in the Notice of Availability (NOA) and will conclude 45 days thereafter. One public meeting will be held during this period and spoken and written comments will be accepted. The purpose of public circulation and the public meetings is to provide agencies and interested individuals with the opportunity to comment on or express concerns regarding the contents of this Draft EIR. The specific date, time, and location for this meeting is provided in the Notice of Availability, on the project website, and through several other methods intended to notify as many potentially interested individuals, agencies, and entities as reasonably possible.

Written comments concerning this Draft EIR can be submitted at the public meeting described above and throughout the Draft EIR public review period. All comments must be received by 5:00 p.m. on the final date of public review as identified in the Notice of Availability, and directed to the name and address listed below:

Lucas Marsalek, Environmental Coordinator
California Department of Transportation, District 5
50 Higuera Street
San Luis Obispo, California 93401
email: lucas.marsalek@dot.ca.gov

Submittal of written comments by email would be appreciated; attached documents in Microsoft Word or PDF format are encouraged. Written comments received in response to this Draft EIR during the public review period will be addressed in a Response to Comments section of the Final Environmental Impact Report.

The Notice of Preparation, Notice of Availability, and Draft EIR can be viewed online at the following website: https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects

ALTERNATIVES CONSIDERED

Two Build Alternatives and a No-Build Alternative are under consideration for the project. The No-Build (No-Project) Alternative is considered as required by CEQA. The following Build Alternatives were considered because they meet most of the project's objectives, are expected to be feasible, and avoid or substantially reduce one or more significant impacts of the project:

- Alternative 1: Onsite Water and Sewer
- Alternative 2: Connect to City Water and Sewer

No-Build Alternative

Under the No-Build Alternative, Caltrans would not construct and relocate the District 5 Maintenance Station and Equipment Shop. Caltrans would continue to operate from the two existing facilities at 50 Higuera and 66 Madonna Road. The existing facilities would continue to be used for current and projected future operations despite their deficiencies. The No-Build Alternative would not achieve any of the project's objectives but is being considered as required by CEQA Guidelines Section 15126.6(e).

Under the No-Build (No-Project) Alternative, all the impacts associated with the construction and operation at the project location would be avoided. At the project location, no temporary construction-related impacts or long-term operational impacts would result. However, not constructing the project would impede the ability of Caltrans District 5 Maintenance and Equipment Divisions to meet their operational goals and responsibilities to the state highway system.

Alternative 1: Onsite Sewer and Water

Alternative 1 proposes drilling a new onsite groundwater well and constructing a potable water system to support Caltrans operations at the site and proposes constructing an onsite septic sewer system.

Alternative 2: Connect to City Water and Sewer

Alternative 2 proposes connecting to City water and sewer. This alternative will require an Outside User Agreement with the City to be followed by annexation of the state-owned property into the City or will require annexation without an Outside User Agreement when the City completes its next General Plan Update in 2028 (approximately).

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table ES.1 summarizes the environmental impacts associated with the project and the analyzed alternatives. The No-Build Alternative would involve no development onsite and, as a result, would have the fewest impacts and would be environmentally superior to the project. However, the No-Build Alternative would not achieve the project objectives. Further, CEQA Guidelines Section 15126.6 states that if the environmentally superior alternative is the No-Build (No-Project) Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

Alternative 1 and Alternative 2 have similar impacts for most resources as the two alternatives are different solely in the source and associated infrastructure needed for water and sewer to support the project. Alternative 1 is the environmentally superior alternative since impacts would be reduced for many issue areas related to the construction and long-term operation of expanded City water and sewer infrastructure along Vachell Lane, Buckley Road, and South Higuera. Alternative 1 would reduce or avoid impacts in the following resource areas: construction

noise and traffic impacts, potential significant and unavoidable offsite agriculture impacts related to induced growth, and land use and planning impacts. Alternative 1 would continue to result in significant and unavoidable impacts to aesthetic resources.

Table ES.1 Summary of Potential Impacts from Alternatives

Potential Impact	Alternative 1	Alternative 2	No-Build Alternative
Aesthetics	Potential impacts associated with the reduction of a scenic vista and the existing character and quality of public views	Same as Alternative 1	No impact
Agriculture	Potential impacts associated with the direct conversion of approximately 17 acres of farmland classified as both Farmland of Local Importance (Farmland Mapping and Monitoring Program) and Prime Farmland if Irrigated (National Resource Conservation Service) used for dry land farming. Indirect loss of an additional 9 acres of active dry land farming located south of Buckley Road.	Same as Alternative 1 but with potential additional loss of offsite farmland due to the expansion of City water and sewer infrastructure	No impact
Air Quality	No net increase in regional emissions expected. Potential impacts associated with increase of mobile and stationary source emissions at the project site.	Same as Alternative 1 but more offsite construction emissions related to utility construction.	No impact
Biological Resources	Potential impacts associated with new source of pollution to creek and loss bat roosting habitat within existing buildings and farm structures	Same as Alternative 1	No impact
Cultural Resources	Potential impacts to a historic archaeological resource eligible to the National Register	Same as Alternative 1	No impact

Potential Impact	Alternative 1	Alternative 2	No-Build Alternative
Energy	No net increase in energy use expected. New facilities will be built with energy-efficient features. The operation and maintenance of onsite water and sewer will likely include higher energy use.	Less energy use expected with connection to City water and sewer.	No impact
Geology and Soils	Structures will be designed to meet engineering standards based on site-specific geotechnical data.	Same as Alternative 1	No impact
Greenhouse Gas Emissions	No net increase in regional emissions expected. New facilities will be built with energy efficient features. The operation and maintenance of onsite water and sewer system will likely include higher operational greenhouse gas emissions.	Less greenhouse gas emissions expected with connection to City water and sewer.	No impact
Hazardous Waste and Hazardous Materials	Potential impacts associated with new operational hazardous waste generation and storage at the project site. Potential for groundwater contaminants in onsite water well and water contamination from septic system.	Potential impacts associated with new operational hazardous waste generation and storage at the project site.	No impact
Hydrology and Water Quality	Potential impacts associated with approximately 18 acres of new impervious surface and new sources of pollution next to creek. Potential groundwater withdrawal impacts and potential for groundwater contamination associated with onsite water well and septic system.	Potential impacts associated with approximately 18 acres of new impervious surface new sources of pollution next to creek	No impact

Potential Impact	Alternative 1	Alternative 2	No-Build Alternative
Land Use and Planning	Potential impacts associated with a conversion of County-zoned agricultural land to a public facility with an industrial type of use	Potential impacts associated with a conversion of County-zoned agricultural land to a public facility with an industrial type of use. Because project is outside City limits, a Outside User Agreement and Annexation of the state-owned property will be required to connect City water and sewer to the project site.	No impact
Mineral Resources	No impact	No impact	No impact
Noise	Potential impacts associated with an increase in noise from new stationary and mobile sources located at the project site and on adjacent public roads.	Same as Alternative 1 but more offsite construction noise related to utility construction.	No impact
Population and Housing	Potential impacts associated with an expected increase of 29 future employees to the area	Potential impacts associated with an expected increase of 29 future employees to the area. Expansion of City water and sewer infrastructure along Vachell Lane, Buckley Road, and South Higuera Street could induce development of the adjacent and surrounding properties	No impact
Public Services	Potential impacts associated with a new industrial-type use and increase of 185 employees at the project site	Same as Alternative 1	No impact
Recreation	Potential impacts associated with a new industrial-type use and increase of 185 employees at the project site	Same as Alternative 1	No impact
Transportation and Senate Bill 743/Induced Demand Analysis	Potential impacts associated with an increase of 185 employees at the project site but a net increase of only 90 daily trips to the area.	Same as Alternative 1	No impact

Potential Impact	Alternative 1	Alternative 2	No-Build Alternative
Tribal Cultural Resources	No impact	No impact	No impact
Utilities and Service Systems	Potential impacts associated with new onsite stormwater drainage infrastructure, onsite potable water and sewer system, and offsite electrical, natural gas, and communications.	Potential impacts associated with new onsite stormwater drainage infrastructure, offsite water and sewer demands and infrastructure needed for connections to the City, and offsite electrical, natural gas, and communications.	No impact
Wildfire	Potential impacts associated with new structures and an increase of 185 employees at the project site, which is surrounded by very high fire severity zones	Same as Alternative 1	No impact
Construction	Potential impacts to nearby receptors associated for air pollution and noise	Potential impacts to nearby receptors associated for air pollution and noise. Increased impacts related to road closures or traffic diversions associated with constructing water and sewer connections to the City.	No impact
Cumulative	Potential impacts associated with the reduction of hillside and open space views, loss of farmland, and groundwater withdrawal to support an onsite potable water system.	Potential impacts associated with the reduction of hillside and open space views, loss of farmland, and the expansion of offsite water and sewer infrastructure to connect to the City.	No impact

Alternatives Considered but Eliminated from Further Discussion

Alternative 3: Facilities North of Buckley Road

Alternative 3 proposed constructing the Maintenance Station and Equipment Shop north of Buckley Road. This alternative was eliminated because the state-owned property north of Buckley Road is not large enough to fit the facilities and site improvements needed to support the long-term operation of the Maintenance Station and Equipment Shop.

Alternative 4: Maintenance Station North and Equipment Shop South

Alternative 4 proposed constructing the Maintenance Station north of Buckley Road and Equipment Shop south of Buckley Road. This alternative was eliminated because it did not meet the Purpose and Need of the project to consolidate the current fragmented locations of the two facilities. Currently, the two facilities are separated by Madonna Road.

Alternative 5: Maintenance Station South and Equipment Shop North

Alternative 5 proposed constructing the Maintenance Station south of Buckley Road and Equipment Shop north of Buckley Road. This alternative was eliminated because it did not meet the Purpose and Need of the project to consolidate the current fragmented locations of the two facilities. Currently, the two facilities are separated by Madonna Road.

Alternative 6: Driveway South of Vachell Lane and Buckley Road Intersection

Alternative 6 proposed constructing a third driveway access point that would connect to the private driveway on the east side of the property and south of the Vachell Lane and Buckley Road intersection. This alternative was eliminated because it was determined that a third driveway was not required and because it would encroach on the floodplain, create new impacts to the jurisdiction area and habitat at the confluence of Tank Farm Creek and the East Fork of San Luis Obispo Creek, and encroach on private property.

AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123(b)(2) of the CEQA Guidelines requires that the summary of an EIR identify areas of controversy known to the lead agency, including issues raised by agencies and the public. In the Notice of Preparation, Caltrans described that the project would receive City water and sewer from the City of San Luis Obispo with an outside user agreement and/or a will serve letter. The City responded with a comment letter to the Notice of Preparation stating that the project site would need to be annexed to receive water and sewer from the City according to the City Municipal Code.

In follow-up meetings to the Notice of Preparation, Caltrans and the City have agreed that City water and sewer services can be provided by potentially an Outside User Agreement and annexation, or annexation without an Outside User Agreement when the City updates its General Plan in 2028 (approximately). Expanding City water and sewer services outside the City limits may induce growth and therefore is a potential area of controversy.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts have been identified as being significant and unavoidable for the reasons described below:

***Impact AES-1: Have a substantial adverse effect on a scenic vista* – Significant and Unavoidable**

The Cuesta Ridge borders the region to the north and east, the Irish Hills border the Los Osos Valley to the west, and the San Miguelito Hills are to the south. These hills are generally the distant visual limits of the area and are considered the scenic backdrop for much of the area. The project building rooflines will be below the horizon lines of the distant hills. However, depending on the viewer height, views from Buckley Road looking south may have the hillside horizon lines interrupted by the proposed buildings. Thus, the existing views would undergo a moderate reduction in the remaining availability of visual access to open space and hillside views. Because of the moderately high quality of the visual resources, combined with the community's high value placed on these visual resources, even this moderate reduction in views would be considered a substantial visual impact. Mitigation Measures AES-1 through AES-16 will reduce the impact to the scenic vistas by minimizing the site elevation, requiring treatment to walls and hardscape, providing layered landscaping, and requiring appropriate architectural style for structures. However, because a moderate reduction in the remaining availability of visual access to open space and hillside views is still expected, this impact is considered Significant and Unavoidable.

***Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings* - Significant and Unavoidable**

The existing visual character of the project area is based mainly on its rural, undeveloped landscapes and varying topography. The project would increase the urban character caused by a change of land use type, additional hardscape and structures, lighting, fencing, and grading and landform alteration.

Mitigation Measures AES-1 through AES-16 will reduce the impacts to the existing public viewpoints by minimizing the site elevation, requiring treatment to walls and hardscape, providing layered landscaping, and requiring appropriate architectural style for structures. However, given the moderately high viewer sensitivity, the inherent visual change associated with an increase in visual scale and additional hardscape would result in a noticeable and substantial degradation of visual character; therefore, this is impact is considered Significant and Unavoidable.

***Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use?* – Significant and Unavoidable**

Alternative 2 would expand water and sewer infrastructure outside the City limits and adjacent to and nearby surrounding agricultural land. This water and sewer infrastructure would likely induce development and conversion of agriculture at these locations. Though any development beyond the project would require annexation into the City and therefore require mitigation to offset the loss of agricultural land, recent local efforts to mitigate the loss of agricultural land around

the City have been difficult. Therefore, Alternative 2 would indirectly result in agricultural land conversion that could not be fully mitigated; this impact would be Significant and Unavoidable.

EXECUTIVE SUMMARY MATRIX

Table ES.2 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this Draft EIR. Table ES.2 is included in the Draft EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES.2 Summary of Impacts and Mitigation Measures

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Aesthetics	Impact AES-1: Have a substantial adverse effect on a scenic vista	Significant	MM AES-1: Architecture styles MM AES-2: Structure elevation MM AES-3: Structure and roof colors MM AES-4: Fence height and type MM AES-5: Radio/microwave dish and equipment placement. MM AES-6: Solar panels and/or canopies placement. MM AES-7: Landscaping MM AES-8: Slope-rounding and appearance MM AES-9: Retaining wall aesthetic treatment MM AES-10: Roundabout aesthetic treatment MM AES-11: Detectable warning surfaces on Buckley Road MM AES-12: Permanent stormwater prevention feature appearance MM AES-13: New lighting design	Significant and Unavoidable

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Aesthetics	Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from 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	Significant	MM AES-1 through MM AES-13 apply	Significant and Unavoidable
Aesthetics	Impact AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	Significant	MM AES-13 applies	Less than Significant after Mitigation
Agriculture	Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use	Less than Significant	None required	Less than Significant
Agriculture	Impact AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract	Significant	MM-AG-1: Landscaping adjacent to active agriculture operation	Less than Significant after Mitigation
Agriculture	Impact AG-3: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use	Significant	Mitigation not feasible	Significant and Unavoidable

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Air Quality	Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan	Significant	MM AQ-1: Minimize construction-generated dust emissions	Less than Significant after mitigation
Air Quality	Impact AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard	Significant	MM AQ-1 applies	Less Than Significant after Mitigation
Air Quality	Impact AQ-3 Expose sensitive receptors to substantial pollutant concentrations	Significant	MM AQ-1 applies MM AQ-2: Minimize construction-generated exhaust emissions MM AQ-3: Naturally occurring asbestos requirements during construction MM AQ-4: Health Risk Assessment for stationary sources	Less Than Significant after Mitigation
Air Quality	Impact AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	None required	Less than Significant

Biological Resources	Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Significant	MM BIO-1: Conduct Pre-construction survey MM BIO-2: Conduct Pre-construction training MM BIO-3: ESA Fencing MM BIO-4: Control trash that attracts predators MM BIO-5: Guidance for vehicle use MM BIO-6: Refueling, Maintenance, and Staging MM BIO-7: Stormwater BMPs MM BIO-8: Pre-construction survey and handling of special-status species MM BIO-9: Preconstruction survey for American badger. MM BIO-10: No pets or firearms. MM BIO-11: Cover 2-foot-deep Excavations. MM BIO-12: Inspect 3 inch or Greater Diameter Pipes for American Badgers MM BIO-13: Nesting Bird Survey MM BIO-14: Active Nests Shall not be Disturbed MM BIO 15: Tree ESA Design and Install. MM BIO 16: Install Owl Boxes MM BIO-17: Monitor Initial Clearing and Grubbing MM BIO-18: Bird and Bat Exclusion	Less Than Significant after Mitigation

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
			MM BIO-19: Scheduling of Building Demolition and Tree Removal for Bats MM BIO-20: Maternity roosts shall not be disturbed MM BIO-21: Install Replacement Bat Habitat	
Biological Resources	Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Marine Fisheries Service	Significant	MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-5, MM BIO-6, and MM BIO-7 apply MM BIO-22: Invasive Species	Less Than Significant after Mitigation
Biological Resources	Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	Significant	MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-5, MM BIO-6, and MM BIO-7 apply MM BIO-22: Invasive Species	Less Than Significant after Mitigation
Biological Resources	Impact BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Significant	None required	Less than Significant
Biological Resources	Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Less than Significant	None required	Less Than Significant

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Cultural Resources	Impact CR-1: cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	Significant	MM CR-1: Data Recovery of historic archaeological resource MM CR-2: Consultation, Public outreach, and education	Less Than Significant after Mitigation
Geology and Soils	Impact GEO-1: •directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving a rupture of a known earthquake fault, seismic-related ground failure (including liquification), or landslides	Less than Significant	None required	Less Than Significant
Geology and Soils	Impact GEO-2: directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking	Less than Significant	None required	Less Than Significant
Geology and Soils	Impact GEO-3: result in substantial soil erosion or the loss of topsoil	Less than Significant	None required	Less Than Significant
Geology and Soils	Impact GEO-4: 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	Significant	MM GEO-1: Geotechnical Study and Design MM GEO-2: Groundwater use limitations during drought	Less Than Significant after Mitigation
Geology and Soils	Impact GEO-5: be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	Significant	MM GEO-1 applies	Less Than Significant after Mitigation

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Geology and Soils	Impact GEO-6: 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	Significant	MM GEO-1 applies	Less Than Significant after Mitigation
Geology and Soils	Impact GEO-7: directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	Significant	MM GEO-PAL-1: Develop a Paleontological Mitigation Plan MM GEO-PAL-2: Implement a Paleontological Mitigation Plan	Less Than Significant after Mitigation
Greenhouse Gas and Energy	Impact GHG/E-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment	Less than Significant	Less than Significant	Less than Significant
Greenhouse Gas and Energy	Impact GHG/E-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs	Less than Significant	Less than Significant	Less than Significant
Greenhouse Gas and Energy	Impact GHG/E-3: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	Less than Significant	None required	Less Than Significant
Greenhouse Gas and Energy	Impact GHG/E-4: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	Less than Significant	None required	Less Than Significant
Hazards and Hazardous Materials	Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Less than Significant	None required	Less Than Significant

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Hazards and Hazardous Materials	Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Significant	MM HAZ-1: Phase II Environmental Site Assessment MM HAZ-2: Soil Management Plan MM HAZ-3: Groundwater Investigation for Drinking Water Well MM GEO-1 applies MM AQ-1 and MM AQ-3 apply	Less Than Significant after Mitigation
Hazards and Hazardous Materials	Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area	Less than Significant	None required	Less Than Significant
Hazards and Hazardous Materials	Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	Significant	MM TRA-1 applies	Less Than Significant after Mitigation
Hazards and Hazardous Materials	HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires	Less than Significant	None required	Less Than Significant
Hydrology and Water Quality	Impact HYDRO-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality	Significant	MM BIO-3, MM BIO-6, and MM BIO-7 apply MM HAZ-1, MM HAZ-2, and MM-HAZ-3 apply MM-GEO-1 applies	Less Than Significant after Mitigation

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Hydrology and Water Quality	Impact HYDRO-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	Significant	MM-GEO-2 applies MM-HAZ-1 applies	Less Than Significant after Mitigation
Hydrology and Water Quality	Impact HYDRO-3: 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 site or off site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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 impede or redirect flood flows	Less than Significant	None required	Less Than Significant
Hydrology and Water Quality	Impact HYDRO-4: Risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones	Less than Significant	None required	Less Than Significant
Hydrology and Water Quality	Impact HYDRO-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	Significant	MM-GEO-1 applies MM-HAZ-1 applies	Less Than Significant after Mitigation

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Land Use and Planning	Impact PLU-1: Physically divides an established community	Less than Significant	None required	Less Than Significant
Land Use and Planning	Impact PLU-2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	Less than Significant	None required	Less Than Significant
Noise and Vibration	Impact NOI-1: Generation of a substantial temporary 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	Less than Significant	None required	Less Than Significant
Noise and Vibration	Impact NOI-2: Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	Significant	MM NOI-1: Noise Enclosures MM NOI-2: Vegetated Berm	Less Than Significant after Mitigation
Noise and Vibration	Impact NOI-3: Generation of excessive groundborne vibration or groundborne noise levels	Less than Significant	None required	Less Than Significant

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Noise and Vibration	Impact NOI-4: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels	Less than Significant	None required	Less Than Significant
Population and Housing	Impact PH-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	Less than Significant	None required	Less Than Significant
Public Services	Impact PR 1 - Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services	Less than Significant	None required	Less Than Significant
Recreation	Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	Less than Significant	None required	Less Than Significant

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Transportation	Impact TRANS-1 Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	Significant	MM TRANS-1: Construction Traffic Management Plan	Less Than Significant after Mitigation
Transportation	Impact TRANS-2: Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)	Less than Significant	None required	Less Than Significant
Transportation	Impact TRANS-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	Less than Significant	None required	Less Than Significant
Transportation	Impact TRANS-4: Result in inadequate emergency access	Significant	MM TRANS-1 applies	Less Than Significant after Mitigation
Utilities and Service Systems	Impact UTL-1: 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	Significant	MM TRANS-1 applies	Less Than Significant after Mitigation
Utilities and Service Systems	Impact UTL-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years	Less than Significant	None required	Less Than Significant

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Utilities and Service Systems	Impact UTL-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	Less than Significant	None required	Less Than Significant
Utilities and Service Systems	Impact UTL-4: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals/Comply with all applicable management and reduction regulations related to solid waste	Less than Significant	None required	Less Than Significant
Wildfire	Impact FIRE-1: Substantially impair an adopted emergency response plan or emergency evacuation plan	Significant	MM TRANS-1 applies	Less Than Significant after Mitigation
Wildfire	Impact FIRE-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire – Less than Significant	Less than Significant	None required	Less Than Significant
Wildfire	Impact FIRE-3: 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	Less than Significant	None required	Less Than Significant

Resource	Impact	Level of Significance After Mitigation	Mitigation Measure (MM)	Level of Significance After Mitigation
Wildfire	Impact FIRE-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes	Less than Significant	None required	Less Than Significant
Cumulative	Impact CUM-1: Aesthetic Resources	Significant	MM AES-1 through MM AES-13 apply	Cumulatively Considerable
Cumulative	Impact CUM-1: Agricultural Resources	Significant	No mitigation feasible	Cumulatively Considerable

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Chapter 1 Introduction

The California Department of Transportation (Caltrans) has prepared this Draft Environmental Impact Report (Draft EIR) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed Caltrans District 5 Maintenance Station and Equipment Shop Relocation project. The project and its location are described in depth in Chapter 2, Project Description. This document was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.).

1.1 BACKGROUND AND NEED FOR THE PROJECT

1.1.1 About District 5

Caltrans has designated 12 districts within the state of California. The management (maintenance and operations) of all State Highways within district boundaries is the responsibility of the respective districts. Each of the District Offices are also the focal point for all administrative, project development, and executive management activities within each of the districts. District 5 is made up of Santa Barbara, San Luis Obispo, Monterey, San Benito and Santa Cruz counties. The district is the home of over 725 Caltrans employees including 350 field employees. The District Office for District 5 is located in San Luis Obispo.

There are 30 freeways and highways located within District 5 that if placed end-to-end would stretch for 1,169 miles. The district is also home to Highway 101, which is one of three major north-south routes connecting northern and southern California. There are 33 cities and 7,788,809 acres in the five-county district, with a population of over 1.3 million people. Motorists travel 6.9 billion vehicle miles through the district each year.

1.1.2 District 5 Maintenance Division

The District 5 Maintenance Division is headquartered in San Luis Obispo but has four satellite stations in the Monterey Peninsula, Salinas, Santa Barbara, and Santa Cruz.

The Caltrans Maintenance Division is responsible for state highway maintenance. Highway maintenance is the “preservation, upkeep, and restoration” of the roadway structures as nearly as possible in the condition to which they were constructed. “Roadway facilities” includes highways and

structures, toll bridges and appurtenant facilities. “Maintenance” also includes the operation of highway facilities and services to provide satisfactory and safe highway transportation” (Caltrans 2014). The District 5 Maintenance Division has the following objectives:

- Coordinate district equipment, the Integrated Maintenance Management System (IMMS), communications, maintenance agreements, service contracts, hazardous materials (self-generated waste and spills), storm water compliance, Level of Service, landscaping, and clerical support.
- Storm damage restoration, Day Labor project coordination, field engineering support, design of Major Maintenance projects, coordination between Maintenance and other programs, and all other engineering functions as required.
- Manage field operations and all maintenance activities within the district

1.1.3 District 5 Division of Equipment

The District 5 Division of Equipment is headquartered in San Luis Obispo and provides services to the entire district. The division provides Caltrans with “typical equipment and associated options to safely and efficiently maintain the State highway infrastructure” (Caltrans 2014). The Division of Equipment is also responsible for maintaining the district mobile fleet. The District 5 Equipment Shop has the following objectives:

- Provide Caltrans with a safe and functional equipment fleet that complies with all the requirements of the California Code of Regulations, California Vehicle Code, Cal-OSHA, and other regulatory agencies.
- Schedule all service and repair work to the Mobile Fleet as overall district priorities dictate.

1.1.4 Planning History

Planning for the Caltrans District Maintenance Station and Equipment Shop Relocation project began in 1991. In 1999, several locations were evaluated, resulting in Caltrans purchasing a 56.5-acre property at 4485 Vachell Lane in 2000.

In 2005, a Facility project Study Report was completed for the relocation of the maintenance station. The report proposed a facility on the 56.5-acre state-owned property at 4485 Vachell Lane. At that time, it was assumed Caltrans would be responsible for building the Buckley Road Extension. With the inclusion of the Buckley Road Extension and other increased cost estimates, the project was removed from the 10-year Budget Plan and put on hold indefinitely due to lack of funding.

In 2008, the Avila Ranch housing development was proposed on a 150-acre parcel on the east side of Vachell Lane, across the street from the state's property. The Avila Ranch parcel has been annexed into the City of San Luis Obispo and added to the City's General Plan as residential zoning to meet its goal for more housing. To build the 720 homes proposed, the developer was required to build and pay for the Buckley Road Extension, which bisects the state's property.

In 2017, a Caltrans District 5 Land Swap Report detailed current and future square footage needs for the maintenance station and equipment shop operations. The report analysis used Caltrans' general space allocation guidelines and benchmark data to compute the square footage needs. Based on Caltrans' space planning guidelines and future estimated employee counts in 2027, it became clear that relocating Caltrans' maintenance station and equipment shop facilities was needed.

Phased construction on Avila Ranch began in 2019, and several more years of construction are expected. Construction of the Buckley Road Extension began in summer 2021 and was completed in the fall of 2022.

In 2019, funding for the Caltrans District 5 Maintenance Station and Equipment Shop Relocation project was approved. Once funding was approved, Caltrans began scoping, planning, and designing a project concept. In March 2022, Caltrans notified agencies and the public of the scope of the project concept and the environmental resources that would be analyzed prior to project approval and completion of a final design for construction. The notice stated, an Outside User Agreement with the City (to be approved by the San Luis Obispo Local Agency Formation Commission) would be required for the project to receive City water and sewer services. The City comment on the Notice of Preparation reiterated the project would require annexation of the state-owned property into the City to receive water and sewer. Following the Notice of Preparation and the City comment letter, Caltrans had multiple discussions with the City and the San Luis Obispo Local Agency Formation Commission (LAFCO), and all parties agreed that there is potential to complete an Outside User Agreement and a definite requirement to complete annexation of the state-owned property if City water and sewer services are to be provided

1.1.5 Purpose

The purpose of the project is to:

- Construct facilities that meet Caltrans District 5 programming requirements for existing and future Maintenance Station and Equipment Shop operations (building sizing, employee staffing, parking, storage space, etc.).

- Improve daily functions by separating the Maintenance Station and Equipment Shop facilities as industrial-type facilities from the conflicting uses of the District 5 Administrative Offices and the Material and Testing Laboratory.
- Consolidate the Maintenance Station and Equipment Shop facilities to a single location.
- Construct a facility in District 5 that provides efficient access to the state highway system.
- Construct a facility that meets the standards of the Americans with Disabilities Act (ADA) and the California Code of Regulations Title 24.
- Decrease flood risk by relocating the Maintenance Station and Equipment Shop facilities outside or above potential flood zones.

1.1.6 Need

The Caltrans District 5 Maintenance Station and Equipment Shop facilities currently consist of a combination of aging and undersized facilities at problematic locations. Past, present, and predicted future problems with these facilities include:

- The current facilities are inadequate in size and function and do not meet the needs for existing staff and equipment.
- Fragmented work locations make operations and activities inefficient.
- Conflicting industrial-type and administrative-type workspaces.
- Escalating operational costs of maintaining aging facilities.
- Recurring flooding events causing damage to buildings and equipment.
- Existing buildings do not meet current seismic structural building standards nor modern green building practices that maximize efficient use of energy and water resources.

1.2 OVERVIEW OF CEQA REQUIREMENTS

The basic purposes of CEQA are to (Chapter 14 California Code of Regulation Section 15002):

- Inform governmental decision makers and the public about the potential significant environmental effects of proposed activities.
- Identify the ways by which environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring implementation of feasible mitigation measures or project alternatives that would substantially lessen those significant effects on the environment.

- Disclose to the public the reasons that a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

With certain strictly limited exceptions, CEQA requires that state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before approving or carrying out those projects. CEQA establishes both procedural and substantive requirements that agencies must satisfy to meet CEQA's objectives. For example, the agency with principal responsibility for approving or carrying out a project (the lead agency) must first assess whether a project would result in significant environmental impacts. If there is substantial evidence that the project would result in significant environmental impacts, CEQA requires that the agency prepare an EIR that analyzes both the project and a reasonable range of potentially feasible alternatives.

As described in the CEQA Guidelines (Chapter 14 California Code of Regulation Section 15121[a]), an EIR is an informational document that assesses potential environmental effects of a proposed project and identifies mitigation measures and alternatives to the project that could reduce or avoid potentially significant environmental impacts. The lead agency must also develop a plan for implementing and monitoring the success of the identified mitigation measures and carry out specific public notice and distribution steps to facilitate public involvement in the environmental review process. As an informational document used in the planning and decision-making process, an EIR is not intended to recommend either approval or denial of a project. In addition, an EIR does not expand or otherwise provide independent authority to the lead agency to impose mitigation measures or avoid project-related significant environmental impacts beyond the authority already within the lead agency's jurisdiction.

1.2.1 Intent and Scope of this Document

In proposing to conduct the various activities identified in Chapter 2, Project Description, of this Draft EIR, Caltrans proposes to carry out and approve a discretionary project subject to CEQA Guidelines Section 15378. Caltrans will use the analyses presented in this Draft EIR, the public comments and responses to them, and the whole of the administrative record to evaluate the project's environmental impacts and to further modify, approve, or deny approval of the project.

1.3 CEQA PROCESS

1.3.1 Notice of Preparation and Scoping Period

A Notice of Preparation (NOP) for the project was prepared in accordance with CEQA Guidelines Section 15082 and circulated to state agencies through the Governor's Office of Planning and Research's State Clearinghouse on March 23, 2022, which initiated the public scoping period. The public review period continued for 33 days and ended on April 25, 2022.

The Notice of Preparation identified environmental topics that would be analyzed in the Draft EIR. The Notice of Preparation was posted online, and copies were distributed to a broad range of stakeholders, including federal, state, and local regulatory agencies and jurisdictions, and property owners in the vicinity of the proposed project. In addition, the announcement of a scoping meeting was posted on social media. The Notice of Preparation is included in this Draft EIR in Appendix B, Scoping Summary.

To provide the public, as well as responsible and trustee agencies, an opportunity to ask questions and submit comments on the scope of the EIR and the project, a public scoping meeting was held online rather than in person, due to the COVID-19 pandemic, during the public scoping period. Caltrans conducted the scoping meeting to provide early opportunities for the public and interested public agencies to provide input. Information about the meeting was mailed to interested parties and nearby property owners, and was also posted on the project website (https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects).

The online scoping meeting was held via Webex communication technology on April 11, 2022. Attendees were given an opportunity to provide spoken and written comments. Caltrans accepted the submitted spoken and written comments at the meeting; written comments were also received during the 33-day scoping period. During the meeting, one spoken comment was received; during the scoping period, six comment letters were received. These comments have been summarized in Appendix B. Information contained in the Notice of Preparation (project description and range of topics) has been refined based on the input received in public comments on the Notice of Preparation and is reflected in the text of this Draft EIR.

1.3.2 Draft EIR

Caltrans has prepared this Draft EIR, as informed by public and agency input received during the scoping period, to disclose potentially significant environmental impacts associated with the project. Where any such impacts are significant, the Draft EIR identifies and discusses feasible mitigation measures and potentially feasible alternatives that substantially reduce or

avoid such effects. The public review period provides the public an opportunity to provide input to the lead agency on the Draft EIR.

1.3.3 Public Review and Meetings

This Draft EIR is currently undergoing public review for 45 days, as specified in the Notice of Availability (NOA) of this Draft EIR. During this period, one public meeting will be held in person. The meeting will begin with a brief overview of the project and the analysis and conclusions set forth in the Draft EIR. This introductory presentation will then be followed by the opportunity for interested members of the public to provide comments regarding the project and the Draft EIR. Commenters may submit spoken comments (which will be recorded) or written comments, or both.

The date, time, and location of the public meeting will be published in local newspapers before the event and are included in the Notice of Availability for this Draft EIR.

1.3.4 Final EIR

All comments (written and spoken) received in response to the Draft EIR will be addressed in a Response to Comments document which, together with the Draft EIR and any related changes to the substantive discussion in the Draft EIR, will constitute the Final EIR. The Final EIR will, in turn, inform Caltrans' final decision as a lead agency under CEQA whether to approve and proceed with the project.

1.4 ORGANIZATION OF THIS DRAFT EIR

This Draft EIR contains the following components:

The Executive Summary provides a description of the issues of concern, identifies alternatives to the project, and summarizes environmental impacts and mitigation measures.

Chapter 1, Introduction, describes the purpose and organization of the EIR and the preparation, review, and certification process.

Chapter 2, Project Description, describes the project, including its purpose and objectives, the project area, actions that would be taken under the project, and related permits and approvals associated with the activity.

Chapter 3, Introduction to the Environmental Analysis, introduces the impact analysis conducted in this Draft EIR.

Chapters 4 through 22 describe the environmental resources and potential environmental impacts of the project. Each of these chapters describes the existing setting and background information for the resource topic area under consideration to aid the reader in understanding the conditions that could be affected by the project. In addition, each chapter includes a discussion of the criteria used in determining the significance levels of the project's environmental impacts, and each provides mitigation measures, if necessary, to reduce, where possible, the adverse effects of potentially significant impacts.

Chapter 23, Other Statutory Considerations, addresses the project's potential to contribute to cumulative impacts, outlines the project's potential to induce growth, and identifies significant and irreversible environmental changes that could result from the project.

Chapter 24, Caltrans Report Preparers, lists the personnel who worked on the environmental document, including consultant staff involved in preparing this Draft EIR.

Chapter 25, Distribution List, contains the individuals and public entities who received the Draft EIR.

Appendix Items A-G contain supplementary and supporting project information.

1.5 CEQA IMPACT TERMINOLOGY AND USE OF LANGUAGE

This Draft EIR uses the following terminology to describe environmental effects of the project:

- A finding of no impact is made when the analysis concludes that the project would not affect the environmental resource or issue.
- An impact is considered less than significant if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered less than significant with mitigation if the analysis concludes that no substantial adverse change in the environment would result with the inclusion of the mitigation measures described.
- An impact is considered significant or potentially significant if the analysis concludes that a substantial adverse effect on the environment could result.
- Mitigation refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.

- A cumulative impact can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, and reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this Draft EIR focuses on whether the project's incremental contribution to significant cumulative impacts, when considered in combination with past, present, or probable future projects, would be cumulatively considerable.
- Because the term "significant" has a specific usage in evaluating impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.

Chapter 2 Project Description

2.1 OVERVIEW

This chapter describes the proposed Caltrans District 5 Maintenance Station and Equipment Shop Relocation project and discusses its purpose and objectives, location, proposed actions, and necessary permits and approvals.

2.2 PROJECT OBJECTIVES

The Caltrans District 5 Maintenance Station and Equipment Shop Relocation project proposes to replace and relocate the existing District 5 Maintenance Station and Equipment Shop facilities in San Luis Obispo. The existing Maintenance Station at 50 Higuera Street and the existing Equipment Shop at 66 Madonna Road are in the City of San Luis Obispo. The project proposes to replace and relocate these facilities south of the new Buckley Road Extension on state-owned property. The current address of the project site is 4485 Vachell Lane in the County of San Luis Obispo. The address will change to a Buckley Road address before the project is operational. The project would relocate the facilities to a new site with adequate space for current and future maintenance and equipment shop operations and consolidate the two facilities to a shared location. The project would provide adequate workspace, equipment storage, and vehicle parking for approximately 155 current employees assigned to the departments, increasing to approximately 184 total employees in the next ten years.

Specific project objectives are as follows:

- Construct facilities that meet Caltrans District 5 programming requirements for existing and future Maintenance Station and Equipment Shop operations (building sizing, employee staffing, parking, storage space, etc.).
- Improve daily functions by separating the Maintenance Station and Equipment Shop facilities as industrial-type facilities from the conflicting uses of the District 5 Administrative Offices and the Material and Testing Laboratory.
- Consolidate the Maintenance Station and Equipment Shop facilities to a single location.
- Construct a facility in District 5 that provides efficient access to the state highway system.
- Construct a facility that meets the standards of the Americans with Disabilities Act (ADA) and the California Code of Regulations Title 24.
- Decrease flood risk by relocating the Maintenance Station and Equipment Shop facilities outside or above potential flood zones.

2.3 PROJECT LOCATION AND SETTING

The project site consists of two state-owned parcels (APN 076-071-021 and 076-071-022), totaling approximately 56.5 acres. APN 076-071-022 is 5 acres, encompasses the area of the new Buckley Road Extension and some improvements along Vachell Lane, and bisects APN 076-071-021. Most of the project's new proposed development will be located on APN 076-071-021, within 34 acres, south of the Buckley Road Extension. The site is currently unincorporated in the County but is located within the City of San Luis Obispo's adopted Sphere of Influence. A Sphere of Influence is defined by Government Code 56425 as "…a plan for the probable physical boundary and service area of a local agency or municipality." The project site is just south of the city limits between South Higuera and Vachell Lane and just west/southwest of the city limits adjacent to Vachell Lane and Buckley Road. The existing Maintenance Station and Equipment Shop are about 2 miles north of the project site and within the city limits on state-owned parcels at 50 Higuera Street and 66 Madonna Road (APNs 004-511-020 and 053-011-001), totaling 5.8 acres. Figures 2-1 and 2-2 show the locations of the existing facilities and the location of the project. Figures 2-3 and 2-4 show the existing conditions and the zoning at and adjacent to the project site.

2.3.1 Existing Conditions at the Project Site

The project site is generally described as encompassing the following: 1) property north of the Buckley Road Extension, 2) the Buckley Road Extension, and 3) property south of Buckley Road Extension. The project site is mostly undeveloped and has been used historically for agriculture, including dry land farming and dairy. The site has also been used to support different Caltrans District 5 functions, including trailer/modular office space and materials/equipment storage, for the last 20 years.

North of Buckley Road Extension

There are 17.5 acres of state-owned property north of Buckley Road within APN 076-071-021. The current land use and conditions north of Buckley Road include (approximately):

- 10 acres of dry farming.
- 6 acres of development, including the District 5 construction office, a parking area, a driveway from Vachell Lane, and the Octagon parking and landscape buffer easement.
- 1.5 acres of open/ruderal space.

Buckley Road Extension

In fall of 2022, the Buckley Road Extension (APN 076-071-022) was constructed and included 5 acres of development; it is now under a deed of lease from Caltrans to the County. The deed of lease includes terms of maintenance and use

of the Buckley Road Extension infrastructure, including but not limited to road elements, retaining walls, and drainage systems.

South of Buckley Road Extension

There are 34 acres south of Buckley Road within APN 076-071-021. Current conditions south of Buckley Road include (approximately):

- 26 acres of dry farming.
- 3 acres of anthropogenic/developed space, including farming structures and Caltrans equipment and material storage.
- 1 acre of ruderal space.
- 4 acres of arroyo willow thicket along the creek.

The East Fork of San Luis Obispo Creek runs along the eastern property line south of the Buckley Road Extension, and San Luis Obispo Creek runs as close as 0.1 mile west of the property site where it runs between South Higuera Road and Highway 101. The two creeks converge near the South Higuera Highway 101 Northbound onramp, approximately 0.5 mile west of the project site.

Overhead Pacific Gas and Electric Company (PG&E) transmission lines run across the project site before the southern limits and a 2.5-acre easement from Caltrans to PG&E. Currently, an existing water well near the Buckley Road and Vachell Lane intersection provides the Construction office north of the Buckley Road Extension with non-potable water.

Two culverts that take stormwater runoff from the Buckley Road Extension have outlets south of the Buckley Road Extension. One of the outlets is 180 feet and south from the edge of the Buckley Road easement; the other is directly adjacent to and south of the new Buckley Road at the Vachell Lane intersection. Figure 2-3 shows the general existing conditions at the project site.

Land Use and Zoning

The project site is zoned by the County as Commercial north of the Buckley Road Extension and zoned Agricultural south of the Buckley Road Extension. Adjacent land west, south, and east of the project is zoned Agricultural and land north of the project within the City is more diverse. South Higuera Street runs near the upper northwest corner of the project site and then veers west toward Highway 101 away from the southern limit of the project site. Land west of South Higuera is composed of agricultural land near San Luis Obispo Creek and open space across Highway 101. The northern portion of the site is bounded by Service Commercial land use. The northeastern portion of the project is bounded by manufacturing, medium-density residential, public facility, and conservation open space uses. The southeastern, southern, and southwestern boundaries of the project site are surrounded by agricultural land in the unincorporated area of the county. Figure 2-4 shows local zoning at and adjacent to the project site.

Figure 2-1 Project Vicinity

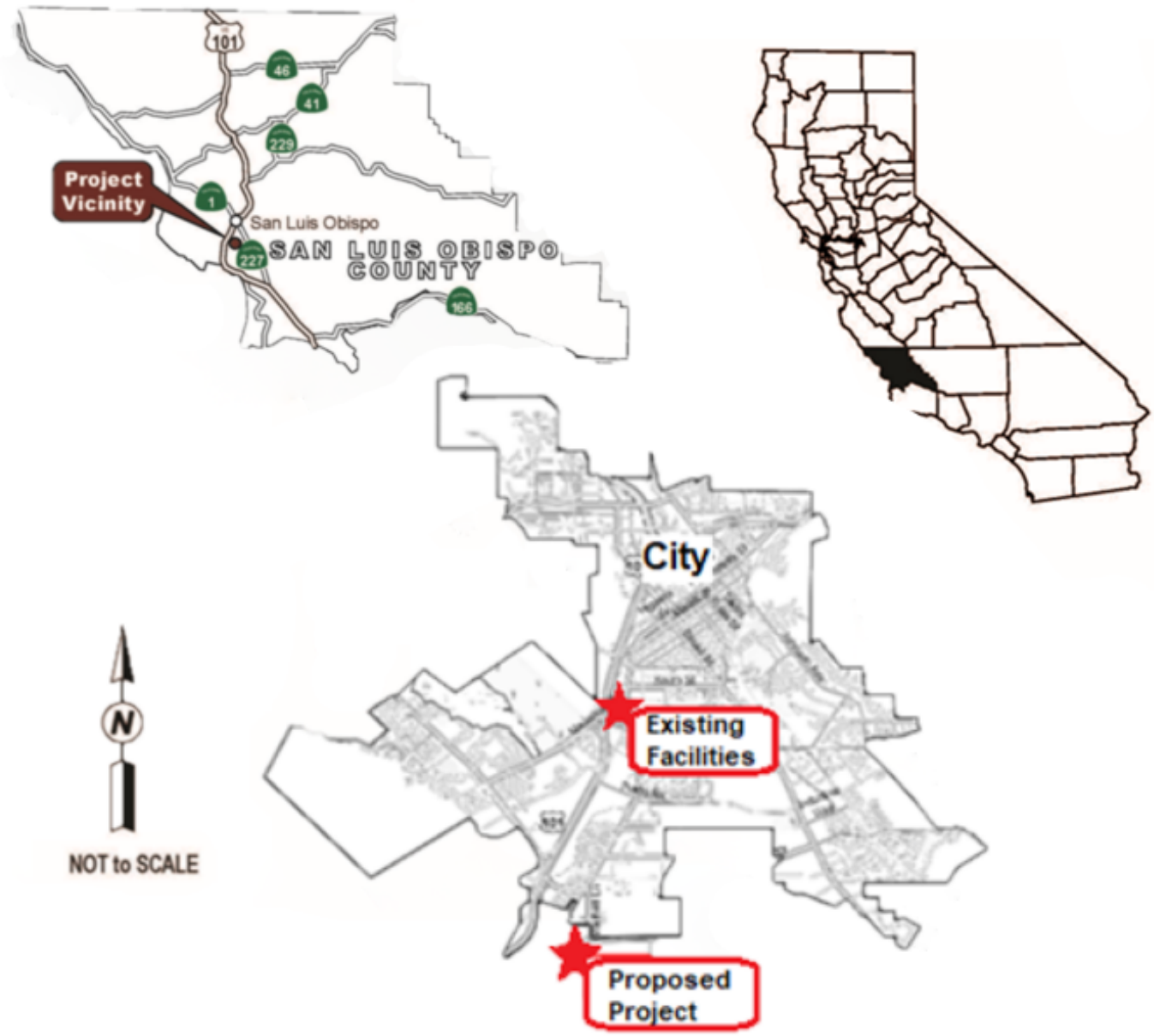


Figure 2-2 Project Location

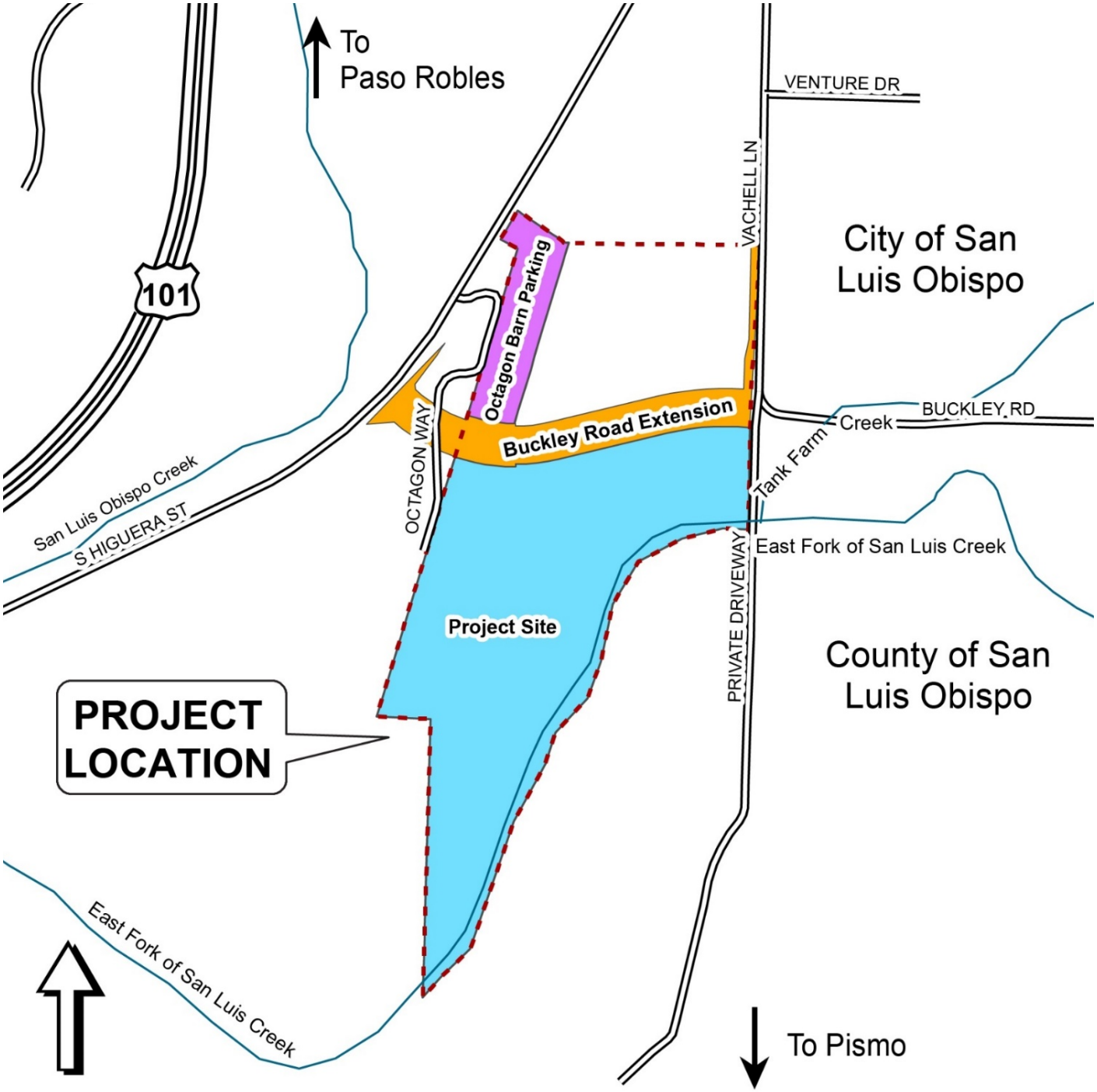
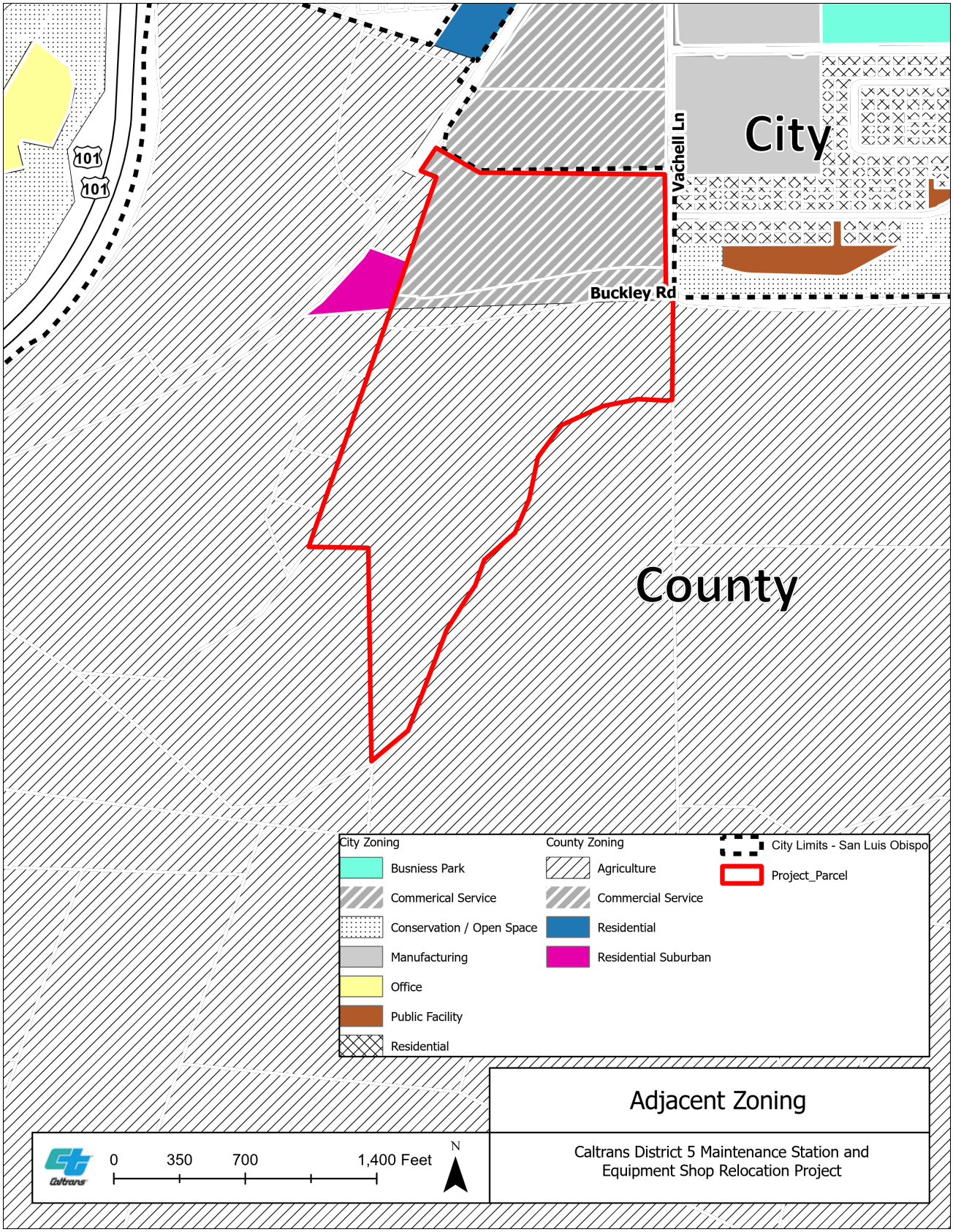


Figure 2-3 Existing Conditions at project Location



Figure 2-4 Existing Zoning



2.4 PROPOSED PROJECT CHARACTERISTICS

The project involves the construction and operation of a replacement District 5 Maintenance Station, Equipment Shop, and associated site improvements. Two Build Alternatives and a No-Build Alternative are under consideration. To supply the project with water and sewer services, Alternative 1 includes constructing an onsite water well and septic system, and Alternative 2 includes constructing new water and sewer utility infrastructure that would connect to existing City of San Luis Obispo infrastructure. The two Build Alternatives differ mainly on the source of water and the locations of new water and sewer infrastructure, which would be constructed and used to support long-term operations at the project site. Further discussion of water and sewer differences between Alternatives 1 and 2 is included in Section 2.4.1.1, Unique Features of Build Alternatives.

Preliminary site plans of Alternatives 1 and 2 for the project are shown in Figures 2-5, 2-6, and 2-7. Note that the site plans are preliminary and conceptual; the final design for the project may include slight modifications to these plans.

The project would include a developed area of approximately 24 acres within 34 total acres south of Buckley Road and owned by Caltrans. Approximately 18 acres of this would be impervious surfaces; the remaining 6 acres of the site would be unpaved, including landscaping and stormwater management elements. The total impervious surface area includes roadways and driveway-related impermeable surface areas, as well as other impervious surfaces related to the proposed structures and paved areas. These area quantities are subject to change pending the final design.

2.4.1 Project Facilities

The project would include buildings, staff and visitor parking areas, utility improvements, and other ancillary improvements. General descriptions of these facilities are included in this section.

Structures

Both Build Alternatives include new structures, including a regional maintenance office with a Transportation Management Center (TMC), Structure Crews building, Special Crews building, Road Crews building, warehouse building, and equipment shop building. Generally, structures would be built to meet California Code of Regulations Title 24 resource standards, achieve a Leadership in Energy and Environmental Design Silver or higher accreditation for buildings over 10,000 square feet, and achieve Zero Net Energy for 50 percent of all structures. The Leadership in Energy and Environmental Design certification is based on a scoring system related to eight major categories: location and transportation; sustainable sites; water efficiency; energy and atmosphere; materials and resources; indoor environmental quality; innovation; and regional priority.

Regional Maintenance Office Building: The Regional Maintenance Office Building would likely be a single-story building, 25 to 30 feet tall, and approximately 10,500 square feet The building would include:

- Offices and workstations
- Break room/conference room
- Interview rooms
- Briefing/training rooms
- Transportation Management Center (TMC)

Structure Crews Building: The Structure Crews Building would likely be a single-story building, 30 feet tall, and approximately 3,250 square feet. The building would include:

- Offices and workstations
- Break room/conference room
- Storage and workshop spaces
- Briefing/training rooms

Special Crews Building: The Special Crews Building would likely be a single-story building, 30 feet tall, and approximately 8,650 square feet. The building would include:

- Offices and workstations
- Break room/conference room
- Storage and workshop spaces
- Briefing/training rooms

Road Crews Building: The Road Crews Building would likely be a single-story building, 25 to 30 feet tall, and approximately 7,250 square feet. The building would include:

- Offices and workstations
- Break room/conference room
- Storage and workshop spaces
- Briefing/training rooms

Warehouse Building: The Warehouse Building would likely be a single-story building, 25 to 30 feet tall, and approximately 10,800 square feet. The building would include:

- Offices and workstations
- Storage and workshop spaces

Equipment Shop Building: The Equipment Shop Building would likely be a single-story building 30 feet tall and approximately 30,000 square feet. The building would include offices, vehicle service bays, service equipment area, tire storage, a parts storage room, a restroom, and an air compressor room. The vehicle service bays would have lifts for servicing and maintaining maintenance and district fleet vehicles. New and used oil storage would take place in or adjacent to the building. The building would also include:

- Offices and workstations
- Break room/conference room
- Storage and workshop spaces
- Briefing/training rooms
- Service and equipment repair bays

Miscellaneous Site Elements

Vehicle Fueling Area: The vehicle fueling area would include an approximately 20,000-gallon aboveground split-fuel gasoline fuel and diesel fuel storage tank, a canopy over the fueling area, and temporary parking for a fuel tanker truck while refilling the tanks. The fuel storage tanks would have self-integrated secondary containment. Gasoline stored in the fuel island would be used to supply district fleet vehicles, and diesel stored would be used to supply heavy-duty vehicle and equipment. The vehicle fueling area would have protection against water ponding near the fuel island.

Waste Enclosure: A waste enclosure would be constructed in the project site. The enclosure would contain covered areas for trash dumpsters, used tire racks, and recycling bins.

Waste Oil Containment: Waste oil tank(s) would be in or adjacent to the equipment shop building.

Heating, Ventilation, and Air Conditioning Equipment Areas: Heating, ventilation, and air conditioning (HVAC) systems would be used to provide fully automated and continuous space heating, ventilation, and cooling to all areas of buildings designed for human occupancy. The HVAC systems and equipment would be protected from weather conditions. A design option is included with the project to construct an underground geothermal heat pump system using approximately 10 underground boreholes that would be constructed approximately 200 to 400 feet below the new grade. The underground geothermal heat pump system would reduce long-term operational energy use/cost and help the project achieve a Leadership in Energy and Environmental Design Silver rating.

Standby Backup Generator and Tank Area: The partially walled generator area would contain a standby backup diesel generator, exhaust system, cooling system, diesel fuel supply and storage system, engine control system, and miscellaneous cables and equipment to support the generators operation. The generator would be used as a backup power source for the facilities, as necessary, if primary power sources were to fail.

Parking Areas

Parking and Carport Areas: Both Build Alternatives would have a visitor parking area and secured parking areas for district employees, vehicles, and equipment. Most parking areas would be surfaced with asphalt paving. If feasible, some areas of parking may be constructed with a more pervious material. Covered parking bays that are topped with solar panels would also be used to the greatest extent feasible. Proposed parking spaces include approximately:

- Total of 274 standard parking spaces for staff, standard fleet and visitors
- Total of 106 parking spaces for large fleet vehicles
- Total of 5 parking spaces for semitruck fleet vehicles

Figure 2-5 Alternative 1 Conceptual Site Plan

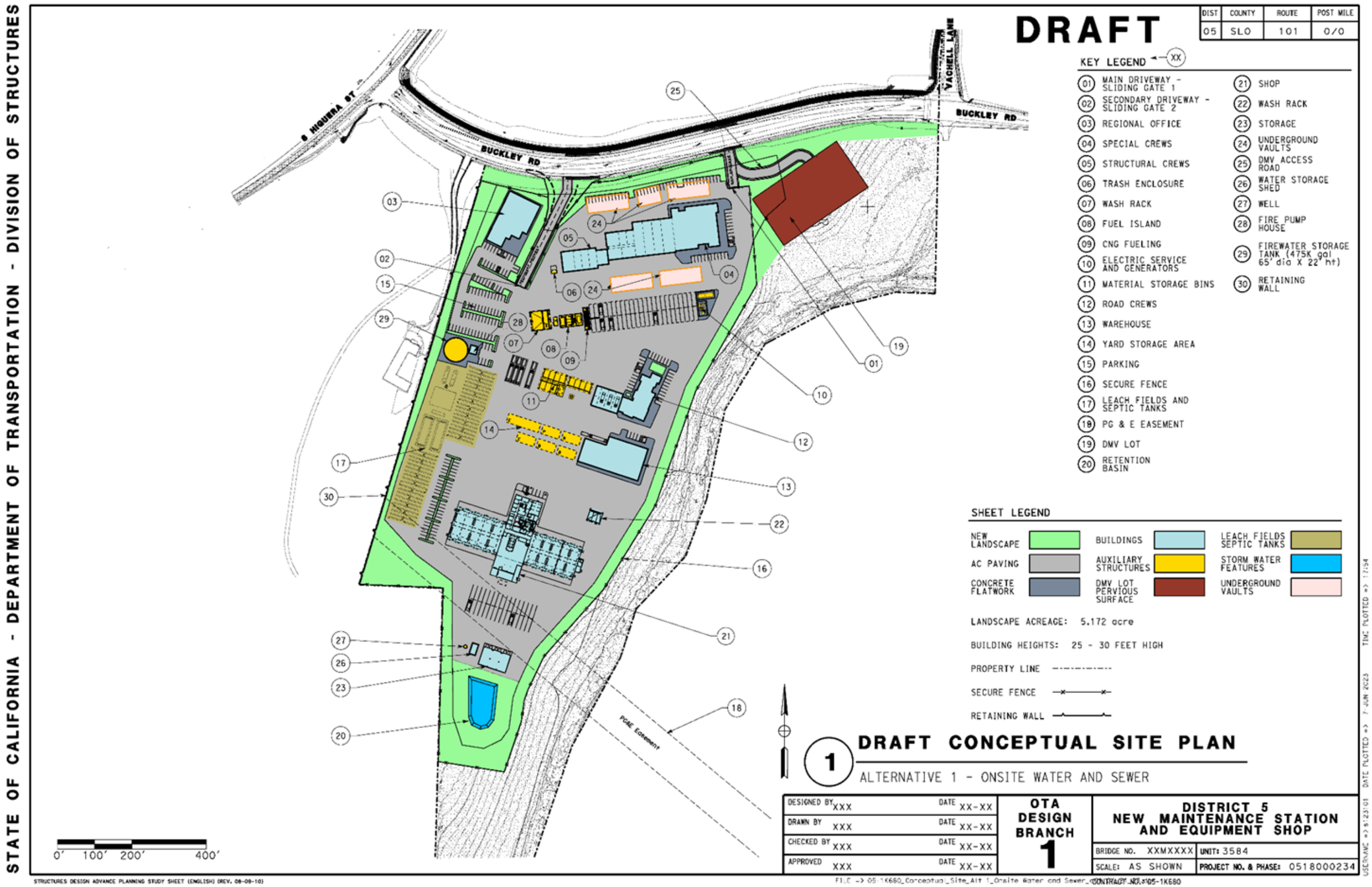


Figure 2-6 Alternative 2 Conceptual Site Plan

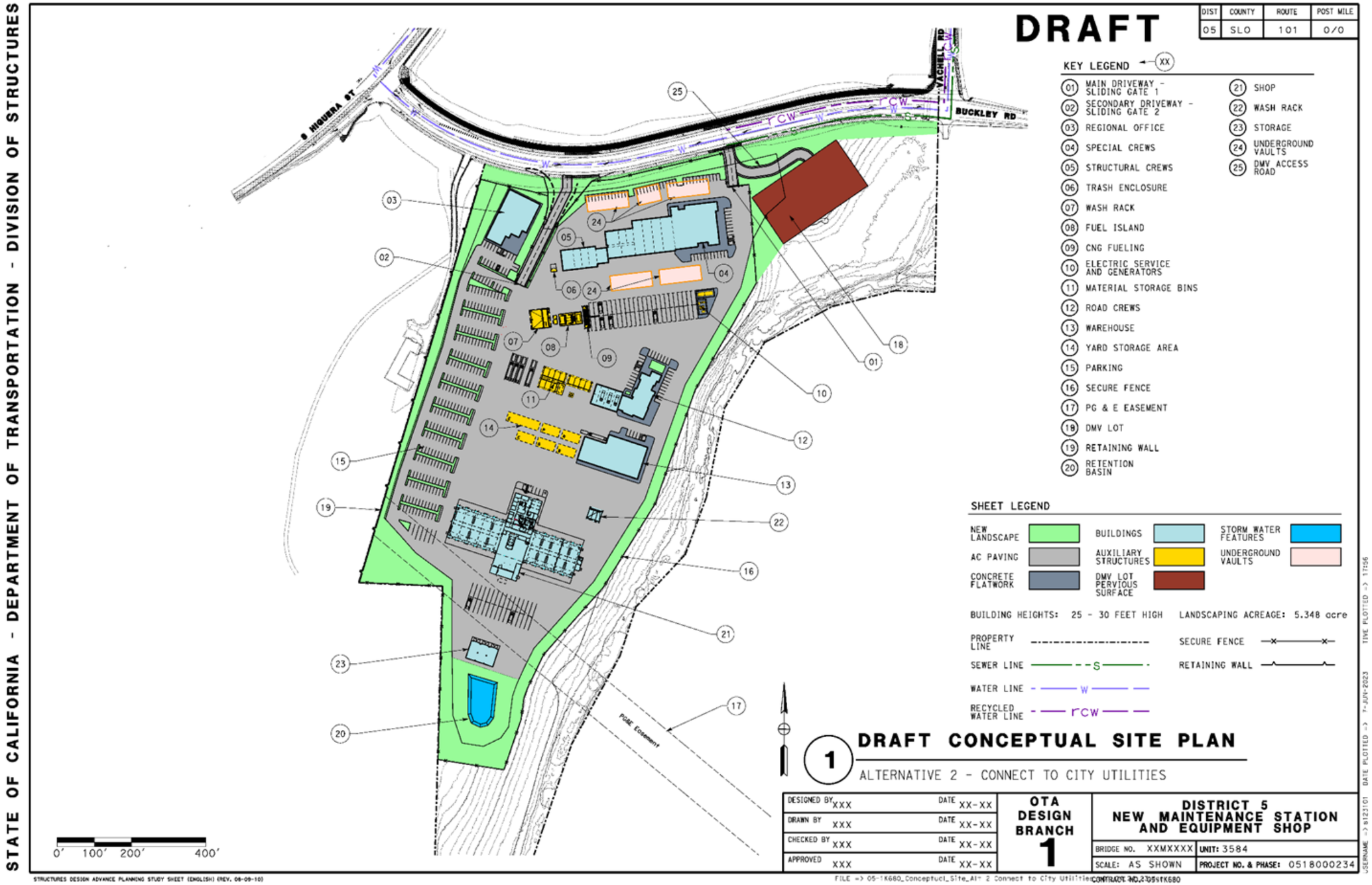
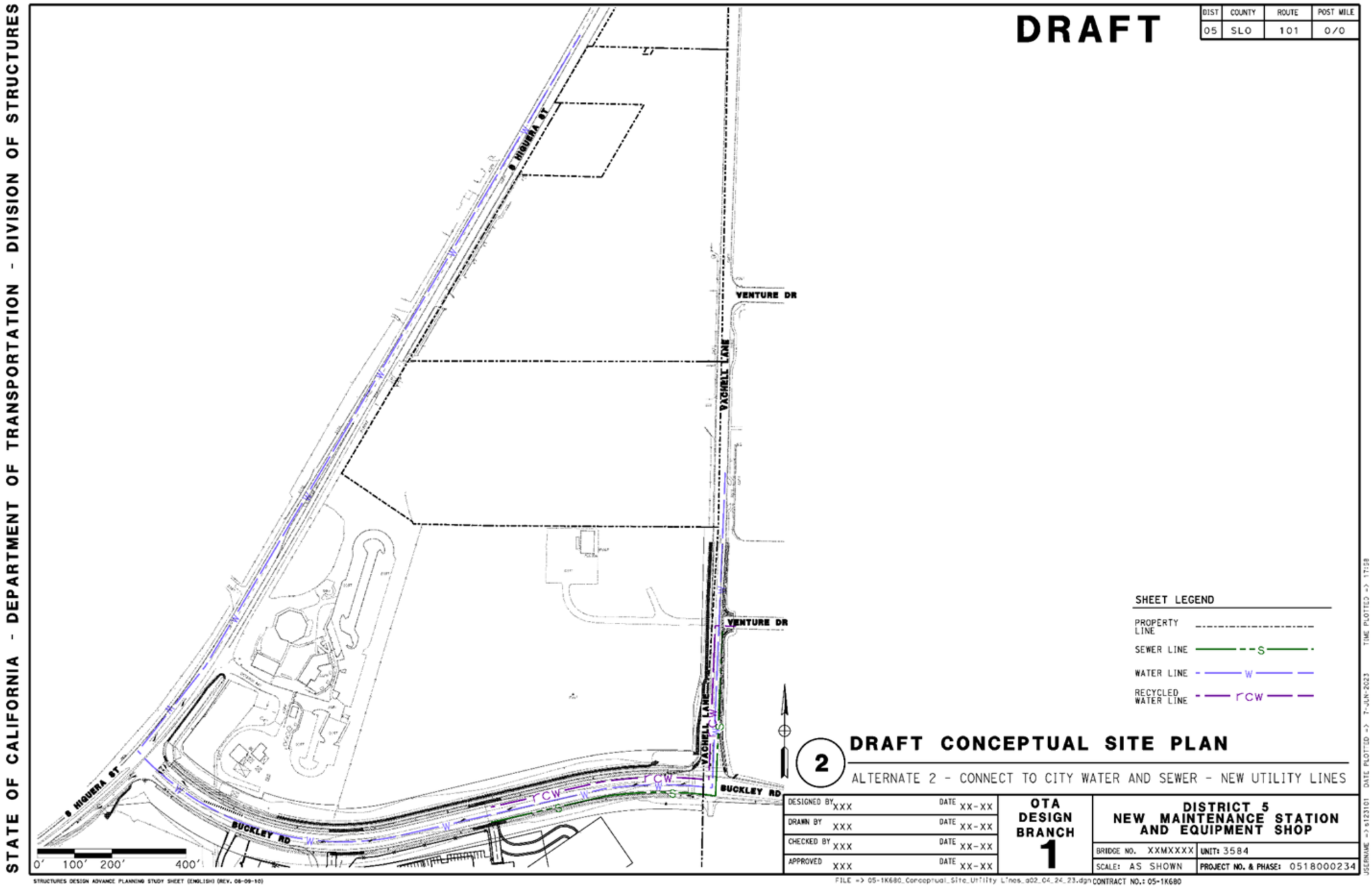


Figure 2-7 Alternative 2 Conceptual City Utilities



Ancillary Improvements

Fencing and Gates: The project site would be enclosed with fencing. Fencing along Buckley Road and other areas visible from public viewpoints would be wrought-iron-style; fencing not within public view along the southern limits of the project would be expanded metal or chain-link fence. Access-controlled metal rolling gates would be installed at the authorized vehicle entrances/exits to/from the secured parking area. Associated with each of the rolling vehicle access gates would be a metal personnel gate with access control features.

Retaining Walls: The project proposes approximately 1,570 linear feet of retaining walls, varying in height from approximately 8 feet to 20 feet above the new grade. The longest retaining wall proposed is approximately 930 feet long, paralleling the western property fence line of the project site adjacent to a private residence. Other approximate dimensions of this retaining wall include: a maximum height of 20 feet, a minimum 10-foot set back from the property fence line, and a maximum slope of 2-to-1 between the property fence line and top of the retaining wall. A cable railing fence/barrier will be constructed on top of the retaining wall for fall protection purposes. If feasible, landscape planting will be placed between the property fence line and the top of the retaining wall. Item number 19 on Figure 2-6 shows the approximate location of the largest proposed retaining wall.

Fire Suppression Equipment/Hydrants: Fire hydrants would be installed in accordance with applicable requirements of the Office of the State Fire Marshal and local fire department. A designated firewater tank and pump house could be required for both Build Alternatives, but the sizing of the tank would vary. The Unique Features of Build Alternatives section in this chapter describes the potential difference in firewater tank requirements.

Landscape and Irrigation: Landscaping requiring minimal maintenance and an automatic irrigation system would be installed on the project site. Proposed landscaping areas include areas that would be established with temporary irrigation and areas to be landscaped along with a permanent irrigation system. Figure 2-9 shows the conceptual landscaping areas for the project.

Exterior Lighting: Exterior lighting would be installed throughout the site for security purposes; lighting would be located along the site perimeter, but it would be directed downward and shielded to reduce light dispersion. Lighting must meet Caltrans safety protocols, which require 24-hour lighting of the facility with lights. If feasible, dimmed lights fitted with motion sensors will be used. Entrances would have brighter lighting than the parking areas and office building. Flagpoles would have lighting that may be directed upward or downward, pending final design.

Driveways and Circulation: Two driveways are proposed from the Buckley Road Extension and into the project site, located approximately 400 feet apart. The main driveway proposed is the most easternly entrance to the site

and is approximately 500 feet from the intersection at Buckley Road and Vachell Lane. A secondary driveway is also proposed west of the main entrance, approximately 550 feet from the intersection at Buckley Road and South Higuera Street. Both driveway intersections would be one-way-stop-controlled. However, the project includes design options for a light-controlled intersection or a one-lane roundabout at the main driveway intersection at the Buckley Road Extension (see Figure 2-8 Roundabout Design Option at Main Driveway). Though the results of a traffic signal warrant analysis do not support the need for these design options at the main driveway, they are still proposed because they would provide easier site access for the larger equipment of the Caltrans maintenance fleet. A traffic signal warrant analysis is a traffic study that uses vehicle traffic volumes to determine what type of traffic control is needed (warranted) at an intersection.

Figure 2-8 Roundabout Design Option at Main Driveway and Buckley Road Intersection

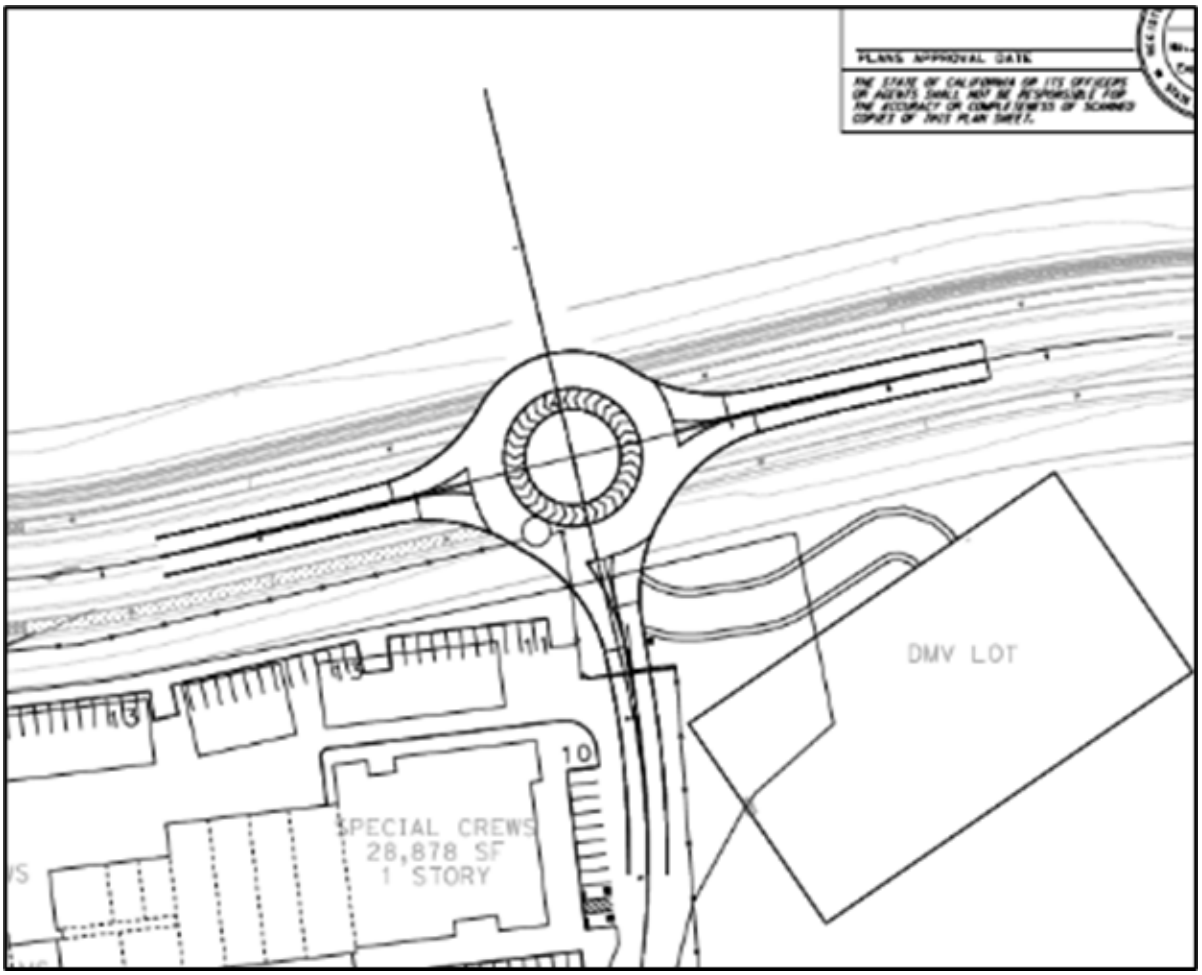
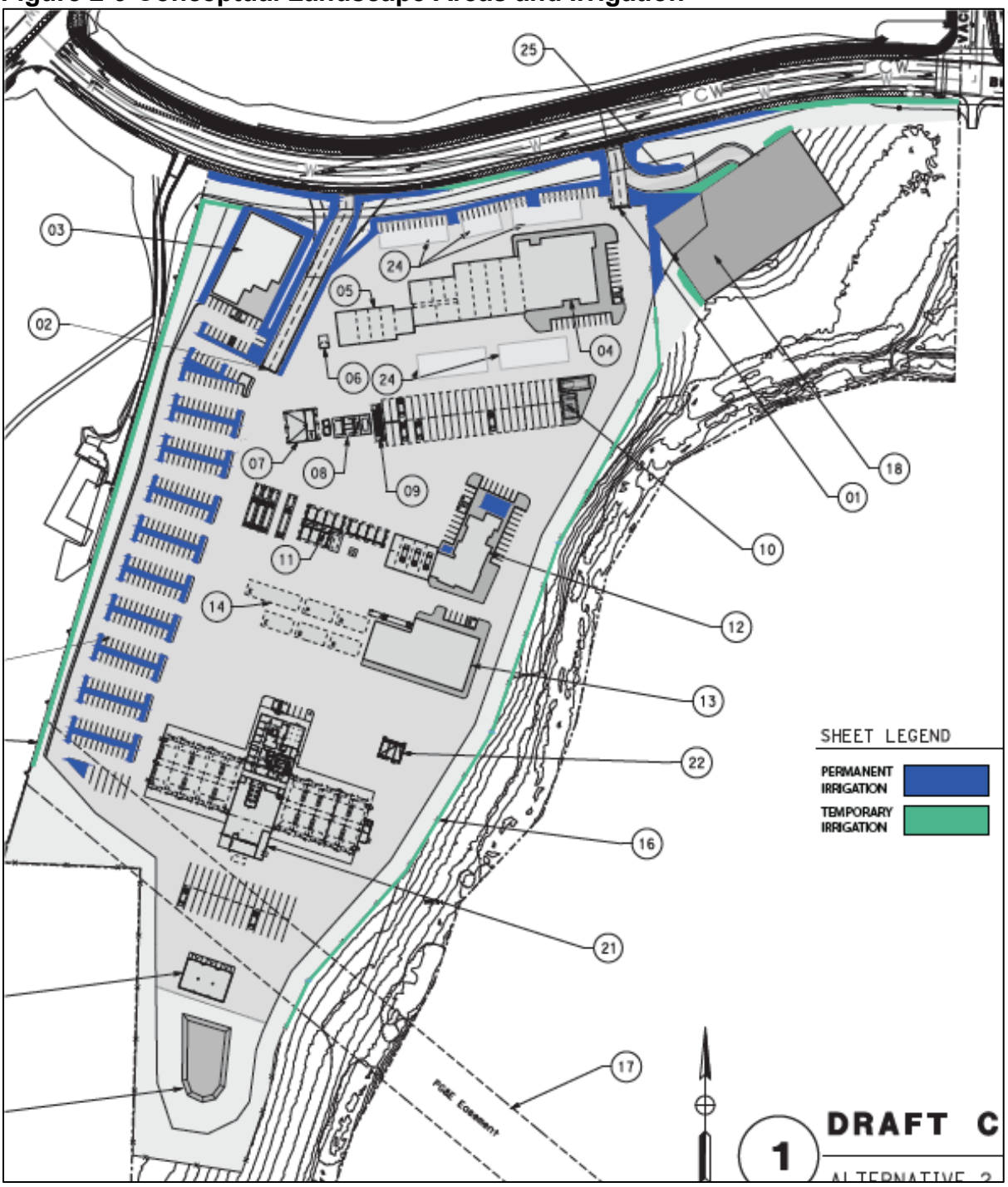


Figure 2-9 Conceptual Landscape Areas and Irrigation



Sidewalk and Street Improvements: Currently, no sidewalk or curb exists along the southern side of the Buckley Road Extension adjacent to the project development. Along Buckley Road at the project site, a separated pedestrian and bike path runs along the northern side of the road. The project would include new curbs, gutters, and sidewalks along the main driveway and at its intersection with Buckley Road. Regardless of the intersection control type

constructed for the main driveway, the project would provide a pedestrian and bicycle crossing opportunity across Buckley Road and connect to the existing pedestrian and bike path on the north side of the road. No other pedestrian or bike improvements are proposed along the south side of the Buckley Road Extension.

Flagpoles and Monument: Three metal flagpoles, each approximately 30 feet high, would be installed near the main entrance from Buckley Road. A Caltrans monument sign would also be installed at this location.

Stormwater Drainage: The new Buckley Road Extension north of the project site's development includes drainage systems to control stormwater associated with the roadway facility. This include bioswales on both sides of the road and underground drainage that ties into the surrounding county drainage system. A 30-inch culvert transports stormwater from Buckley Road approximately 240 feet south to an outfall structure on the project site. It is likely that this culvert and/or outfall will need to be moved or modified to accommodate both Build Alternatives at this location. Other than the drainage system that supports the Buckley Road Extension, there is no municipal storm drain system that serves the site. Site runoff in the northern half of the project site would be directed toward underground vaults. Depending on groundwater level and site conditions, the vaults will range from 3 feet to 10 feet below new grade elevation and be 12,000 square feet to 40,0000 square feet in size.

Site runoff at the southern half of the project site would be directed to a large retention basin approximately 23,000 square feet in size and 4.5 feet in depth below the new grade elevation. Site runoff would be managed and discharged according to post-construction stormwater requirements issued by the State Water Resources Control Board. Drainage details, including proposed new drainage south of Buckley Road, are shown in the Conceptual Drainage Plan, Figure 2-10.

Utilities: The project site has existing electrical and communication utilities for the construction office located north of the Buckley Road Extension, but the proposed development south of Buckley Road does not have existing or immediate access to any utilities, including water, sewer, electricity, natural gas, and communications. Both Build Alternatives share the same proposed utility connections for electricity, natural gas, and communications. The project is being designed as an electric facility and will accommodate the future potential of an all-electric maintenance fleet. Therefore, the potential future electric load/demand will be an important consideration when designing the electrical infrastructure required from the PG&E connection and onto the project site. Although the project includes only electric features for operation of the facility, a connection to the nearby natural gas line and stub-out within the state property will be constructed.

Figure 2-10 Conceptual Drainage Plan

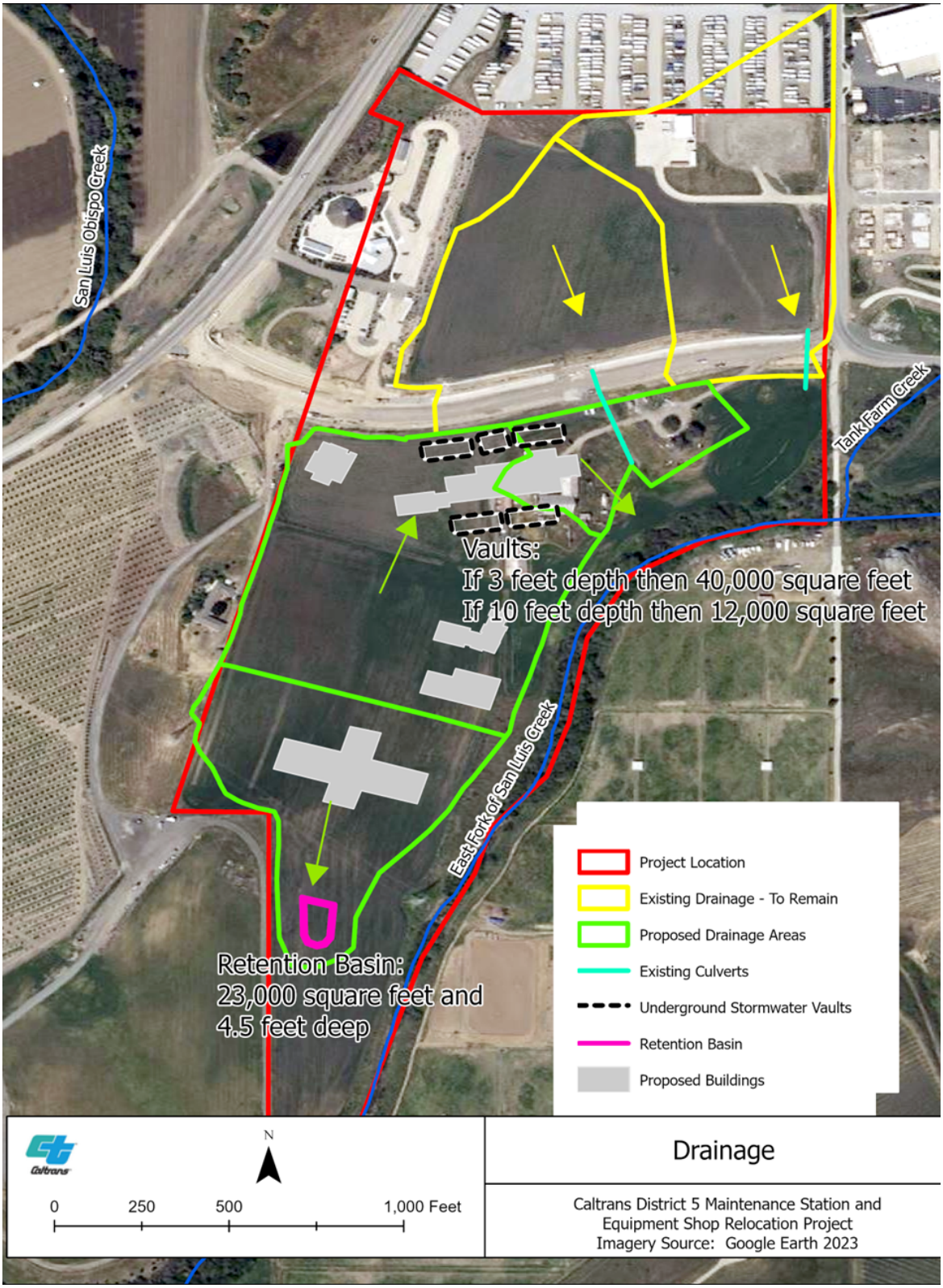
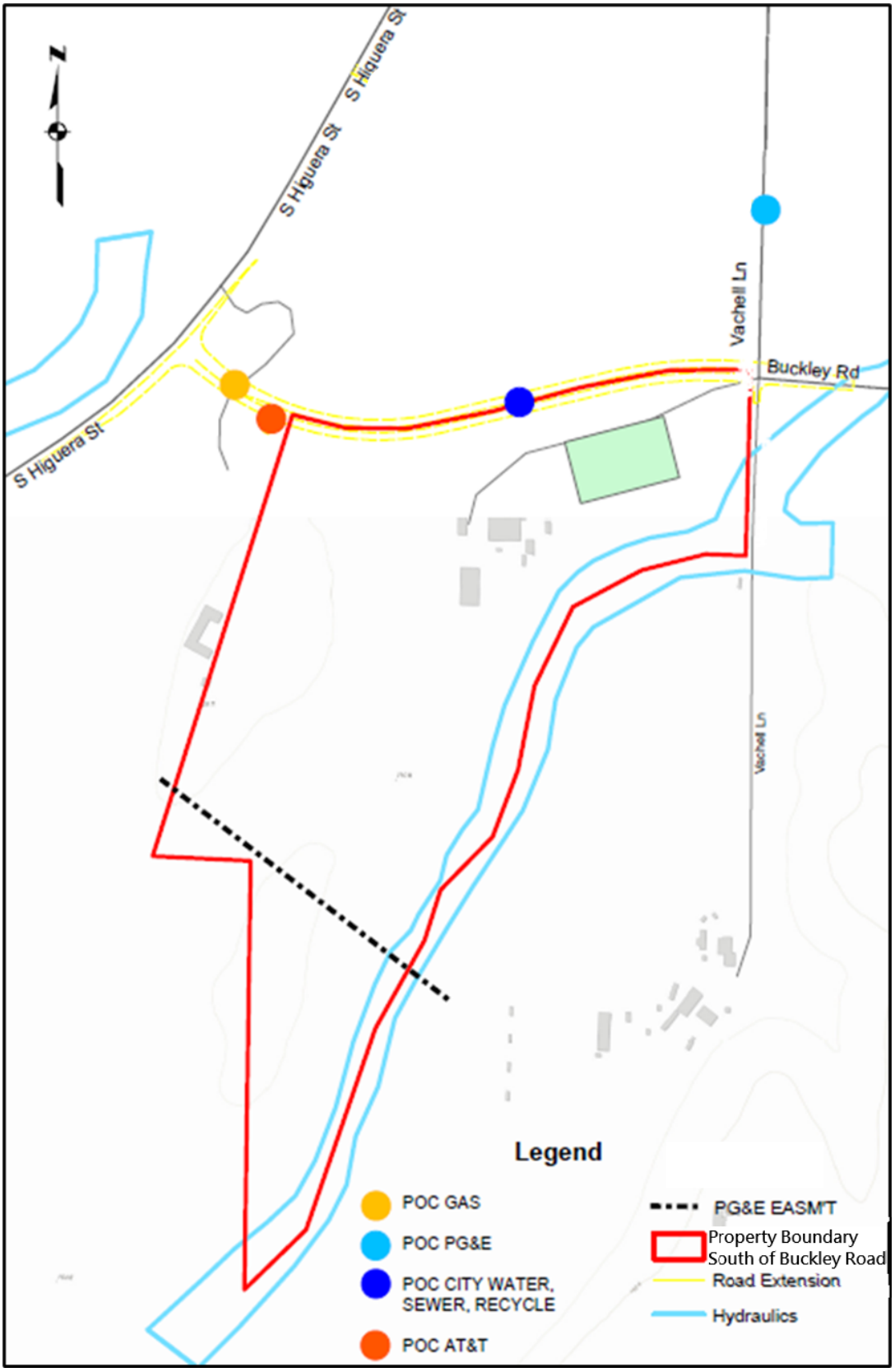


Figure 2-11 Approximate Utility Points of Connection



A natural gas connection and stub-out as described will ensure that the new facilities are not precluded from any unforeseeable future natural gas needs. These utilities are all offsite within the county and city road right-of-way of South Higuera, Vachell Lane, and Buckley Road east of the Vachell Lane intersection. Table 2.1 lists the anticipated utility agencies that would serve the project for each of the Build Alternatives. More detail regarding the water and sewer utilities for the Build Alternatives is included in the Unique Features of Build Alternatives section of this chapter. The approximate utility points of connection are shown in Figure 2-11.

Communications: A radio/microwave dish and equipment will be constructed to access the Caltrans mobile radio systems throughout District 5. The communications equipment will include a 6-foot-diameter microwave dish that will be ground mounted; the top of the dish will not exceed 20 feet above the new grade ground surface. The dish will be mounted on a 20-foot-tall stand-alone pole or a 20-foot tower structure. A small accessory building, no more than 100 square feet, will be constructed next to the ground-mounted dish to store equipment. The communication equipment needs to be on the project site to relay radio traffic to and from the proposed Traffic Management Center.

Water Monitoring Well: A water monitoring well will be drilled on the project site prior to the final environmental document. The approximate location of the monitoring well is identified as item number 27 on Figure 2-5. More discussion about the purpose and intent of the water monitoring well is included in the Unique Features of Build Alternatives section of this chapter. The monitoring well is currently in the permitting process with the County of San Luis Environmental Health Department.

Unique Features of the Build Alternatives

Alternative 1

To support long-term operation at the site, Alternative 1 would construct a permanent onsite water well and septic system for potable water and sewer services. The Alternative 1 conceptual layout is shown in Figure 2-5. A permanent water well, whether it includes converting the monitoring well or drilling a separate water well, would be treated to potable water standards with a water treatment system and storage tank and require a Small Public Water System permit from the County Environmental Health Department before construction. If a separate permanent water well is drilled, the water monitoring well would remain in place.

Alternative 1 would construct a septic system including underground tanks and a leach field would be constructed for sewer and wastewater at the project site. The leach field and septic tank area would be approximately 1 acre in size; and the approximate location is identified as item number 17 on Figure 2-5. The leach field and septic area would not be covered with asphalt paving or other impervious surfaces. The septic tank and leach field would

require a permit from the County Environmental Health Department prior to construction.

An approximately 475,00-gallon designated aboveground firewater tank would be used (identified as item number 29 on Figure 2-5) and connected to an automatic pumphouse to provide high pressure water to fire hydrants and building sprinkler systems. The approximate dimensions of the tank are 65 feet in diameter by 22 feet in height. A designated firewater tank is a water tank that is required to hold a specified amount of water that must always be available for fire suppression.

Alternative 2

Alternative 2 would construct new utility infrastructure to connect to water and sewer services from the City of San Luis Obispo. The Alternative 2 conceptual layout is shown in Figure 2-6. New utility lines would likely enter the project site within or near the main driveway at Buckley Road, and it is assumed that the new utility lines would be constructed under the existing road prism of South Higuera Road, the Buckley Road Extension, and Vachell Lane. Figure 2-7 shows the approximate locations of new utility lines and their connection points to existing City infrastructure.

Water Main: Approximately 4,700 linear feet of a new 12-inch water main line would be constructed. The new water line would connect to the existing City water main near the driveway to the property with street address 4180 Vachell Lane. From the connection point near the driveway at 4180 Vachell Lane, the 12-inch line would run south down Vachell Lane for about 800 feet; at Vachell Lane and Buckley Road, the 12-inch water main would then run east for 1,500 feet along the Buckley Road Extension; at Buckley Road and South Higuera, the 12-inch water main would then run north about 2,400 feet on South Higuera Street and connect with an existing water main. Constructing this new water main infrastructure for the project would create a looped water main system instead of a dead end. A dead end on a water main system can cause several issues, including lower available water pressure and fire flow volume, stagnation, water quality, and increased maintenance needs. Therefore, instead of ending the water main at the project site with a dead end, the new water main will connect to existing City water mains at two locations (Vachell Lane and South Higuera) to create a loop.

Sewer Main: Approximately 1,000 linear feet of new 8-inch sewer main would be constructed. The new sewer line would connect to an existing City main at the intersection of Earthwood lane and Vachell Lane and run south down Vachell lane for about 420 feet before turning west and running down the Buckley Road Extension for about 640 feet, ending near the project main driveway.

Recycled Water Main: Approximately 1,000 linear feet of new 8-inch recycled water main would be constructed. The new recycled water line would connect to an existing City main at the intersection of Earthwood Lane and Vachell

Lane and run south down Vachell Lane for about 420 feet before turning west and running down the Buckley Road Extension for about 640 feet, ending near the project main driveway.

A required aboveground designated firewater tank connected to an automatic pumphouse is not expected for Alternative 2 but could be needed to supplement City water for high pressure water needed at fire hydrants and the building sprinkler systems. If needed, the designated firewater tank and pumphouse would be smaller than what is expected for Alternative 1. The need for a designated firewater tank would be determined during the design phase and in coordination with the State Fire Marshall.

Table 2.1 Utility Providers

Utility Provider	Alternative 1	Alternative 2
Water Supply	Caltrans—Onsite water well	City of San Luis Obispo
Sanitary Sewer	Caltrans—Onsite Wastewater Treatment System (for septic tank and leach field)	City of San Luis Obispo
Recycled Water	Not Applicable	City of San Luis Obispo
Electrical	PG&E	PG&E
Natural Gas	SoCal	SoCal
Communication	AT&T	AT&T

2.4.2 Construction Activities

Construction Methods

Site Preparation and Earthwork

Site preparation would include demolition of existing structures, clearing and grubbing, grading, excavation, importing and placing fill, and compacting the fill and other materials. Clearing and grubbing of the site, including the potential removal of all onsite vegetation, would be conducted using bulldozers, standard excavators, and hand labor. All demolished material and debris would be disposed of at an appropriate location selected by the construction contractor.

In general, the existing grade slopes downward from west to east. Therefore, the site will be graded by excavating (or lowering) the western half of the site and filling (or raising) the eastern half of the site. Approximately 19,500 cubic yards of site grading (fill), for buildings, structures, roads, parking lots, drainage, underground stormwater treatment devices, and landscape berms, are anticipated. Fill material would be placed with an excavator and compacted with a compactor/roller. To the extent feasible, excavated soil

would be reused onsite. Excavation into existing grades at the site would occur at depths over 20 feet along the western edge of the property. Excavation depths of 2 to 10 feet would occur below the new grade for stormwater vault structures. Excavation of the stormwater basin would occur at a depth of approximately 4.5 feet below the new grade. Some soil export is anticipated with over-excavation at the building locations. The preliminary export volume is anticipated at approximately 8,150 cubic yards. Any newly graded slopes at the project site would not exceed a 2-to-1 ratio. The anticipated number of potential worker and construction-related trips for each construction phase is provided in Table 2.2.

Table 2.2 One-Way Construction Trips

Construction Phase	Worker Trips per Day	Vendor Trips per Day	Hauling Trips per Day	Total Trips by Construction Phase
Site Preparation and Demolition	33	0	134	5,010
Grading	20	0	42	1,860
Construction	36	19	0	16,500
Paving	15	0	0	300

Buildings and Structures

Construction of buildings and structures would include the following activities:

- Rough grading, site preparation, and excavation for foundation systems and underground stormwater vault.
- Concrete forming and placement of rebar for foundations.
- Delivery of concrete for foundations.
- Delivery and erection of structural steel.
- Delivery and installation of mechanical, electrical, plumbing, fire sprinkler, fire alarm, and communication systems.
- Delivery and installation of exterior and interior architectural finish system.
- Finish grading and landscape installation.

Pipelines and Underground Utility Equipment

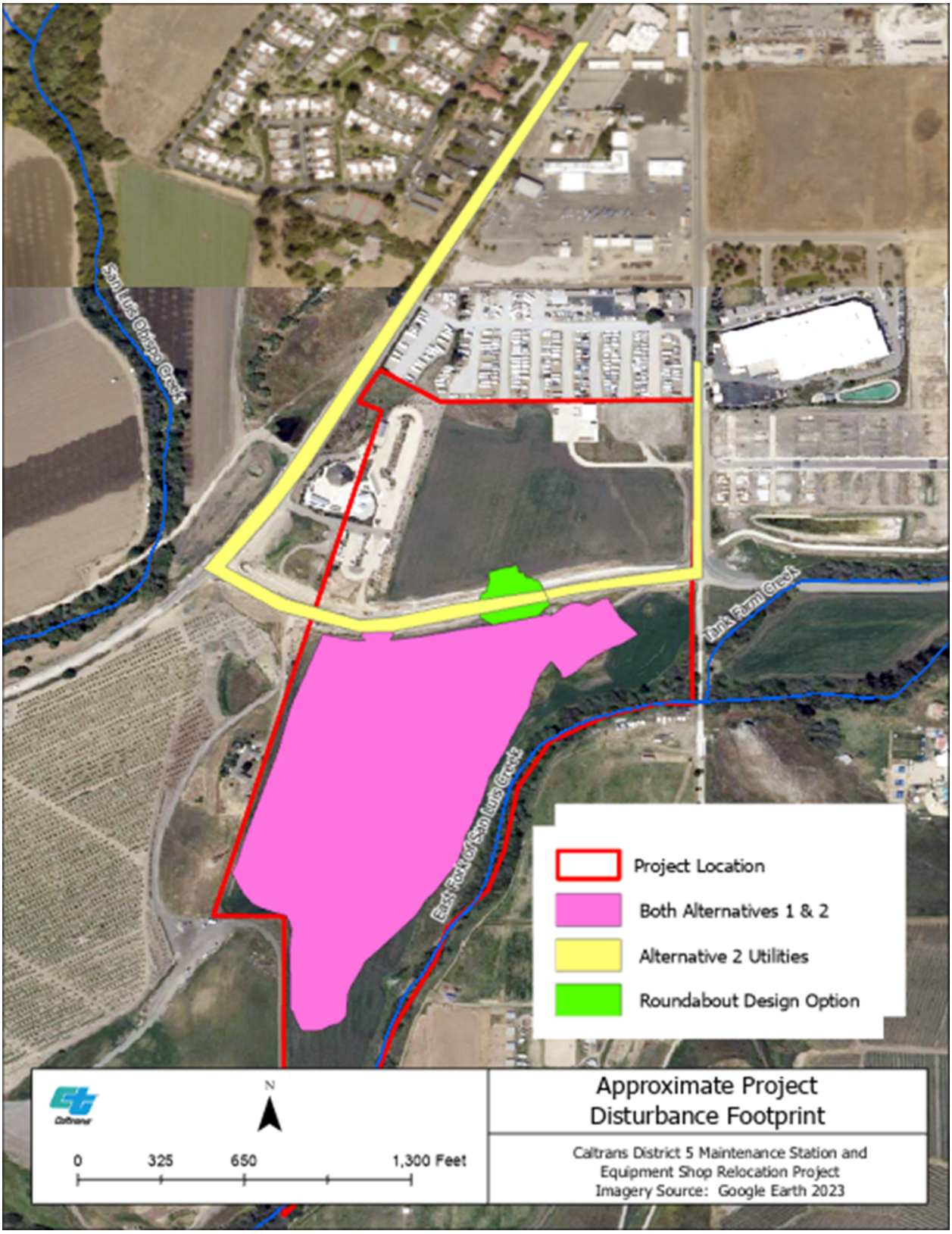
Drainage, water supply, and wastewater pipelines and underground utilities generally would be installed in open trenches using conventional cut-and-cover construction techniques. The first step in the construction process would be surface preparation, including the removal of any structures, pavement, or vegetation from the surface of the trench area using jackhammers, graders, pavement saws, mowing equipment, bulldozers, front-end loaders, and/or trucks. A backhoe, track-mounted excavator, or similar

equipment would then be used to dig trenches for pipelines or underground utility equipment. The width of the trench would generally vary between 3 and 6 feet, with a depth of at least three times the pipeline diameter. The diameter of pipelines would vary based on service flow requirements, material type, and purpose. It is estimated that trenching for each utility infrastructure (water, sewer, stormwater, gas, electrical, and phone/internet/cable) would be as much as 5,000 linear feet.

In most locations, trenches would likely have vertical sidewalls to minimize the amount of soil excavated and the area required for construction easement. Soil excavated from the trench would be stockpiled alongside the trench or in staging areas for later reuse in backfilling the trench or for fill at other onsite locations, if appropriate. Native soil would be reused for backfill to the greatest extent possible; however, it may not have the properties necessary for compaction and stability. If not reusable, the soil would be hauled offsite for disposal at an appropriate disposal site.

The final step in the installation process would be restoring the ground surface. Site restoration would generally involve installing pavement, landscaping, and/or erosion controls, as necessary. It is anticipated that most utility work would take place below existing pavement. The approximate disturbance footprints for the project alternatives and the roundabout design options are shown in Figure 2-12.

Figure 2-12 Approximate Disturbance Footprint



Electrical Utilities Connections

Proposed new electrical connections for the project would be installed in open trenches using the techniques described above. The new electrical lines would then be connected to the existing aboveground electrical system infrastructure adjacent to the site.

Construction Equipment

The main pieces of equipment that might be used are as follows:

- Track-mounted excavator
- Medium crane
- End dump truck
- 10-wheel dump truck
- Paving equipment
- Flat-bed delivery truck
- Concrete truck
- Grader
- Bulldozer
- Backhoe
- Compactor
- Front-end loader
- Water truck
- Forklift
- Compressor/jack hammer
- Boom truck
- Mowing and weed removal equipment
- Generator (temporary)

Decommissioning of the Existing Facilities

After all construction is complete and Caltrans Maintenance and Equipment Shop staff transition to the project site, the State would decommission the existing Maintenance Station and Equipment Shop structures and all related activities would stop at 50 Higuera and 66 Higuera. For the purpose of this EIR, “decommission” means to remove all equipment, materials, operations/activities, and employees from the existing Maintenance Station and Equipment Shop facilities at 50 Higuera and 66 Madonna Road. Decommission does not include the demolition and removal of buildings and other structures. If the State determines that there is no other State use for the property, the property would be included in the annual omnibus surplus legislation and, upon enactment, could be sold pursuant to California Government Code Section 11011.

Construction Schedule

Construction of the project is anticipated to last for approximately 36 months. A breakdown of each construction activity is provided in Table 2.3. Construction activities would typically be performed Monday through Friday between 7:00 a.m. and 5:00 p.m. After-hours work and work on Saturdays, Sundays, and State holidays would be permitted at the discretion of Caltrans.

Table 2.3 Approximate Construction Schedule

Description of Activity	Approximate Duration
Stage 1 – Demolition: Demolition of structures, existing infrastructure, fencing, etc.	2 months
Stage 2 – Grading: Rough grading, placement of fill in and compaction in conjunction with installation of retaining walls and underground work such as stormwater vaults	6 months
Stage 3 – Final Construction: Construction of foundations, buildings, and other onsite and offsite improvements, including utilities	28 months
Total	36 months

2.4.3 project Operations

Employees

The project facility would be staffed with 29 additional employees compared to the staffing levels of the existing District 5 Maintenance Station and Equipment Shop. Most employees and operations will follow a typical Monday-through-Friday work schedule. However, the facility would still be operated 7 days a week, 24 hours a day by both onsite and on-call staff members. The project facility is projected to have 184 employees: 161 Maintenance staff members and 23 Equipment Shop staff members. Most Maintenance and Equipment Shop staff would commute daily, Monday

through Friday. Table 2.4 compares the number of employees associated with the existing and proposed facilities.

Facility Operation

Operation of the proposed project facility would be the same as the operation of existing facilities at 50 Higuera and 66 Madonna Road. Routine operations at the Maintenance Station involve staff arriving and equipment preparations in the morning, followed by departure to the highway system for maintenance work, and then a return in the afternoon prior to staff home departure. On-call emergency and weekend shift work at the Maintenance Station follows a similar routine but during afterhours and weekends. Routine operations at the Equipment Shop include daily onsite repair and maintenance of all District 5 equipment. In summary, most of the work completed daily by Maintenance staff done offsite and on the highway system; most of the work completed daily by Equipment Shop staff is onsite.

Table 2.4 Existing and Proposed Staffing

Facility	Existing Staffing	project Staffing
Maintenance Station	134	161
Equipment Shop	21	23
Total	155	184

2.5 RESPONSIBLE AND TRUSTEE AGENCIES

Under CEQA (Public Resources Code Sections 21069-21070), trustee agencies are state agencies that have jurisdiction by law over natural resources affecting a project that are held in trust for the people of the State of California. Responsible agencies are public agencies other than the lead agency that have responsibility for carrying out or approving some portion of a project.

This Draft EIR will provide environmental information to these agencies, other public agencies, and public utility providers that may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies may include, but are not limited to, the following:

- County of San Luis Obispo
- City of San Luis Obispo
- San Luis Obispo County Air Pollution Control District
- San Luis Obispo County Airport Land Use Commission
- San Luis Obispo Local Agency Formation Commission
- California State Fire Marshall

- Central Coast Regional Water Quality Control Board
- Pacific Gas and Electric Company
- Southern California Gas Company
- California Department of Fish and Wildlife

2.6 ANTICIPATED PERMITS AND APPROVALS

The project's new development lies mostly on state-owned property, and therefore the City and County do not have jurisdiction over the site. In other words, most of the City and County local land use and zoning regulations do not apply to proposed development within the site. However, a City or County can be designated by the State to enforce a state-level regulation or program, such as the County Department of Environmental Health, which oversees permitting and compliance of groundwater wells within the county. Also, under Alternative 2, Caltrans will complete an Outside User Agreement and annexation of the state-owned property, or solely annexation of the state-owned property to connect City water and sewer services. In these two examples, the City or County would have jurisdiction over the project or at least over certain features of the project, even though it is located on state-owned property. The anticipated approach to complete the permits and agreements needed for Alternative 2 is described below. If an Outside User Agreement is not possible, then future annexation of the state-owned property without an Outside User Agreement is still an option but would not take place until approximately 2028, based on discussions with the City.

2.6.1 Phase 1: Outside User Agreement

The agreement between Caltrans and the City will include initial/interim hookup to City water and sewer facilities after City Council and San Luis Obispo Local Agency Formation Commission authorization. The physical changes to the City's infrastructure system would include the following: water, sewer, and recycled water system connection at the project site, including construction of pipelines within the existing roadways of South Higuera, Buckley Road, and Vachell Lane. The agreement would also include a condition defining a time period that Caltrans must apply for annexation after the initial/interim connections are completed.

2.6.2 Phase 2: Annexation

During the annexation of the state-owned property, the City and Caltrans staff will determine the permanent improvements and conditions required for orderly development. There is potential for the State to develop the state-owned land north of the Buckley Road Extension for a new Caltrans District 5 Office building. However, the District Office would be planned, designed, and

constructed by the California Department of General Services. Based on the timing condition required in the Outside User Agreement, the State (Caltrans or California Department of General Services) would apply for annexation with a plan to either: 1) develop a District Office on the state-owned land north of the Buckley Road Extension, or 2) commit, designate, or pre-zone the state-owned land north of the Buckley Road Extension as protected open space, preserved agricultural, or similar.

The project site is not within a Special Focus Area of the City's 2014 Land Use Element (LUE) of the General Plan, but it is within the City's Sphere of Influence (SOI). The existing Maintenance Station and Equipment Shop facility locations are identified in Policy 8.5 of the Land Use Element as within the Mid-Higuera Area and planned and zoned for redevelopment from a Caltrans office and yard complex to a mixed-use development.

Local regulations will apply to certain features at the project site as mentioned previously and also to offsite improvements such as connecting to existing City and County infrastructure within the public right-of-way. Table 2.5 shows the permits, licenses, agreements, and certifications (PLACs) required for project construction.

Table 2.5 Permits and Approvals

Alternative	Agency	Permit, License, or Certification	Status
Alternatives 1 and 2	State Water Resources Control Board	Porter-Cologne Water Quality Act – Caltrans National Pollutant Discharge Elimination System Permit	Permit to be obtained during the Plans, Specifications and Estimate phase of the project
Alternatives 1 and 2	San Luis Obispo Air Pollution Control District (APCD)	Permit to Construct and Permit to Operate	Permit to be obtained before construction and operation of regulated equipment
Alternatives 1 and 2	San Luis Obispo County Certified Unified Program Agency (CUPA)	Storage and use of hazardous and petroleum-based materials	Permit to be obtained before construction and operation of regulated storage equipment
Alternatives 1 and 2	State Fire Marshall	ADA, structural review, and fire suppression code compliance	Permit to be obtained during the Plans, Specifications and Estimate phase of the project
Alternatives 1 and 2	County of San Luis Obispo - Environmental Health Services	New Non-transient Noncommunity Water System Permit	Permit to be obtained during the Plans, Specifications and Estimate phase of the project

Alternative	Agency	Permit, License, or Certification	Status
Alternatives 1 and 2	County of San Luis Obispo - Environmental Health Services	Onsite Wastewater Treatment System Permit	Permit to be obtained during the Plans, Specifications and Estimate phase of the project
Alternatives 1 and 2	San Luis Obispo County Public Works	Encroachment Permit	Permit to be obtained during the Plans, Specifications and Estimate phase of the project
Alternative 1	San Luis Obispo County Certified Unified Program Agency (CUPA)	Storage and use of hazardous and petroleum-based materials	Permit to be obtained before construction and operation of regulated storage equipment
Alternative 1	State Fire Marshall	ADA, structural review, and fire suppression code compliance	Permit to be obtained during the Plans, Specifications and Estimate phase of the project
Alternative 2	Interagency Agreement for City water, sewer, and recycled water	Early discussions completed between Caltrans and City. Agreement to be executed during the Plans, Specifications and Estimate phase of the project	Interagency Agreement for City water, sewer, and recycled water
Alternative 2	Encroachment permits for utility connections	Permit to be obtained during the Plans, Specifications and Estimate phase of the project	Encroachment permits for utility connections
Alternative2	Written approval to extend City services outside City limit but within the Sphere of Influence	Permit to be obtained during the Plans, Specifications and Estimate phase of the project	Written approval to extend City services outside City limit but within the Sphere of Influence

Chapter 3 Introduction to the Environmental Analysis

3.1 OVERVIEW

This chapter gives an overview of the environmental analysis process. Chapters 4 through 23 of this Draft EIR describe the environmental resources and potential environmental impacts of the project. Each chapter describes the existing setting and background information for the identified resource topic to help the reader understand the environmental conditions that could be affected by the project. In addition, each chapter includes a discussion of the criteria used in determining the significance levels of the project's environmental impacts. Finally, each chapter recommends mitigation measures to reduce, where possible, the adverse effects of significant impacts.

3.2 SIGNIFICANCE OF ENVIRONMENTAL IMPACTS

According to CEQA, an EIR should define the thresholds of significance and explain the criteria used to determine whether an impact is above or below that threshold. Significance criteria are typically identified for each environmental resource topic to determine whether implementation of the project would result in a significant environmental impact when evaluated against the baseline conditions described in the environmental setting. The significance criteria vary depending on the environmental resource topic. In general, effects can be either significant (above threshold) or less than significant (below threshold). In some cases, a significant impact will be identified as significant and unavoidable if no feasible mitigation is available to reduce the impact to a less-than-significant level. If a project is subsequently adopted despite identified significant impacts that would result from the project, CEQA requires the lead agency to prepare and adopt a statement of overriding considerations describing the social, economic, and other reasons for moving forward with the project despite its significant impacts.

3.3 BASELINE CONDITIONS

Under CEQA, the environmental setting or "baseline" serves as a gauge against which to assess changes to existing physical conditions that would occur because of a proposed project. According to CEQA Guidelines Section 15125 (14 California Code of Regulations Section 15125), for purposes of an EIR, the environmental setting is normally the physical conditions in and around the vicinity of the proposed project as those conditions exist at the time the Notice of Preparation is published. This Draft EIR for the Caltrans District 5 Maintenance Station and Equipment Shop Relocation project uses

this definition of the baseline. Because the project involves replacing and relocating existing operational Caltrans facilities located 2 miles away, most (if not all) activities that would be part of the project are already being carried out on an ongoing basis within the region. These ongoing activities are considered a part of the baseline conditions, and the impact analysis in this Draft EIR instead focuses on the increment of change that would result from constructing and operating the project in the new location. For instance, vehicles operated by Caltrans staff assigned to the existing facilities emit air quality pollutants under current conditions. Therefore, rather than focusing on all potential air quality pollutants that would be emitted from the project to the region, this Draft EIR evaluates the impacts of any changes to the existing operations (e.g., 29 additional staff and vehicles) and the air quality pollutant impacts that would result from these changes of the project.

It is also important to note that the impact analysis for several resources includes a baseline specific to the project site and therefore is independent of the existing operational Caltrans facilities located 2 miles away (for example, the Aesthetic and Agricultural Resources baselines do not consider the existing facilities at 66 Madonna Road and 50 Higuera).

Chapter 4 Aesthetics

4.1 OVERVIEW

This chapter evaluates the project's impacts on aesthetics. The chapter first describes the regulatory and environmental settings and then evaluates the project's impacts to aesthetic resources. The impact evaluation begins by describing the applicable significance criteria and the methods used to evaluate the level of significance, and then presents the impact evaluation.

4.2 REGULATORY SETTING

4.2.1 Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies are applicable to aesthetics and the project.

4.2.2 State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans 2018a). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

Highway 101 through San Luis Obispo County has been identified as an "Eligible State Scenic Highway" by the State of California. This identification does not provide any scenic policies or protections, but it does indicate a preliminary level of recognition by the state of the route's overall visual quality.

4.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (e.g., connections to infrastructure within the public right-of-way).

Also, the San Luis Obispo County and San Luis Obispo City planning policies emphasize the protection of visual resources and underscore the concern and sensitivity regarding aesthetic issues. The local community also has a history of active participation in projects involving potential changes to the visual environment.

Because the County of San Luis Obispo and the City of San Luis Obispo are stakeholders in this project, their local policies and guidelines that address the aesthetics of land use, site design, and construction have been taken into consideration in the impact determination. The local planning policies specifically regarding preservation of rural character are indicators of community aesthetic values. The project will be visible from several angles and viewing distances to the project site.

4.3 ENVIRONMENTAL SETTING

4.3.1 Regional

The region of San Luis Obispo is generally rural in character. The cities of the region are moderate to small in size and population, and the landscape between towns is largely defined by scattered ranch houses and residences at the lower elevations, and open space on the surrounding hillsides and ridges. Most cities, including San Luis Obispo, and developed areas are along the Highway 101 corridor, the main travel route through the region. The project site is just south of San Luis Obispo in an area identified as a gateway to the city.

The landform of the region is largely defined by the convergence of the Chorro, Los Osos and Edna valleys. A series of low, visually distinct mountain peaks separate the Chorro and Los Osos valleys and provide a scenic focal point for much of this region. The Cuesta Ridge borders the region to the north and east, the Irish Hills border the Los Osos Valley to the west, and the San Miguelito Hills to the south. These hills are generally the distant visual limits of the area and are considered the scenic backdrop for much of the area.

Development can be seen in the project vicinity, mostly north of the project site. Developments include the recently constructed Avila Ranch residential area, R.V. Storage area, and Lockheed Martin Corporate Office Building.

The main natural plant communities of the region are oak woodland and oak savanna. Sycamores, willows, and associated understory are found in linear patterns along the riparian corridors and drainages. At lower elevations, livestock grazing and agriculture have altered much of the natural vegetative growth patterns.

San Luis Obispo and the surrounding area have long been recognized for their scenic qualities. San Luis Obispo County and San Luis Obispo City planning policies emphasize the protection of visual resources and underscore the concern and sensitivity regarding aesthetic issues and visual quality preservation.

The existing visual quality of the project area is moderately high. This view quality is due primarily to the rural character, undulating landform with edges of

riparian areas, and views of distant hills. Viewers of the project site have varying sensitivities but are generally expected to have somewhat high expectations regarding the scenic quality of the setting as well as the overall area.

4.3.2 Project Site

The project site is at 4485 Vachell Lane, south of Buckley Road, in the Edna Valley south of the City of San Luis Obispo. The landform of the site ranges in elevation from about 80 to 120 feet above sea level and is moderately undulating with somewhat steeper slopes near creeks and drainages. The parcel is bounded on the eastern side by Vachell Lane, with agricultural open space beyond. At the western border of the project parcel is a privately owned property with a single-family residence. Beyond the private residence to the west is South Higuera Street, Highway 101, and agricultural open space.

The project site is within the San Luis Obispo Creek watershed. Two tributary creeks are near the project site: the East Fork of the San Luis Obispo Creek (East Fork Creek) and Tank Farm Creek. The two creeks merge just southwest of the intersection of Buckley Road and Vachell Lane. After merging, the East Fork Creek flows along the east side of the project site and joins the San Luis Obispo Creek about 3,500 feet downstream of the site. Beyond the creek to the south are a ranch property and open space. A PG&E power distribution line with large towers runs through the southern portion of the project site.

Near the center of the project site are three older wooden ranch houses, a large barn, and various farm support structures. The project parcel has been used mostly for agriculture, and most of the natural vegetation on the site has been removed, except for the riparian and wetland plants along the creek. A cluster of mature cypress and palm trees near the barns will be removed along with the removal of the barn structures.

The Avila Ranch housing development is under construction on a 150-acre parcel on the east side of Vachell Lane, northeast of the project site. The Avila Ranch parcel has been annexed into the City of San Luis Obispo and added to the City's General Plan as residential zoning. To build the 720 proposed homes and mixed-use development, the developer was required to build and pay for the Buckley Road Extension adjacent to and north of the north of the project site.

The historic Pereira Octagon Barn property sits along the western perimeter of the project property and fronting South Higuera Street. It is important to note the level of community interest associated with the existing Octagon Barn and its setting. Constructed in approximately 1900, this barn is one of only a few known structures of its kind in the state and is considered a Historic Resource for the purposes of CEQA. The barn is currently leased by the Land Conservancy of San Luis Obispo County and has been undergoing

a gradual restoration, implemented mostly by local volunteers' efforts. The long-range plan for the site envisions the barn and setting as an entry node to the city, providing visitors and locals with a historical view and celebration of the region's agricultural heritage.

4.4 IMPACT ANALYSIS

4.4.1 Methodology

This visual impact assessment generally follows the guidance outlined in the publication Visual Impact Assessment for Highway Projects published by the Federal Highway Administration in March 1981. The major components of this process include establishing the visual environment of the project, assessing the visual resources of the project area, and identifying viewer response to those resources. Those components define the existing or baseline conditions. Resource change introduced by the project and the associated viewer response is then assessed, providing a basis for determination of potential visual impacts. Visual impact is a function of assessing the extent of physical change (resource change) and comparing that with the degree of viewer sensitivity (viewer response).

The following steps were followed to assess the potential visual impacts of the project:

- Define the project location and setting.
- Identify key views.
- Analyze existing visual resources, resource change and viewer response.
- Depict (or describe) the visual appearance of project alternatives.
- Assess the visual impacts of project alternatives.
- Propose measures to offset visual impacts.

The focus of this analysis is to determine the project's impacts on views from and adjacent to the project site, as well as other potentially critical locations. Such possible impacts include structure and hardscape visibility, tree removal, and grading that could significantly change the existing terrain, vegetative patterns, or overall aesthetic character.

The existing landscape of the project is assessed, and an inventory of onsite scenic resources is developed. These visual resources are evaluated and rated for their aesthetic benefit and for their contribution to the existing character of the landscape and region.

The existing visual resource inventory is then compared with the project features, and any potential conflicts or impacts to existing visual resources

are identified. Photographs are taken from each of the Key Views and used as the basis further analyzing the potential effects of the project. Photo simulations document the project and existing scenic resources and evaluate the effect of the proposed design. The images identify changes in the area's visual character as a result of the project.

Because of the type of the project, it was anticipated that many of the potential viewers may experience the project as an alteration of the landscape character rather than focus on its individual components. An emphasis of the analysis methodology is to evaluate the cumulative effect that each of the individual features may have on the overall visual character of the site.

Both Build Alternatives include the construction of a new Maintenance Station and Equipment Shop facilities south of the Buckley Road Extension. The difference between the two alternatives relates to the method of future utility connection, and the alternatives will not vary substantially in the way they will contribute to visual resource changes. Since the analysis of both Build Alternatives would result in what would be perceived as relatively the same impacts to visual resources, the impact analysis does not include a separate analysis for each of the project alternatives, but rather an analysis of how the project would impact visual resources, regardless of which Build Alternative is pursued.

Key Views

Consistent with the Federal Highway Administration guidance, representative viewing locations, each one called a Key View (KV), were selected to best disclose the typical visual character of the project, show unique project components or affected resources, and represent affected viewer groups. The number of potential viewpoints associated with this project is infinite, and it would not be possible or valuable to attempt to show every possible viewing scenario. The identified Key Views were selected to show the typical project changes and any potential visual character changes in the project vicinity from the project. The Key Views are generally representative of the likely changes to occur with the project and are intended to provide a reasonable evaluation of the project's overall potential visual impacts.

Determining the extent of the site's visibility is a critical step in analyzing its potential visual impacts. Field studies were conducted to identify locations from where the project could be reasonably seen.

Figure 4-1 Key View Points



Key View 1 – From the intersection of Vachell Lane and Buckley Road looking southwest toward the project site. This key view offers a mid-ground view of the project from the intersection of two nearby public roadways. This view will be available for the typical traveler along Vachell Lane and Buckley Road for a varying duration depending on the direction of travel.

Key View 2 – From Vachell Lane looking southwest toward the project site. This key view represents potential views for residents of the Avila Ranch residential development. These viewers are expected to have a high degree of awareness to changes in their viewshed and an increased sensitivity to possible visual impacts. The viewing duration is potentially unlimited.

Key View 3 – From Buckley Road looking south toward the project site at the northeast entrance. This key view represents what viewers traveling along Buckley Road see as they approach the project site. This route may be used by commuters who can become less attentive to the roadside viewshed as a result of daily repetition of views and the functional rather than leisure purpose of their travel. The duration of view will vary depending on the intersection type. A signalized intersection would lengthen the viewing duration if travelers were stopped, while a roundabout would somewhat shorten the duration as drivers experience a continual flow of traffic.

Key View 4 – From Buckley Road looking southeast toward the project site at the western entrance. This key view is in the area near the Octagon Barn

property and shows how visitors to this potentially important recreational facility may see the project. The importance of this viewpoint is enhanced because of the expected increase in viewers associated with the restoration and development of the Octagon Barn property. Viewing duration to the project site from this viewpoint location is potentially unlimited if viewed from the Octagon Barn property.

Key View 5 – From the intersection of South Higuera and Buckley Road looking east toward the project site. This key view represents what a variety of viewers such as residents, commuters, and tourists may see. This signalized intersection could increase the viewing duration up to 30 seconds depending on the signal timing.

Key View 6 – From northbound Highway 101 looking east toward the project site. This key view is from northbound Highway 101 where a great number of travelers per day have potential views of the project site from this location. This portion of Highway 101 serves as a southern entry point to the city of San Luis Obispo. As seen from this Observer Viewpoint, the project parcel is visible in the mid-ground and appears as part of the backdrop to the Octagon Barn. Typical views of the project site from Highway 101 last approximately 10 seconds. From the southbound lanes, views to the project site are mostly blocked by the roadway super-elevation (the tilt of the highway pavement as it curves) of the northbound lanes, existing guardrail, and other landform and vegetation.

Key View 7 – From South Higuera Street approximately 0.2 mile south of the project site looking north. This key view represents what viewers traveling along South Higuera see as they approach the City of San Luis Obispo from the south. South Higuera Street serves as an alternate, slower-paced route into the city, and from this viewing location the project site is visible directly ahead in the mid-ground for approximately 15 seconds for automobiles and 1.5 minutes for bicyclists.

Types of Viewers

There are two major types of viewer groups for the evaluation of viewer response: those with views from nearby roadways and those with views from nearby residences and businesses. Each viewer group has its own particular level of viewer exposure and viewer sensitivity, resulting in distinct and predictable visual concerns for each group which help to predict responses to visual changes. Local residents are generally the most sensitive to aesthetic changes due to their familiarity as well as their personal investment in the area. Commuters are often familiar with an area, but the repetitive nature of the activity reduces awareness of the visual experience. Tourists or visitors are people traveling through the area for leisure, but who do not live locally or use the route on a regular basis. Since these viewers may be driving through the area for the first and perhaps only time, their views for the highway may be their main means of experiencing the area’s scenic quality. In general, roadway users in motor vehicles will perceive the area as a cumulative

sequence of views and may not focus on specific nearby developments. Pedestrians and bicyclists can be very aware of their visual surroundings because of the duration of views, slower pace and viewing proximity.

Viewers from Nearby Roadways

The greatest number of viewing opportunities of the project will be from nearby public roadways such as Highway 101, South Higuera Street, Vachell Lane and Buckley Road. The overall awareness of visual resources by these roadway users is expected to vary with their specific activity. Sensitivity to the project itself will be further influenced by viewing duration and the visual dominance of the project relative to its surroundings. The viewing exposure to the project site varies with each of these roadway viewer locations.

Viewers from Highway 101 are exclusively in motor vehicles and are composed of tourists, commuters, inter-regional travelers, and commercial traffic. Tourists using Highway 101 are expected to have a high awareness of the visual resources yet are anticipated to be less sensitive to specific changes in the landscape. In general, highway users in vehicles will experience the area as a cumulative sequence of views and may not focus on specific roadway features. Local residents and business owners are the most sensitive to aesthetic issues due to their familiarity as well as their personal investment in the area. Commuters, however, can become less attentive to the roadside viewshed as a result of daily repetition of views and the functional rather than leisure purpose of their travel.

Viewers from South Higuera Street are expected to include fewer commercial and inter-regional travelers than those along Highway 101. Bicyclists are part of the viewer-group along South Higuera Street. The County of San Luis Obispo has future plans to develop a public bikeway from the vicinity of the Octagon Barn south toward Avila Beach, which will increase the number of bicyclist-viewers. In addition, restoration and development of the Octagon Barn will potentially introduce a substantial number of new viewers into the project area. This potential viewer group will likely be highly sensitive to the visual context of the Octagon Barn and its surroundings.

The viewers along Buckley Road and Vachell Lane are mostly local and generally live in the general area or are using this route as access from Highway 227 to the Highway 101/ South Higuera corridor.

Viewers from Nearby Residences and Businesses

This viewer group is made of all those who can see the project or any of its components from ranches, residences, or businesses in the vicinity. Some ranchettes and businesses are within view of the project site, at a distance of approximately one-eighth to 1 mile. The recently constructed Avila Ranch residential development has increased this number of people with potential views, and these viewers are anticipated to have a high degree of awareness to changes in their viewshed and an increased sensitivity to possible visual impacts.

Photo Simulations and Project Representations

Photo-simulations illustrate the visual character from the key view and provide an overview of the visual setting of the project area. The “existing” image shows how the view looked at the time of this study, and the “proposed” simulation represents how that location might appear with the project in place. Computer modeling in combination with the known dimensions of existing onsite elements was used as the visual scale reference to increase accuracy of the photo-simulations. For the purposes of this study, the new landscaping in the photo-simulations show plant growth at approximately seven to ten years after project construction.

See Figures 4-2 through 4-15.

Figure 4-2 Key View Point #1 Existing



Figure 4-3 Key View Point #1 Proposed



Figure 4-4 Key View Point #2 Existing



Figure 4-5 Key View Point #2 Proposed

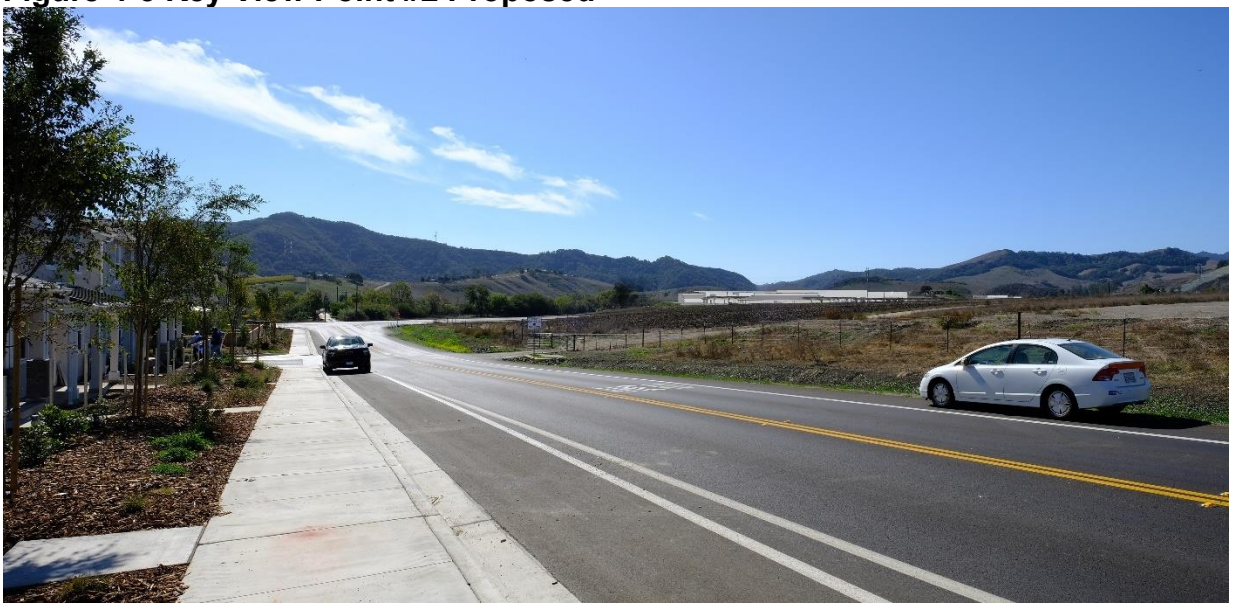


Figure 4-6 Key View Point #3 Existing



Figure 4-7 Key View Point #3 Proposed



Figure 4-7(a) Key View Point #3 Proposed with Roundabout



Figure 4-8 Key View Point #4 Existing



Figure 4-9 Key View Point #4 Proposed



Figure 4-10 Key View Point #5 Existing

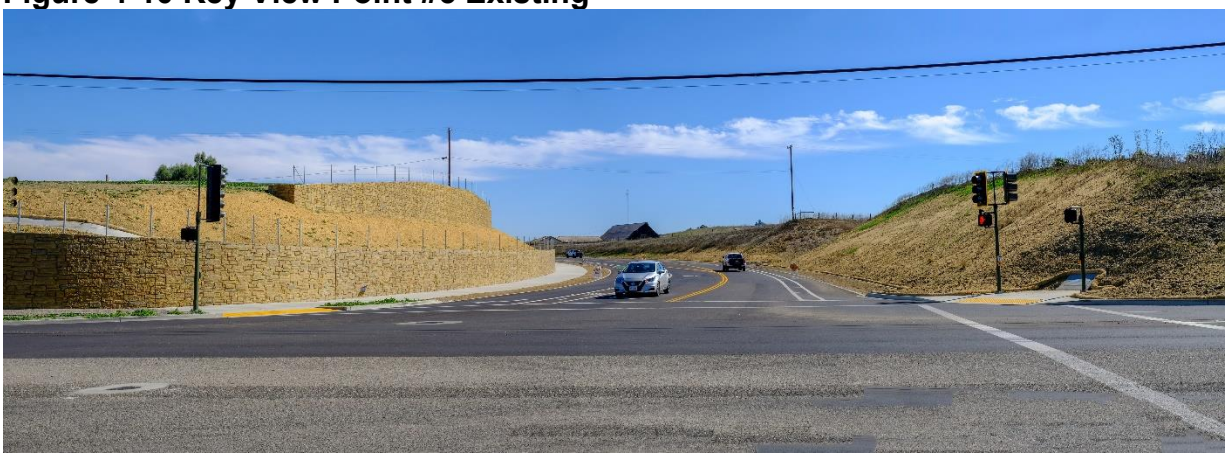


Figure 4-11 Key View Point #5 Proposed

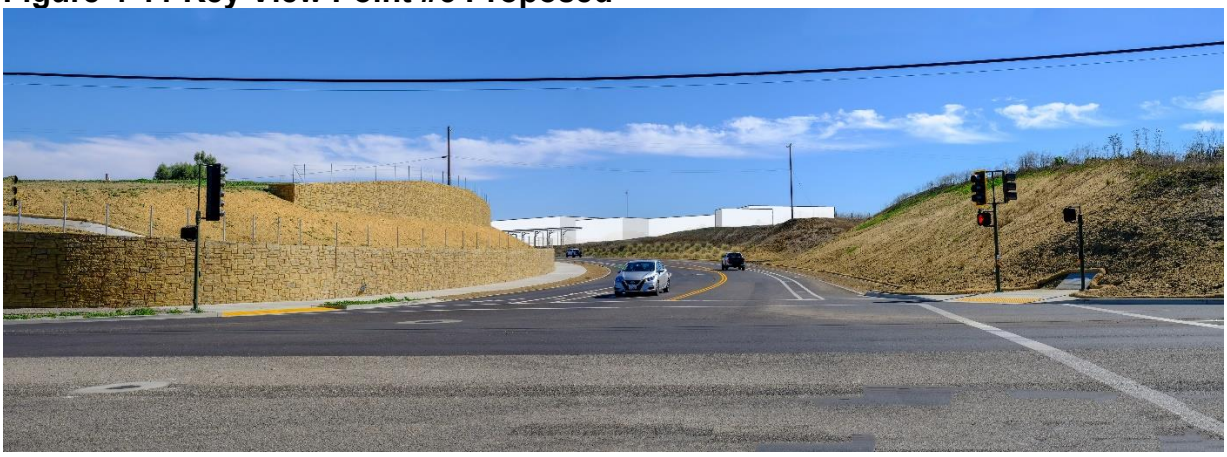


Figure 4-12 Key View Point #6 Existing



Figure 4-13 Key View Point #6 Proposed



Figure 4-14 Key View Point #7 Existing



Figure 4-15 Key View Point #7 Proposed



4.4.2 Criteria for Determining Significance

With respect to aesthetic resources, applicable sections of Appendix G of the CEQA Guidelines state that a project would normally have a significant impact on the environment if it would answer “yes” to one or more of the following questions:

a) Have a substantial adverse effect on a scenic vista?

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

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are

those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

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

This impact analysis and the supporting photo-simulations attempt to accurately represent the basic mass, location, and scale of the proposed elements. For project features not specifically defined by design or policy, the study assumes a "reasonable worst case" scenario consistent with CEQA Guidelines. Any aesthetic treatments shown in the photo-simulations are generic representations of possible aesthetic treatments. Actual aesthetic treatments will be determined during the design phase of the project and will be developed with input from community engagement efforts. Any treatments included in the photo-simulations are considered part of the baseline project in terms of the visual analysis. If potential visual impacts would occur, based all or in part on the implementation of typical landscape and aesthetic treatments, those impacts are identified, and more specific landscape and/or aesthetic treatment recommendations are made.

4.4.3 Environmental Impacts

***Impact AES-1: Have a substantial adverse effect on a scenic vista –* Significant and Unavoidable Impact**

Scenic vistas are often panoramic views that have high-quality compositional and picturesque value. A series of low, visually distinct mountain peaks separate the Chorro and Los Osos valleys and provide a scenic focal point for much of this region. The Cuesta Ridge borders the region to the north and east, the Irish Hills border the Los Osos Valley to the west, and the San Miguelito Hills to the south. These hills are generally the distant visual limits of the area and are considered the scenic backdrop for much of the area.

As currently designed, the project building rooflines will be below the horizon lines of the distant hills. However, depending on the viewer height, views from Buckley Road looking south may have the hillside horizon lines interrupted by the proposed buildings. Therefore, the existing views would undergo a moderate reduction in the remaining availability of visual access to open space and hillside views. Because of the moderately high quality of the visual resources, combined with the community's high value placed on these visual resources, even this moderate reduction in views would be considered a substantial visual impact. Mitigation measures are included to minimize the project impacts, but a moderate reduction in views cannot be avoided. Therefore, this impact is considered Significant and Unavoidable.

Mitigation Measure AES-1: Architecture styles. All structures shall be designed with a non-industrial-style architecture which compliments the

historic agricultural and rural character of the region. Structure architecture shall be designed in collaboration with District 5 Landscape Architecture with input from local agencies and residents.

Mitigation Measure AES-2: Structure elevation. All structures shall be sited and developed to avoid or minimize impacts to scenic viewsheds and constructed at the lowest elevation possible which still allows positive drainage and flood protection. Structure siting shall be designed in collaboration with District 5 Landscape Architecture.

Mitigation Measure AES-3: Structure and roof colors. All structure roof colors shall be limited to deep earth tones, deep muted reds, browns, and grays. Shiny metal roofs, bright orange, red, or blue shall be prohibited. All structure colors shall be like the surrounding natural colors, and colors shall be limited to muted earth tones. White paint shall be prohibited.

Mitigation Measure AES-4: Fence height and type. All fencing shall be the minimum required height and shall not be chain-link or include any razor wire where it is visible from public views primarily along Buckley Road. The fence type, color, and design shall be determined in collaboration with District 5 Landscape Architecture.

Mitigation Measure AES-5: Radio/microwave dish and equipment placement. The radio/microwave dish and equipment shall be the lowest height feasible. It shall be placed within the site so that it is least visible from offsite. Final placement and any associated aesthetic treatments shall be designed in collaboration with District 5 Landscape Architecture.

Mitigation Measure AES-6: Solar panels and/or canopies placement. Solar panels and/or canopies shall be placed within the site to be least visible from offsite. Final placement and any associated aesthetic treatments shall be designed in collaboration with District 5 Landscape Architecture.

Mitigation Measure AES-7: Landscaping. Landscaping shall be used to the greatest extent possible for the purpose of reducing the urbanizing effect of increased paving, walls, and other built project features, as well as for aesthetic attributes. Landscaping shall be used to screen the maintenance station and equipment shop facility from offsite viewing locations. Landscaping shall include a combination of trees, shrubs, and ground cover. Landscape screening shall be designed to appear as a naturally occurring, layered vegetative pattern and not as a formal, unnatural perimeter planting. Landscaping shall be designed by District 5 Landscape Architecture.

Mitigation Measure AES-8: Slope-rounding and appearance. The berm along Buckley Road shall be contour graded to appear as a naturally occurring extension of the existing landform. All excavation slopes shall

include slope-rounding as feasible and appropriate to reduce their engineered appearance and to visually blend with the natural topography of the region.

Mitigation Measure AES-9: Retaining wall aesthetic treatment. All retaining walls shall include aesthetic treatment such as texture and color. Any associated concrete gutters and cable safety railing shall be integrally colored and/or stained. The aesthetic treatment shall be determined by Caltrans District 5 Landscape Architecture. Planting shall be included with all retaining walls to the greatest extent feasible.

Mitigation Measure AES-10: Roundabout aesthetic treatment. If a roundabout is selected at the northeast entrance on Buckley Road, it shall include the following measures: Apply aesthetic treatment to all hardscape elements. Treatments shall compliment the natural and scenic visual setting. The central island of the roundabout shall be landscaped to reduce the urbanizing character and be consistent with local policies and guidelines. The specific types of aesthetic treatments and planting shall be determined by Caltrans District 5 Landscape Architecture with input from the local agencies and residents.

Mitigation Measure AES-11: Detectable warning surfaces on Buckley Road. Detectable warning surfaces on Buckley Road shall be a color congruent with local aesthetics as determined by Caltrans District 5 Landscape Architecture.

Mitigation Measure AES-12: **Permanent stormwater prevention feature appearance**. All permanent stormwater prevention measures shall be designed to visually fit with the ornamental or natural landscape. Swales, ditches, and basins shall appear as natural as possible. Built structures shall be architecturally treated, colored or hidden from view with planting as recommended by Caltrans District 5 Landscape Architecture.

Mitigation Measure AES-13: New lighting design. New lighting shall be directed downward, and the luminaire source shall be shielded from offsite views. Lighting shall also be in compliance with the local lighting and night sky preservation guidance and policies. Permanent exterior lighting shall be designed such that sources are not directly visible from areas beyond the project site, glare is minimized, and night lighting impacts are minimized or avoided to the maximum extent feasible. Fixtures shall be motion activated to hibernate into a low or no light level while not activated at night if feasible. Exterior lights shall be hooded and shielded and directed downward or toward the area to be illuminated to prevent obtrusive spill light (i.e., light trespass) beyond the project site. Exterior lighting shall be designed to minimize backscatter to the night sky to the maximum extent feasible. Exterior lighting shall use fully shielded luminaires.

***Impact AES-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway* – No Impact**

This question is not applicable since the project is not located within a state scenic highway. Therefore, No Impact.

***Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings*– Significant and Unavoidable Impact**

The existing visual character of the project area is based primarily on its rural, undeveloped landscapes and varying topography. The project would increase the urban character caused by a change of land use type, additional hardscape and structures, lighting, fencing, and grading and landform alteration.

Mitigation measures in the form of aesthetic treatment to walls and hardscape, landscaping, and appropriate architectural style for structures would reduce adverse impacts to the character to some extent. However, given the moderately high viewer sensitivity, the inherent visual change associated with an increase in visual scale and additional hardscape would result in a noticeable and substantial degradation of visual character. Therefore, this impact is considered Significant and Unavoidable.

Mitigation Measures AES-1 though AES-13 apply.

***Impact AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area*– Less than Significant with Mitigation Incorporated**

Nighttime lighting conditions vary throughout the city, from heavily lit areas of commercial development to more rural areas with little night lighting. Lighting and glare levels in the project vicinity are typical for that of rural areas. Most light and glare in the project vicinity is generated by commercial and industrial uses to the north and northeast of the site, including the Lockheed Martin Corporate Office building along Vachell Lane. Lighting from the newly constructed Avila Ranch housing development also contributes to lighting levels in the area. Vehicle headlights, street lighting at intersections and along the Vachell Lane and Buckley Road, building lighting, and distant airport lighting contribute to the existing light setting to the north and east of the project site.

The project site lighting design will include tall overhead fixtures to illuminate the parking, carport, and driveway areas. The buildings will also have exterior lights near entrances. Because of the existing ambient nighttime light level in the area from surrounding industrial, residential, and roadway uses, the project will not create a substantial source of light or glare in the area. Also, a mitigation measure is included to further minimize impacts. Therefore, this impact is considered Less Than Significant with Mitigation.

Mitigation Measure AES-13 applies.

Chapter 5 Agriculture and Forest Resources

5.1 OVERVIEW

This chapter evaluates the project's impacts on agriculture. The chapter first describes the regulatory and environmental settings and then evaluates the project's impacts to agricultural resources. The impact evaluation begins by describing the applicable significance criteria and the methods used to evaluate the level of significance, and then presents the impact evaluation. The project site does not contain forestry resources; therefore, no further discussion of that issue is necessary.

5.2 REGULATORY SETTING

5.2.1 Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies are applicable to agriculture and the project.

5.2.2 State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program (FMMP)

The California Department of Conservation established the Farmland Mapping and Monitoring Program in 1982 as a non-regulatory program to provide a consistent and impartial analysis of agricultural land use and land use changes throughout California. The first Important Farmland maps, produced in 1984, covered 30.3 million acres in 38 counties. Since that time, the California Department of Conservation has collected data every 2 years to assist in understanding changes in agricultural land in the state. Data now span more than 32 years and have expanded to 49.1 million acres as modern soil surveys have been completed by the U.S. Department of Agriculture (USDA). The Farmland Mapping and Monitoring Program now maps agricultural and urban land use for nearly 98 percent of California's privately held land.

Prime Farmland – Farmland that has the best combination of physical and chemical features and can sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to sustain high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

Farmland of Statewide Importance – Farmland similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

Unique Farmland – Farmland with lesser quality soil that is used for production of the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards, which are found in some climatic zones in California. Land must have been used for crops at some time during the 4 years prior to the mapping date.

Farmland of Local Importance – Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

Grazing Land – Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

Urban and Built-up Land – Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or about six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, and public administrative purposes; railroad and other transportation yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment facilities; water control structures; and other developed purposes.

Other Land – Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is covered in California Government Code Section 51200-51297.4. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Specifically, this legislation enables landowners who voluntarily agree to participate in the Williamson Act program, to receive assessed property taxes according to the income-producing value of their property in agricultural use, rather than on the property's assessed market value. The project site is not under a Williamson Act contract, but multiple parcels to the south of the site are under a Williamson Act contract.

The Williamson Act program is administered by the California Department of Conservation in conjunction with local governments, which administer the individual contract arrangements with landowners. The landowner commits the parcel to a 10-year "rolling" period wherein no conversion out of agricultural use is permitted. Each year the contract automatically renews unless a notice of non-renewal or cancellation is filed. In return, the land is taxed at a rate based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. An application for immediate cancellation can also be requested by the landowner, provided that the proposed immediate cancellation application is consistent with the cancellation criteria stated in the California Land Conservation Act and those adopted by the affected county or city. Nonrenewal or immediate cancellation does not change the zoning of the property. Participation in the Williamson Act program is dependent on county adoption and implementation of the program and is voluntary for landowners.

The Williamson Act states that a board or council shall, by resolution, adopt rules governing the administration of agricultural preserves. The rules of each agricultural preserve specify the uses allowed. Generally, commercial agricultural uses are permitted within an agricultural preserve; however, local governments may identify compatible uses permitted with a use permit.

California Government Code Section 51238.1 allows a board or council to deem compatible any use, without conditions or mitigation that would otherwise be considered incompatible. However, this may occur only if that use meets the following conditions:

- The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels on other contracted lands in agricultural preserves.
- The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
- The use will not result in the significant removal of adjacent contracted land from agricultural or open space use.

While the project site is not under Williamson Act contract, some nearby agricultural operations are subject to such contracts.

Cortese-Knox-Hertzberg Act Local Government Reorganization Act of 2000 (CKH Act)

The Cortese-Knox-Hertzberg Act was adopted in 2000 and establishes procedures for local government changes of organization, including city incorporations, annexations to a city or special district, and city and special district consolidations. The Cortese-Knox-Hertzberg Act empowers local agency formation commissions (Local Agency Formation Commissions) to act on local agency boundary changes and to adopt spheres of influence for local agencies with the primary purpose of discouraging urban sprawl, preserving open-space and prime agricultural lands, encouraging the efficient provision of government services, and encouraging orderly formation and development of local agencies. Under the Cortese-Knox-Hertzberg Act Section 56064, prime agricultural land is defined as an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

a. Land that qualifies, if irrigated, for rating as Class I or Class II in the U.S. Department of Agriculture Natural Resources Conservation Service land use compatibility classification, whether or not land is actually irrigated, provided that irrigation is feasible.

b. Land that qualifies for rating 80 through 100 Storie Index Rating.

c. Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the U.S. Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

d. Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.

e. Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.

The project will pursue an Outside User Agreement and annexation into the City to receive City services (water, sewer, etc.). Therefore, the project will need a written approval of the Outside User Agreement and board approval of annexation from San Luis Obispo County Local Agency Formation Commission to extend City services to the project site.

5.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (e.g., connections to infrastructure within the public right-of-way).

5.3 ENVIRONMENTAL SETTING

5.3.1 Regional Context

Agriculture is a major production industry in the County of San Luis Obispo, with a gross production value of $1,081,952,000 in 2021. Top crops by value in 2021 included: strawberries, wine grapes, avocados, broccoli, cattle and calves, and vegetable transplants (County of San Luis Obispo 2021). Agricultural production creates a multiplier effect, creating jobs and economic output in many other sectors of the local economy, including tourism, industrial, retail, and commercial services. Agricultural activity in the region includes mainly rotational row crops and vineyards in level or gently sloping areas and livestock grazing in foothill areas. The project site adjacent to the city is located in the heart of San Luis Obispo County and the Central Coast region, and is surrounded by lands used for either grazing or agricultural cultivation, with both cultivated and grazing lands designated for agricultural use adjacent to, south, southwest, and southeast of the project site in unincorporated areas of the county. Agricultural operation on lands in the project vicinity generally include rotational row crops, oat fields, vineyards, and orchards.

5.3.2 Local Context

The project site partially encompasses and is adjacent to County-designated agricultural land to the west, south, and southeast. These lands are designated by the County for agricultural use and include prime farmland, farmland of statewide importance, and farmland of local importance, farmland of local potential, and grazing land as designated by the Farmland Mapping and Monitoring Program. The agricultural lands adjacent to the southeast, south, and southwest of the site support areas of row crop cultivation and grazing and are under Williamson Act contract, while the parcels to the east support limited cultivation and are not under Williamson Act contract.

5.3.3 Project Site

The 56.5-acre project site is in unincorporated land of the county but within the City’s sphere of influence and is adjacent to, south, and west of the City-County boundary. In the county, the project site is zoned commercial north of Buckley Road (approximately 17.5 acres) and zoned agricultural south of

Buckley Road (approximately 34 acres) and has historically been used for agricultural purposes and most recently contains dryland field crops. There is a shallow groundwater water well (approximately 20 feet below ground surface) near the northwest corner of the property located south of Buckley Road but it is not currently used for crop irrigation.

North of Buckley Road Extension

Approximately 17.5 acres of state-owned property are north of Buckley Road. The current land use and conditions north of Buckley Road include (approximately):

- 10 acres of dry farming
- 6 acres of development, including the District 5 construction office, a parking area, a driveway from Vachell Lane, and the Octagon parking and landscape buffer easement)
- 1.5 acres of open/ruderal space

Buckley Road Extension

The Buckley Road Extension includes approximately 5 acres of development and is under a deed of lease from Caltrans to the County. The deed of lease includes terms of maintenance and use of the Buckley Road Extension infrastructure, including but not limited to road elements, retaining walls, drainage systems, and improvements on the west side of Vachell Lane.

South of Buckley Road Extension

There are 34 acres south of Buckley Road within APN 076-071-021. Current conditions south of Buckley Road include (approximately):

- 26 acres of dry farming
- 3 acres of anthropogenic space, including farming structures and Caltrans equipment and material storage
- 1 acre of ruderal space
- 4 acres of arroyo willow thicket along the creek

5.3.4 Farmland within the project Site

According to the 2018 Farmland Mapping and Monitoring Program maps, the project site contains approximately 0.1 acre of grazing land, 1 acre of developed land, 15.5 acres of farmland of local potential, and 40 acres of farmland of local importance (California Department of Conservation 2018). See Figure 5-1, which shows the Farmland Mapping and Monitoring Program designations within the project site.

Figure 5-1 Agricultural Resources within the Project Site

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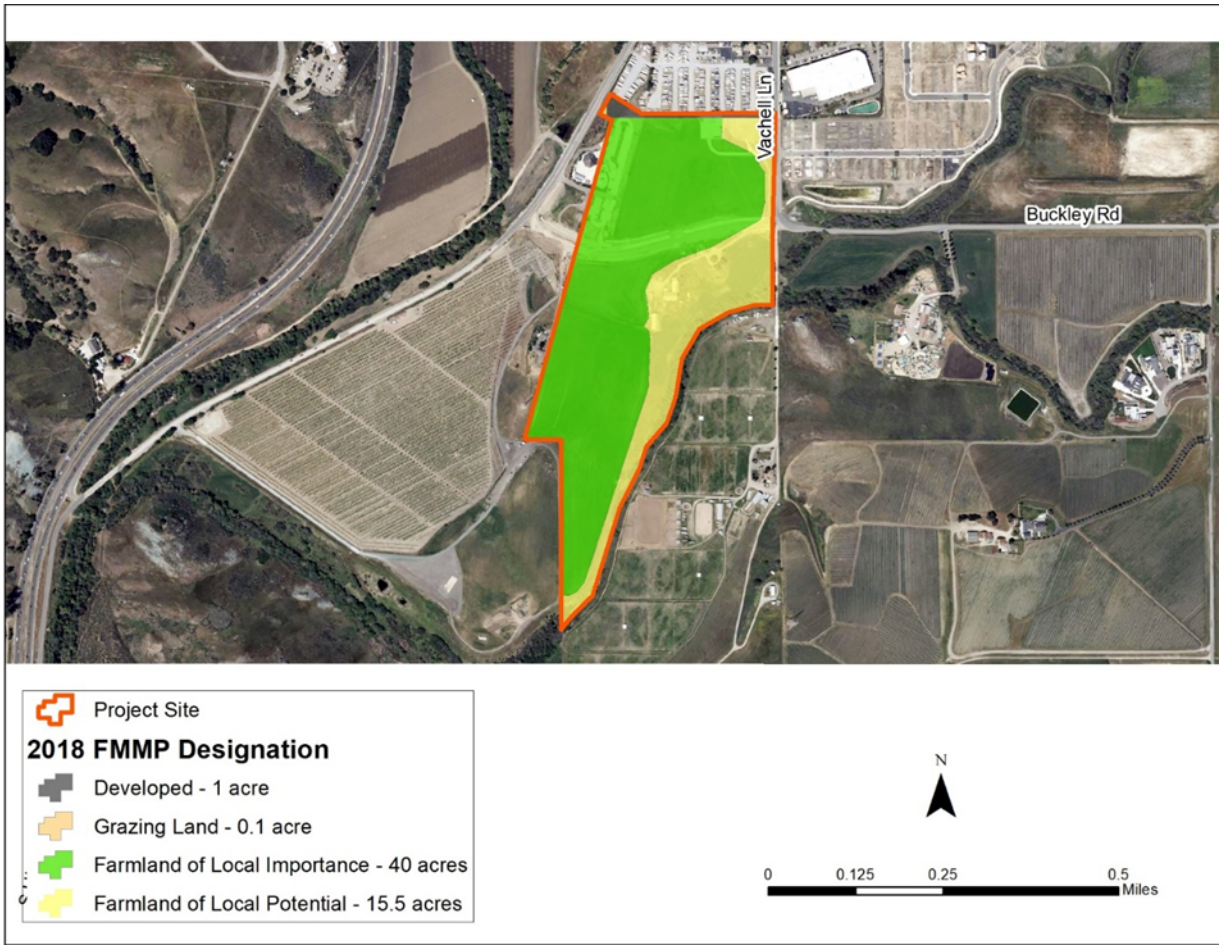


5.3.5 Agricultural Soils within the Project Site

The Natural Resources Conservation Service assesses the potential agricultural productivity and limitations of different soils by using both the land capability classification (LCC) system (described in the National Soil Survey Handbook Part 622.02) and the Important Farmland Inventory (pursuant to requirements of the Code of Federal Regulations Chapter 7 Part 657).

The land capability classification indicates the suitability of soils for most kinds of crops, where groupings are made according to the limitations of the soils when used to grow crops and the risk of damage to soils when they are used in agriculture. Soils are rated from Class I to Class VIII, with soils having the fewest limitations receiving the highest rating (Class I). The system is subdivided into capability class and capability sub-class. Land capability classification sub-classes are used to further characterize soils within a specific class by designating the main hazard by which a particular soil is limited by reference to a letter, including erosion (e); water (w); shallow,

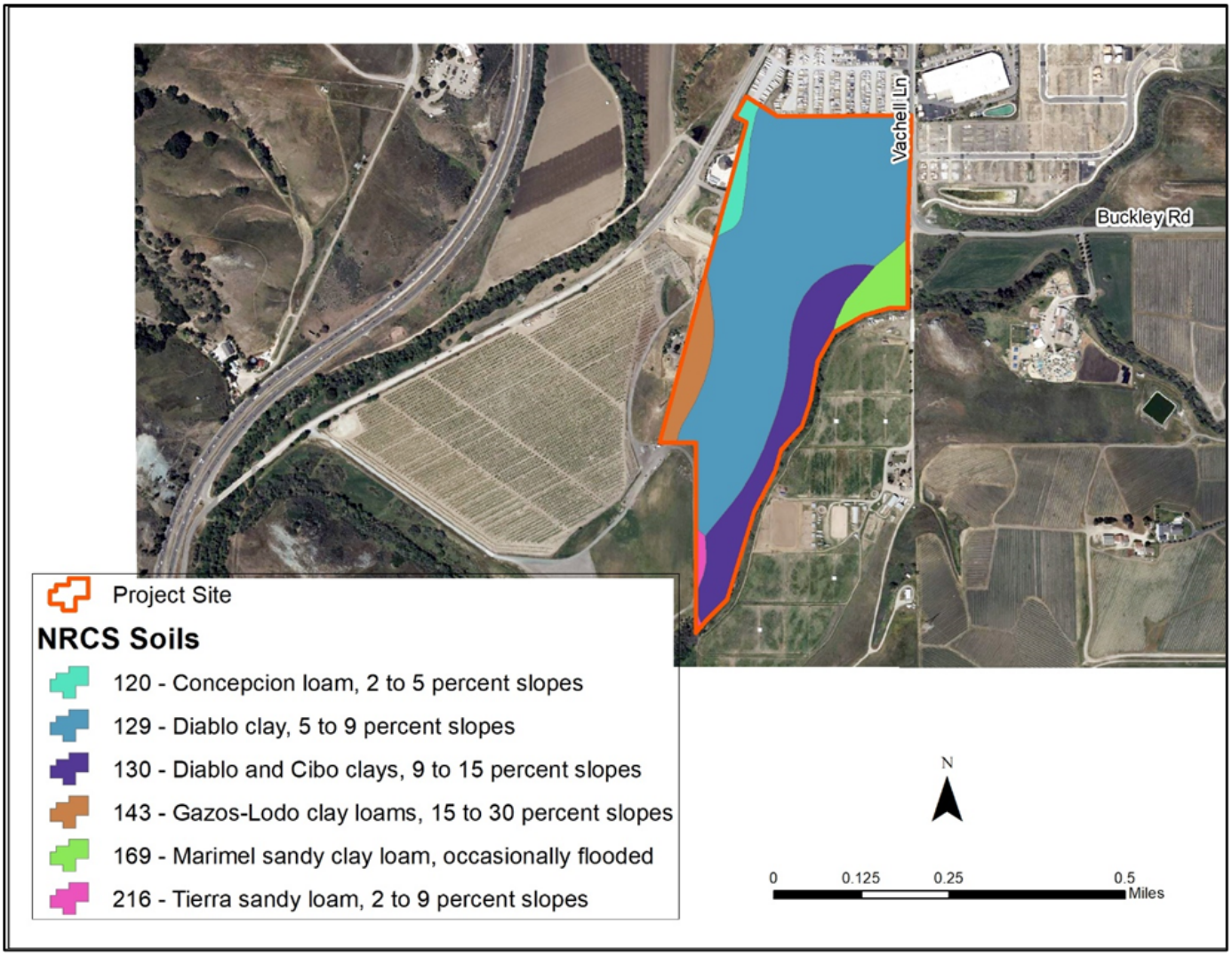
droughty, or stony (s); and very cold or very dry (c). Class I soils have no sub-classes because soils of this type have few limitations (California Department of Conservation 1997). The Natural Resources Conservation Service identifies prime soils as those with a land capability classification of Class I or II. Many soils are assigned Class I or II only when irrigated, but otherwise receive a lower rating without irrigation. It is important to note the Natural Resources Conservation Service farmland classification criteria are different than the soil land capability classification. Therefore, a farmland classification with a soil land capability classification greater than 2 (not a Natural Resources Conservation Service prime soil) can still be considered Prime Farmland if irrigated.

Soils at the project site consist of approximately 41.6 acres of prime agricultural soils if irrigated, and approximately 14.9 acres of prime agricultural soils if irrigated and drained, based on Natural Resources Conservation Service soil classifications. The prime if irrigated agricultural soils consist of Diablo clay and Marimel sandy clay loam (Natural Resources Conservation Service 2018); see Table 5.2 and Figure 5-2. Diablo clay constitutes approximately 38.9 acres of the project site and is rated with a land capability class of Class III with irrigation and Class III without irrigation; Marimel sandy clay loam constitutes approximately 2.7 acres of the project and is rated with a land capability classification of Class III with irrigation and Class III without irrigation. Per Natural Resources Conservation Service Farmland designations, these soils are not considered prime soils but are considered Prime Farmland if irrigated.

Table 5.1 Natural Resources Conservation Service Soil Capabilities and Farmland Classification

Map Symbol	Soil Name	Acreage In Project Site	Non-Irrigated Land Capability Classification	Irrigated Land Capability Classification	Important Farmland Designation
120	Concepcion loam, 2 to 5 percent slopes	1.7	3	3	Farmland of Statewide Importance
129	Diablo clay, 5 to 9 percent slopes	38.9	3	3	Prime (if irrigated)
130	Diablo and Cibo clays, 9 to 15 percent slopes	9.9	3	3	Farmland of Statewide Importance
143	Gazos-Lodo clay loams, 15 to 30 percent slopes	2.9	6	6	Not prime farmland
169	Marimel sandy clay loam, occasionally flooded	2.7	3	3	Prime (if irrigated and drained)
216	Tierra sandy loam, 2 to 9 percent slopes	0.4	3	3	Farmland of Statewide importance

Figure 5-2 Agricultural Soils within the Project Site



5.4 IMPACT ANALYSIS

5.4.1 Methodology

Data for this analysis came from the review of Natural Resources Conservation Service soil maps and the Farmland Mapping and Monitoring Program San Luis Obispo Important Farmland Map (2018). Potential impacts to agricultural resources are associated with the direct conversion of dryland farming land to urban development, including approximately 24 acres of new development within the 56.5-acre property. The project site is currently state-owned property within unincorporated land of the county and in the City's sphere of influence. The potential for impacts to agricultural resources are therefore evaluated in the context of state and county resources and agricultural policies.

The analysis for agricultural resources uses Land Evaluation and Site Assessment (LESA) methodology to determine the potential for significance of impacts, assessed in the section below. The following methods were also used to determine the extent and/or significance of the project's impact on agricultural resources:

a) Identify any onsite land classified by the Farmland Mapping and Monitoring Program with an Important Farmland designation that would be directly converted because of the proposed project.

b) Identify any onsite prime soils that would be impacted based on the Natural Resources Conservation Service designation of prime agricultural soils. The Natural Resources Conservation Service defines prime agricultural soils as land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops.

c) Identify onsite and offsite areas with a County agriculture land use designation that would be directly converted or would be affected by other changes in the environment that would indirectly contribute to the conversion of agricultural land as a result of the project.

5.4.2 Criteria for Determining Significance

With respect to agricultural resources, applicable sections of Appendix G of the CEQA Guidelines state that a project would normally have a significant impact on the environment if it would:

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

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract;

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code Section 12220(g)), timberland (as defined by Public Resource Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));

d) Result in the loss of forest land or conversion of forest land to non-forest use;

e) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in the conversion of farmland to non-agricultural use.

5.4.3 Environmental Impacts

***Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use* - Less than Significant**

The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency (see also Figure 5-1). Therefore, the project would not convert any Farmland Mapping and Monitoring Program-designated Important Farmland. The project site contains approximately 0.1 acre of Farmland Mapping and Monitoring Program-designated Grazing Land, 1 acre of Farmland Mapping and Monitoring Program-designated of Developed Land, 15.5 acres of Farmland Mapping and Monitoring Program-designated Farmland of Local Potential, and 40 acres of Farmland Mapping and Monitoring Program-designated Farmland of Local Importance. Within these designations, the project site is actively dry farmed on approximately 30 acres of Farmland Mapping and Monitoring Program-designated Farmland of Local Importance and approximately 5 acres of Farmland Mapping and Monitoring Program-designated Farmland of Local Potential. Implementation of the project would result in the direct conversion of approximately 17 acres of Farmland Mapping and Monitoring Program-designated Farmland of Local Importance and 4.5 acres of Farmland of Local Potential south of the Buckley Road Extension. If constructed at the main driveway, the roundabout design option would convert another approximate 0.1 acre of Farmland Mapping and Monitoring Program-designated Farmland of Local Importance north of the Buckley Road Extension. The loss of Farmland of Local Potential and Farmland of Local Importance is not considered a significant impact under CEQA.

The project site contains approximately 38.9 acres of Diablo clay, 5 to 9 percent slopes, and 2.7 acres of Marimel sandy clay loam, occasionally flooded, both of which have soil land capability classification ratings of 3 (irrigated and non-irrigated) and a farmland classification of prime farmland if irrigated.

Within the 38.9 acres of Diablo clay, 5 to 9 percent slopes, the Buckley Road Extension permanently converted approximately 5 acres with construction of the new road and with improvements along Vachell Lane. Also, the parking and landscaping buffer area constructed for the Octagon Barn converted approximately 2.3 acres of Diablo clay, 5 to 9 percent slopes. Therefore approximately 31.6 acres of Diablo clay, 5 to 9 slopes, currently remains within the project site. The project would directly convert approximately 16.8 acres of Diablo clay, 5 to 9 slopes, south of Buckley Road.

If constructed at the main driveway, the roundabout design option would convert another approximately 0.1 acre of Diablo clay, 5 to 9 slopes, north of the Buckley Road Extension.

This soil is designated as Prime Farmland if irrigated by the Natural Resources Conservation Service. However, no portion of the project site is currently irrigated, and there is no history (at least within the last 20 years based on interpretation from aerial imagery and as described in the Octagon Barn's Mitigated Negative Declaration, County of San Luis Obispo 2012) of irrigated crop production with the project site.

A California Agricultural Land Evaluation and Site Assessment (LESA) Model was prepared for the project, resulting in a scoring decision of less than significant. The Land Evaluation and Site Assessment is a method used to define an approach for rating the relative quality of land resources based on specific measurable features. The California Agricultural Land Evaluation and Site Assessment Model is composed of six different factors: two Land Evaluation (LE) factors are based on measures of soil resource quality, and four Site Assessment (SA) factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. The factors are then weighted relative to one another and combined, resulting in a single project score that becomes the basis for deciding a project's potential significance, based on a range of established scoring thresholds:

- If the total Land Evaluation and Site Assessment score is from 0 to 39 points, the scoring decision is "not considered significant."
- If the score is from 40 to 59 points, it is "considered significant only if Land Evaluation and Site Assessment sub-scores are each greater than or equal to 20 points."
- If the score is from 60 to 79 points, it is "considered significant unless either Land Evaluation or Site Assessment sub-score is less than 20 points."
- If the score is from 80 to 100 points, it is "considered significant" (California Department of Conservation 1997).

Land Evaluation and Site Assessment scores for the project site are summarized in Table 5-2 and Appendix C. A final score of 43.5 with a Site Assessment score below 20 indicates the project impacts to existing agricultural soils would be Less than Significant. No mitigation is required.

Table 5.2 Land Evaluation and Site Assesment Score Sheet

Scoring Factor	Factor Rating (0 to 100 points)	Factor Weighting (Total = 1.00)	Weighted Factor Score
Land Evaluation – 1 Land Capability Classification	60.1	0.25	15.025
Land Evaluation – 2 Storie Index Rating	60.6	0.25	15.15
Land Evaluation - Subtotal	Not applicable	Not applicable	**30.175**
Site Assessment -1 Project Size	60	0.15	9
Site Assessment -2 Water Resource Availability	25	0.15	3.75
Site Assessment -3 Surrounding Agricultural Lands	30	0.15	4.5
Site Assessment – 4 Protected Resource Lands	0	0.05	0
Site Assessment Subtotal	Not applicable	Not applicable	**17.25**
Total Land Evaluation and Site Assessment Score	Not applicable	Not applicable	**47.425**

For Alternative 2, the project will pursue City water and sewer services, and therefore City and Local Agency Formation Commission (LAFCO) approval will be required. For the purposes of City and Local Agency Formation Commission approval and under their respective definitions, there are no prime soils or prime agricultural land (Class I or II soils irrigated or non-irrigated) within the project site. Therefore, the project does not require the minimum 1-to-1 mitigation ratio for prime soils converted to non-agricultural development as required in City and Local Agency Formation Commission policies.

The project would not convert Important Farmland (as defined by the Farmland Mapping and Monitoring Program of the California Resources Agency) or prime agricultural soils (Class I or II) as defined by the Natural Resources Conservation Service but would directly convert approximately 16.9 acres of Natural Resources Conservation Service soil with a farmland designation that is consider prime farmland if irrigated. Nevertheless, the conversion of farmland within the project site is not considered significant per the California Agricultural Land Evaluation and Site Assessment Model.

Future use of the project site north of Buckley Road could include a Caltrans District 5 Office, and another approximately 13 acres of Natural Resources Conservation Service soil with a farmland designation that is considered prime if irrigated could be lost to development. However, development on the north side of the Buckley Road Extension that would remove another approximately 13 acres of Natural Resources Conservation Service prime if irrigated soils would not change the results of the California Agricultural Land

Evaluation and Site Assessment Model. See Section 27.5 Cumulative Impacts for more discussion about potential development and agricultural impacts on the project site north of the Buckley Road Extension. As noted above, the project site does not include prime agricultural soils per City and Local Agency Formation Commissions policies.

***Impact AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract* - Less than Significant with Mitigation Incorporated**

The project site is not under Williamson Act contract. The project site is zoned in the County General Plan for Agricultural south of the Buckley Road Extension and zoned for Commercial use north of the Buckley Road Extension. The project's construction and operation of the Maintenance Station and Equipment Shop replacement facilities to be located south of the Buckley Road Extension would conflict with the permitted uses of the County agricultural zoning and land use ordinance. However, the project site is owned by the State of California, which is not subject to local land use laws, such as the County General Plan land use designations and zoning.

The project site is surrounded by County agricultural zoned land and uses to the west, south, and southeast. The agricultural lands adjacent to the west and south of the project site support areas of orchard, row crop cultivation, and grazing and are under Williamson Act contract, while the parcels to the southeast support limited cultivation and are not under Williamson Act contract.

The County Agricultural Buffer Policy recommends where land is currently used for Intensive Agricultural Uses (such as production-level, irrigated cropland, vineyards or orchards), a 100- to 600-foot-wide buffer is needed; where land is used for Non-Intensive Agricultural Use (such as dry farming or rangeland and pasture), the County recommends a 50 to 200-footwide buffer is needed. At the project site, the nearest occupied structure to an active agricultural use is the Regional Office Building to be located at the northwest corner of the site and south of the Buckley Road Extension. At this location, the Regional Office Building would be approximately 150 feet from the active orchard that is west and across the private driveway to Buckley Road. All other occupied structures are at least 150 feet from adjacent non-intensive agricultural uses.

Although the County Agricultural Buffer Policy does not apply to the state-owned property, the project will include an additional landscape buffer strategy along the western property line and adjacent to the Regional Office Building. Therefore, the project would not conflict with Williamson Act contracts or County agricultural zoning and would have a Less than Significant Impact with Mitigation Incorporated on agricultural zoning and Williamson Act contracts or County agricultural zoning.

Mitigation Measure-AG-1: Landscaping adjacent to active agriculture operations. To reduce the potential for noise, dust, and pesticide drift to affect future occupants of the new Caltrans facilities, the project landscape

plans will include planting of a windrow of trees and shrubs where feasible along the western property line in locations adjacent to active agriculture operations**.**

Impact AG-3: Conflict with existing zoning, 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))? **– No Impact**

Impact AG-4: Result in the loss of forest land or conversion of forest land to non-forest use? **- No Impact**

Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use? **– No Impact**

Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use? **– Significant and Unavoidable**

Alternative 1 would not result in any other changes in the existing environment (apart from the effects described above in Impacts AG-1 and AG-2) that could result in conversion of farmland to non-agricultural use. Therefore, the impact is considered Less than Significant.

Alternative 2 would expand water and sewer infrastructure outside the city limits and adjacent to and nearby surrounding agricultural land. This infrastructure could induce development and conversion of prime soils and agriculture at these locations. Although such development would likely require annexation into the City and therefore require mitigation to offset the loss of agricultural land, recent local efforts to mitigate the loss of prime (significant) agricultural land around the city have not been difficult. Therefore Alternative 2 may indirectly result in agricultural land conversion that could not be fully mitigated. As such, this impact would be Significant and Unavoidable.

Chapter 6 Air Quality

6.1 OVERVIEW

This chapter evaluates the project's air quality impacts. The chapter first describes the air quality regulatory and environmental settings and then evaluates the project's air quality impacts. The impact evaluation begins by describing the air quality significance criteria and the methods used to evaluate significance, and then presents the impact evaluation.

Air quality is described for a specific location as the concentration of various pollutants in the atmosphere. Air quality conditions at a particular location are a function of the type and amount of air pollutants emitted into the atmosphere, the size and topography of the regional air basin, and the prevailing meteorological conditions.

6.2 REGULATORY SETTING

6.2.1 Federal Laws, Regulations, and Policies

The U.S. Environmental Protection Agency is responsible for establishing the National Ambient Air Quality Standards (NAAQS), enforcing the Clean Air Act, and regulating transportation-related emission sources, such as aircraft, ships, and certain types of locomotives, under the exclusive authority of the federal government. The U.S. Environmental Protection Agency also establishes vehicular emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet stricter emission standards established by the California Air Resources Board.

Clean Air Act

At the federal level, the Clean Air Act governs air quality in the United States and is implemented by the U.S. Environmental Protection Agency, which is responsible for setting and enforcing the National Ambient Air Quality Standards for atmospheric pollutants. The agency regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, non-road engines, and certain types of locomotives. The U.S. Environmental Protection Agency also has jurisdiction over emission sources outside state waters (outer continental shelf) and establishes various emission standards for vehicles sold in states other than California; California has received a waiver to establish emission standards lower than the federal standards. As part of its enforcement responsibilities, the U.S. Environmental Protection Agency requires each state with "nonattainment" areas to prepare and submit a state implementation plan (SIP) that demonstrates the means to

attain the National Ambient Air Quality Standards before the deadline mandated by the U.S. Environmental Protection Agency. The state implementation plan must integrate federal, state, and local plan components and regulations and identify specific measures to reduce pollution, using a combination of performance standards and market-based programs, within the timeframe identified in the state implementation plan. A maintenance plan must be prepared for each former nonattainment area that subsequently demonstrates compliance with the standards.

The Clean Air Act also contains regulations dealing with operating permits for large industrial and commercial sources that release pollutants into the air. Operating permits contain information on which pollutants are being released, the quantity that may be released, and what steps the owner or operator of the emission source must take to reduce pollution.

Non-road Emission Regulations

U.S. Environmental Protection Agency has adopted emission standards for different types of non-road engines, equipment, and vehicles. For non-road diesel engines, the U.S. Environmental Protection Agency has adopted multiple tiers of emission standards.

The U.S. Environmental Protection Agency signed a final rule on May 11, 2004, introducing the Tier 4 emission standards, to be phased in between 2008 and 2015 (69 Code of Federal Regulations 38957–39273, June 29, 2004). The Tier 4 standards require that emissions of particulate matter (PM) and oxides of nitrogen (NOx) be further reduced by about 90 percent. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after-treatment. To enable sulfur-sensitive control technologies in Tier 4 engines, the U.S. Environmental Protection Agency also mandated reductions in sulfur content in non-road diesel fuels. In most cases, federal non-road regulations also apply in California, which has only limited authority to set emission standards for new non-road engines. The Clean Air Act preempts California's authority to control emissions from new farm and construction equipment less than 175 horsepower (hp) (Clean Air Act Section 209[e][1][A]) and requires California to receive authorization from the U.S. Environmental Protection Agency for controls over other off-road sources (Clean Air Act Section 209[e][2][A]).

On-road Vehicle Emission Regulations

On April 1, 2010, the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce greenhouse gas emissions and improve fuel economy standards for new model year 2012–2016 cars and light trucks. On August 9, 2011, the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration announced standards to reduce greenhouse gas emissions and improve fuel efficiency for heavy-duty trucks and buses. In

August 2016, the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration jointly finalized Phase 2 Heavy-Duty National Program standards to reduce greenhouse gas emissions and improve fuel efficiency of medium- and heavy-duty vehicles for model year 2018 and beyond (U.S. Environmental Protection Agency 2020a). However, some of these standards have been stayed by a court order, and the U.S. Environmental Protection Agency has proposed repealing certain Phase 2 emissions standards (Center for Climate and Energy Solutions 2020). In April 2020, the National Highway Traffic Safety Administration and U.S. Environmental Protection Agency amended the Corporate Average Fuel Economy (CAFE) and greenhouse gas emissions standards for passenger cars and light trucks and established new less stringent standards, covering model years 2021 through 2026 known as the Safer Affordable Fuel-Efficient (SAFE) I Rule (U.S. Environmental Protection Agency 2020b). The National Highway Traffic Safety Administration and U.S. Environmental Protection Agency are currently considering repealing the SAFE I Rule as it may have overstepped the agency's authority by issuing regulations and preemption of state and local laws related to fuel economy standards (NHTSA 2021).

6.2.2 State Laws, Regulations, and Policies

California Clean Air Act (CCAA)

The California Clean Air Act is the state's main law for addressing air pollution and improving air quality. It grants authority to the California Air Resources Board to regulate emissions from various sources, including vehicles, industrial facilities, and consumer products (Source: California Health and Safety Code, Division 26 – Air Resources).

California Air Resources Board (CARB) Regulations

The California Air Resources Board has adopted numerous regulations to implement the goals of the California Clean Air Act. These regulations cover a wide range of sectors and activities, including vehicle emissions standards, greenhouse gas reductions, and industrial emissions controls (Source: California Code of Regulations, Title 17 - Public Health, and Title 13 - Motor Vehicles).

California Vehicle Emissions Standards

California has unique authority under the federal Clean Air Act to set stricter vehicle emissions standards than the rest of the country. These standards are often referred to as the "California Emissions Standards" (Source: California Code of Regulations, Title 13 - Motor Vehicles).

California Low Emission Vehicle (LEV) Program

This program sets emission standards for new passenger vehicles sold in California to reduce smog-forming pollutants and greenhouse gas emissions (Source: California Code of Regulations, Title 13 - Motor Vehicles).

State Vehicle Fleet Regulations

Senate Bill 498 requires state agencies, starting no later than the 2024-2025 fiscal year, to ensure that at least 50 percent of the light-duty vehicles purchased for the state vehicle fleet each year are zero-emission. In addition to the statutory targets for transitioning the state fleet to increasing levels of zero-emission vehicles (ZEVs), Caltrans has in place zero-emission vehicle-first purchasing mandates applicable to all state agencies that purchase vehicles for the state fleet. These mandates prioritize pure zero-emission vehicles (i.e., battery electric and hydrogen fuel-cell vehicles), although they allow for plug-in hybrids and other vehicles to be purchased if the purchasing agency can demonstrate why a pure zero-emission vehicle cannot meet Caltrans' transportation requirements.

Toxic Air Contaminants (TAC) Regulations

In addition to Airborne Toxic Control Measures, Toxic Air Contaminants are controlled under several different regulations in California, including the Tanner Air Toxics Act, Air Toxics Hot Spots Information Act, and Assembly Bill (AB) 2588: Air Toxics "Hot Spots" Information and Assessment Act. In addition, Proposition 65 (the Safe Water and Toxic Enforcement Act of 1996) requires the state to publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. Proposition 65 requires businesses to notify Californians about substantial amounts of chemicals in the products they purchase or that are released into the environment.

6.2.3 Local Laws, Regulations, and Policies

The San Luis Obispo Air Pollution Control District (SLOAPCD) develops and implements rules and regulations that set emission standards and limits for various sources of air pollution, including industrial facilities, commercial operations, residential activities, and vehicles. These rules are designed to reduce the release of harmful pollutants into the atmosphere. The San Luis Obispo Air Pollution Control District issues permits to businesses and facilities that have the potential to emit air pollutants. These permits establish specific emission limits and conditions that must be followed to ensure compliance with air quality regulations. The district operates and maintains a network of air quality monitoring stations across the county. These monitoring stations measure concentrations of various air pollutants, such as particulate matter, ozone, nitrogen dioxide, sulfur dioxide, and volatile organic compounds. Monitoring data helps assess compliance with air quality standards and identifies areas of concern. The San Luis Obispo Air Pollution Control District

has developed thresholds for Construction and Operational emissions to determine the significance of the project on existing air quality under CEQA.

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (e.g., connections to infrastructure within the public right-of-way).

6.3 ENVIRONMENTAL SETTING

6.3.1 Regional Setting

Topography

The project site is in the Coastal Plateau region of the county. The coastal plateau is about 5 to 10 miles wide and varies in elevation from sea level to about 500 feet. It is bounded on the northeast by the Santa Lucia Mountain Range, which extends almost the entire length of the county. Rising sharply to about 3,000 feet at its northern boundary, the Santa Lucia Range gradually winds southward away from the coast, finally merging into a mass of rugged features on the north side of Cuyama Canyon.

Local and Regional Weather

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland.

Regional weather is largely dominated by a persistent high-pressure area that commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland.

From November through April, the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the

total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year.

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High-pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze.

In the fall, onshore surface winds decline, and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a “sloshing” effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, “trapping” pollutants near the surface.

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a “Santa Ana” condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high-pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the “post Santa Ana” condition led to high ambient pollutant levels, but it does play an important role in the air pollution conditions of the county.

Atmospheric Stability and Dispersion

Air pollutant concentrations are determined mostly by the amount of pollutant emissions in an area and the degree to which these pollutants are dispersed into the atmosphere. The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange, or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions.

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition, termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating.

Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low-lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses.

During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating.

In contrast, in the summertime, the presence of the Pacific High-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1,000 to 2,500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo County. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion.

6.3.2 Project Vicinity

The project site is at 4485 Vachell Lane in San Luis Obispo County between South Higuera Road and Vachell Lane and bisected by the Buckley Road Extension. Adjacent land west, south, and southeast of the project is zoned agricultural; land north and northeast of the project within the City is more diverse. South Higuera Street runs near the upper northwest corner of the project site and then veers west toward Highway 101 away from the southern limit of the project site. Land west of South Higuera is composed of

agricultural land near San Luis Obispo Creek and open space across Highway 101. The northern portion of the site is bounded by Service Commercial land use. The northeastern portion of the project is bounded by manufacturing, medium-density residential, public facility, and conservation open space uses. The southeastern, southern, and southwestern bounds of the project site are surrounded by agricultural land in the unincorporated area of the County. Just west of the project site is a single residential property within APN 076-081-023 (street address 4595 Octagon Way).

6.3.3 Air Pollutants

Air pollutants are governed by multiple federal and state standards to regulate and mitigate health impacts. At the federal level, there are six criteria pollutants for which National Ambient Air Quality Standards (NAAQS) have been established: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (PM2.5 and PM10), and sulfur dioxide. These are referred to as the “criteria” pollutants. The California Air Resources Board has set California Ambient Air Quality Standards (CAAQS) for the same six pollutants, as well as for four additional pollutants: sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride.

The U.S. Environmental Protection Agency has also identified nine priority mobile source air toxics: 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel particulate matter), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter).

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. Toxic air contaminants are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, toxic air contaminants differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. Toxic air contaminants, therefore, are not considered “criteria pollutants” under either the Federal Clean Air Act or the California Clean Air Act and are thus not subject to National or State Ambient Air Quality Standards. Toxic air contaminants are not considered criteria pollutants in that the federal and California Clean Air Acts do not address them specifically through the setting of National or State Ambient Air Quality Standards. Instead, the U.S. Environmental Protection Agency and Air Resources Board regulate Hazardous Air Pollutants (HAPs) and toxic air contaminants, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with district rules, these federal and state statutes

and regulations establish the regulatory framework for toxic air contaminants. At the national levels, the U.S. Environmental Protection Agency has established National Emission Standards for Hazardous Air Pollutants (NESHAPs), in accordance with the requirements of the Federal Clean Air Act and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of Hazardous Air Pollutants.

Within California, toxic air contaminants are regulated primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for Air Resources Board to designate substances as toxic air contaminants. This includes research, public participation, and scientific peer review before Air Resources Board designates a substance as a toxic air contaminant. Existing sources of toxic air contaminants that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: 1) prepare a toxic emissions inventory; 2) prepare a risk assessment if emissions are significant; 3) notify the public of significant risk levels; and 4) prepare and implement risk reduction measures.

At the state level, the Air Resources Board has authority for the regulation of emissions from motor vehicles, fuels, and consumer products. Most recently, diesel-exhaust particulate matter (DPM) was added to the Air Resources Board's list of toxic air contaminants. Diesel-exhaust particulate matter is the primary toxic air contaminant of concern for mobile sources. Of all controlled toxic air contaminants, emissions of diesel-exhaust particulate matter are estimated to be responsible for about 70 percent of the total ambient toxic air contaminant risk. The Air Resources Board has made the reduction of the public's exposure to diesel-exhaust particulate matter one of its highest priorities, with an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles (Air Resources Board 2005).

At the local level, air districts have authority over stationary or industrial sources. All projects that require air quality permits from the San Luis Obispo Air Pollution Control District are evaluated for toxic air contaminant emissions. The San Luis Obispo Air Pollution Control District limits emissions and public exposure to toxic air contaminants through several programs. The San Luis Obispo Air Pollution Control District prioritizes toxic air contaminant-emitting stationary sources, based on the quantity and toxicity of the toxic air contaminant emissions and the proximity of the facilities to sensitive receptors. The San Luis Obispo Air Pollution Control District requires a comprehensive health risk assessment for facilities that are classified in the significant-risk category, pursuant to Assembly Bill 2588. No major existing sources of toxic air contaminants have been identified in the project area.

Odors

There are no adopted rules or regulations at the state or federal level for the control of odor sources. The San Luis Obispo Air Pollution Control District

does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to the San Luis Obispo Air Pollution Control District's Rule 402, Nuisance. Also, San Luis Obispo's Municipal Code, Chapter 8.22 discusses "Offensive Odors" as well. The San Luis Obispo Air Pollution Control District has developed a screening table to identify whether the project will have any impacts related to odor based on its type of operation and project's proximity to sensitive receptors.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant by the Air Resources Board in 1986. All types of asbestos are hazardous and may cause lung disease and cancer.

Asbestos can be released from serpentine and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos-bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed.

Serpentine may contain chrysotile asbestos, especially near fault zones. Ultramafic rock, a rock closely related to serpentinite, may also contain asbestos minerals. Asbestos can also be associated with other rock types in California, though much less frequently than serpentinite and/or ultramafic rock. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in counties of the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. The California Department of Conservation, Division of Mines and Geology, has developed a map showing the general location of ultramafic rock in the state.

Asbestos-containing material may also be present in existing structures. The demolition or renovation of existing structures may be subject to regulatory requirements for the control of asbestos-containing material.

6.3.4 Existing Air Quality Conditions

The U.S. Environmental Protection Agency, California Air Resources Board, and local air districts operate an extensive air monitoring network to measure

progress toward attainment of the National and California Ambient Air Quality Standards. The closest air monitoring station to the project area is at 3433 Roberto Court in San Luis Obispo. However, the station at Roberto Court has been active only since January 2021. Prior to the Roberto Court station, the nearest station was at 3220 South Higuera Street in San Luis Obispo. The California Air Resources Board-operated San Luis Obispo Higuera Street station was shut down, and monitoring was discontinued in early January 2021. The San Luis Obispo Air Pollution Control District began operating the San Luis Obispo Roberto Court station as a replacement on January 1, 2021 with PM10 and PM2.5 monitoring. Ozone monitoring was not continued at this location because of the associated costs and because ozone concentrations continue to be monitored in Morro Bay and Nipomo Regional Park that provide data highly representative of the region. The monitoring stations record of ambient concentrations of ozone, PM2.5, and PM10 was obtained for the last 3 years of available measurement data (2019–2021), as summarized in Table 6.1.

Note: In Table 6.1, the value in the Days Exceeded columns indicates the number of exceedance days recorded annually for a particular constituent compared to that constituent's National and California Ambient Air Quality Standard. The first number is the state value, and the second number is the federal value if they are different. "None" in a table cell means there is no applicable standard.

Table 6.1 Summary of Ambient Air Quality Monitoring Data

Pollutant Standard	2019 Days Exceeded	2019 Maximum	2020 Days Exceeded	2020 Maximum	2021 Days Exceeded	2021 Maximum
Ozone – 1-hour (parts per billon)	0/None	64	0/None	72	N/A	N/A
Ozone – 8-hour (parts per billon)	0/0	60	0/0	61	N/A	N/A
PM10 – 24-hour (micrograms per cubic meter)	0/1	100	11/0	131	1/0	53
PM10 – Annual (micrograms per cubic meter)	N/A	12.1	N/A	15.8	N/A	16
PM2.5 – 24-hour (micrograms per cubic meter)	None/0	14.8	None/10	113.7	None/0	17.2
PM2.5 – Annual (micrograms per cubic meter)	N/A	5.2	N/A	7.92	N/A	5.93

Attainment Status

The California Air Resources Board and U.S. Environmental Protection Agency have established the California Ambient Air Quality Standards and National Ambient Air Quality Standards, respectively, in an effort to protect human health and welfare. Geographic areas are deemed to be in attainment if these standards are met or in nonattainment if they are not met. “Unclassified” areas are areas that cannot be classified on the basis of available information as meeting or not meeting the primary or secondary National Ambient Air Quality Standards for the pollutant. Nonattainment status is classified by the severity of the nonattainment problem. For ozone, these classifications are marginal, moderate, serious, severe, and extreme nonattainment. Nonattainment classifications for particulate matter range from marginal to serious. Table 6-2 shows the current (2021) attainment status for the California Ambient Air Quality Standards and National Ambient Air Quality Standards.

In May 2012, the Environmental Protection Agency designated the eastern portion of San Luis Obispo County as marginally nonattainment for the 8-hour ozone standard. This was based on data from enhanced monitoring over the previous decade that revealed previously unrecognized high ozone levels in that region; the western portion of the county retained its attainment status. The project site is within the western portion of the county and within attainment. In October 2015, the ozone standard was lowered from 75 to 70 parts per billion, and in April 2018, the Environmental Protection Agency designated the eastern portion of the county as a “Marginal” nonattainment zone for the new standard. Based on the Environmental Protection Agency review of data, which included an exceptional events coding being applied to ozone data during the 2018, and 2020 wildfire events, the county was found to be meeting the National Ambient Air Quality Standards design value of 70 parts per billion by the prescribed date. This finding was published on October 20, 2022 by the Environmental Protection Agency in the Federal Registry notice titled “Determinations of Attainment by the Attainment Date, California Areas Classified as Serious for the 2008 Ozone National Ambient Air Quality Standards and Marginal for the 2015 Ozone National Ambient Air Quality Standards.” This notice shows the county will not be redesignated as “Moderate” at this time. Instead, the county will remain “Marginal,” and the Environmental Protection Agency will address the area in another action. The county is currently designated as attaining all other National Ambient Air Quality Standards.

The California Ambient Air Quality Standards are generally more restrictive (i.e., lower) than the National Ambient Air Quality Standards and typically are specified as not to be exceeded. Thus, a single exceedance is a violation of the applicable standard and triggers a nonattainment designation. As a result, San Luis Obispo County is designated as a nonattainment area for the state 1-hour and 8-hour ozone standards, as well as the state 24-hour and annual PM10 standards. The county is designated as attaining the state annual PM2.5 standard. State and federal standards for nitrogen dioxide have never been

exceeded here. The state standard for sulfur dioxide was exceeded periodically on the Nipomo Mesa until 1993. Equipment and processes at the facilities responsible for the emissions were upgraded as a result, and the state sulfur dioxide standard has not been exceeded since that time. The federal sulfur dioxide standard has been exceeded only once, in 2013, when maintenance activities at these facilities resulted in emissions exceeding the 1-hour standard of 75 parts per billion. (This standard was established in 2011.) State carbon monoxide standards have not been exceeded in the county since 1975. The county has never been required to conduct lead monitoring (2021 Annual Air Quality Report, San Luis Obispo Air Pollution Control District).

Note: In Table 6.2, San Luis Obispo County (in whole or in part) is designated as nonattainment for the standards mentioned in the table as of September 2022. “None” in a table cell means there is no applicable standard.

Table 6.2 San Luis Obispo County Ambient Air Quality 2021 Attainment Status

Pollutant	Averaging Time	California Standard	National Standard
Ozone (03)	8 Hours	70 parts per billion - nonattainment	70 parts per billion - nonattainment
Ozone (03)	1 Hour	90 parts per billion - nonattainment	None
Respirable Particulate Matter (PM10)	24 Hours	50 micrograms per cubic meter - nonattainment	150 micrograms per cubic meter
Respirable Particulate Matter (PM10)	1 Year	20 micrograms per cubic meter - nonattainment	None
Fine Particulate Matter (PM2.5)	24 Hours	35 micrograms per cubic meter	None
Fine Particulate Matter (PM2.5)	1 Year	12 micrograms per cubic meter	12 micrograms per cubic meter
Carbon Monoxide (CO)	8 Hours	9.0 parts per million	9 parts per million
Carbon Monoxide (CO)	1 Hours	20 parts per million	35 parts per million
Nitrogen Dioxide (NO2)	1 Year	30 parts per billion	53 parts per billion
Nitrogen Dioxide (NO2)	1 Hour	180 parts per billion	100 parts per billion
Sulfur Dioxide (SO2)	3 Hours	None	500 ppb (secondary)
Sulfur Dioxide (SO2)	1 Hour	250 parts per billion	75 parts per billion (primary)
Lead (Pb)	3 Month	None	0.15 micrograms per cubic meter
Lead (Pb)	30 Day	1.5 micrograms per cubic meter	None

6.3.5 Sensitive Receptors

Sensitive receptors are those segments of the population most susceptible to poor air quality: children, the elderly, and individuals with serious pre-existing health problems affected by air quality (e.g., asthma) (California Air Resources Board 2005). Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds include play areas associated with parks or community centers. A single residence sits directly west of the project site on adjacent property, and multiple single-family residences were recently built as part of the Avila Ranch Housing Development, more than 500 feet northeast of the project and east of Vachell Lane. The non-residential sensitive receptors within 1.2 miles of the project site are shown in Table 6.3.

Table 6.3 Sensitive Receptor Locations

Sensitive Receptor Name	Address
Octagon Barn	4400 Octagon Way
Montessori Children's School	4200 South Higuera Street
Calvary SLO Church	4029 South Higuera Street
Trust Children’s Center	4085 Earthwood Lane
3 public parks within Avila Ranch Housing Development	211 Bravo Street

6.4 IMPACT ANALYSIS

6.4.1 Methodology

Construction-Related Emissions

The project construction-related emissions were modeled using the California Emissions Estimator Model (CalEEMod). Construction emissions were quantified based on the preliminary construction schedule provided by the Design group. Approximately 15,000 square feet of existing structures would be demolished. Additional construction information, such as equipment use, worker vehicle trips, and equipment load factors were not available and were based on default parameters contained in the model. Modeling assumptions and output files are included in Appendix B of the project’s Air Quality Report.

Operational Emissions

Long-term operational emissions of criteria air pollutants associated with the project were also calculated using the California Emissions Estimator Model, computer program. The California Emissions Estimator Model program includes quantification of emissions from various emission sources, including energy use, area sources, and motor vehicle trips. Non-transportation as well transportation source emissions were quantified based largely on the default parameters contained in the model. Also, transportation source operational emission analysis was conducted using Caltrans-EMFAC computer model.

Stationary Sources

Stationary sources at the project site could release Toxic Air Contaminants (TAC). The San Luis Obispo Air Pollution Control District will a conduct health risk assessment and calculate toxic air contaminant emissions from the back-up generator and gasoline dispensing facility during the permitting process and before project construction.

Mobile Sources

The operational analysis assumes that 29 additional workers will be needed to support operations related to the project. Trip distances were derived from the Transportation Study developed for the project. Mobile-source emissions related to these vehicle trips and the associated fugitive dust (brake wear, tire wear, and re-entrained roadway dust) from vehicle trips were estimated using the California Emissions Estimator Model, with the default trip rates and distances adjusted to reflect the above-noted project-specific data inputs. The Vehicle Miles Traveled outputs from CalEEMod are slightly higher than those provided in the traffic study for the project because the traffic study accounted for daily worker commute trips but not the intermittent walk-in or delivery vehicle trips, which were accounted for in the estimates of air pollutants as they may not contribute to traffic impacts due to the intermittent nature of such trips, but would contribute to annual operational emissions resulting from the project.

6.4.2 Criteria for Determining Significance

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

The project would result in a significant impact related to air quality if it would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

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

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

San Luis Obispo Air Pollution Control District Thresholds

To assist in the evaluation of air quality impacts, the San Luis Obispo Air Pollution Control District has developed recommended significance thresholds, which are contained in the San Luis Obispo Air Pollution Control District's CEQA Air Quality Handbook (2012). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following San Luis Obispo Air Pollution Control District thresholds are exceeded.

Construction Impacts

The threshold criteria established by the San Luis Obispo Air Pollution Control District to determine the significance and appropriate mitigation level for a project's short-term construction emissions are presented in Table 6.4 and discussed, as follows (San Luis Obispo Air Pollution Control District 2012):

Table 6.4 San Luis Obispo Air Pollution Control District Thresholds of Significance for Construction Impacts

Pollutant	Daily Threshold (pounds per day)	Quarterly Tier 1 Threshold (tons)	Quarterly Tier 2 Threshold (tons)
Ozone Precursors (Reactive Organic Gas and Nitrogen Oxide)[2]	137	2.5	6.3
Diesel Particulate Matter (Diesel Particulate Matter), or PM10 Exhaust	7	0.13	0.32
Fugitive Particulate Matter (PM10 Dust)	None	2.5	None

Notes: 1) Daily and quarterly emissions thresholds are based on the California Health and Safety Code and the Air Resources Board Carl Moyer Guidelines.2) Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5-ton PM10 quarterly threshold.

ROG and NOx Emissions

Daily: For construction projects expected to be completed in less than one quarter (90 days), exceedance of the 137-pounds-per-day threshold requires Standard Mitigation Measures.

Quarterly – Tier 1: For construction projects lasting more than one quarter, exceedance of the 2.5-tons-per-quarter threshold requires Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. If implementation of the Standard Mitigation and Best

Available Control Technology measures cannot bring the project below the threshold, offsite mitigation may be necessary.

Quarterly – Tier 2: For construction projects lasting more than one quarter, exceedance of the 6.3-tons-per-quarter threshold requires Standard Mitigation Measures, Best Available Control Technology, implementation of a Construction Activity Management Plan (CAMP), and offsite mitigation.

Diesel Particulate Matter (DPM) Emissions

Daily: For construction projects expected to be completed in less than one quarter, exceedance of the 7-pounds-per-day threshold requires Standard Mitigation Measures.

Quarterly - Tier 1: For construction projects lasting more than one quarter, exceedance of the 0.13-ton-per-quarter threshold requires Standard Mitigation Measures, Best Available Control Technology for construction equipment.

Quarterly - Tier 2: For construction projects lasting more than one quarter, exceedance of the 0.32-ton-per-quarter threshold requires Standard Mitigation Measures, Best Available Control Technology, implementation of a Construction Activity Management Plan, and offsite mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

Quarterly: Exceedance of the 2.5-tons-per-quarter threshold requires Fugitive PM10 Mitigation Measures and may require the implementation of a Construction Activity Management Plan.

Operational Impacts

Criteria Air Pollutants

The threshold criteria established by the San Luis Obispo Air Pollution Control District to determine the significance and appropriate mitigation level for long-term operational emissions from a project are presented in Table 6.5.

Table 6.5 San Luis Obispo Air Pollution Control District Thresholds of Significance for Operational Impacts

Pollutant	Daily Threshold[1] (pounds per day)	Annual Threshold[1] (pounds per day)
Ozone Precursors (Reactive Organic Compounds and Nitrogen Oxide) [2]	25	25
Diesel Particulate Matter [2]	1.25	None
Fugitive Particulate Matter (PM_{10}), Dust	25	25
Carbon Monoxide	550	None

Notes:1) Daily and annual emissions thresholds are based on the California Health and Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the Air Resources Board

Carl Moyer Guidelines for Diesel Particulate Matter. 2) CalEEMod – use winter operational emission data to compare to operational thresholds.

Localized Carbon Monoxide Concentrations

Localized carbon monoxide concentrations associated with the project would be considered a less-than-significant impact if: 1) traffic generated by the project would not result in deterioration of intersection level of service (LOS) to level of service E or F; or 2) the project would not contribute additional traffic to an intersection that already operates at level of service of E or F.

Toxic Air Contaminants

If a project has the potential to emit toxic or hazardous air pollutants, or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population, even at a very low level of emissions. For the evaluation of such projects, the San Luis Obispo Air Pollution Control District recommends the use of the following thresholds:

- Type A Projects: New proposed land use projects that generate toxic air contaminants (such as gasoline stations, distribution facilities or asphalt batch plants) that impact sensitive receptors. Air districts across California are uniform in their recommendation to use the significance thresholds that have been established under each district's "Hot Spots" and permitting programs. The San Luis Obispo Air Pollution Control District has defined the excess cancer risk significance threshold at 10 in a million for Type A projects in San Luis Obispo County; and,
- Type B Projects: New land use projects that will place sensitive receptors (e.g., residential units) in close proximity to existing toxics sources (e.g., freeway). The San Luis Obispo Air Pollution Control District has established a CEQA health risk threshold of 89-in-a-million for the analysis of projects proposed in close proximity to toxic sources. This value represents the population-weighted average health risk caused by ambient background concentrations of toxic air contaminants in San Luis Obispo County. The San Luis Obispo Air Pollution Control District recommends Health Risk screening and, if necessary, Health Risk Assessment (HRA) for any residential or sensitive receptor development proposed in proximity to toxic sources.

6.4.3 Environmental Impacts

***Impact AQ-1 Conflict with or obstruct implementation of the applicable air quality plan* – Less Than Significant with Mitigation Incorporated**

The project site is within the western portion of the county and within San Luis Obispo Air Pollution Control District attainment. In October 2015, the ozone standard was lowered from 75 to 70 parts per billion, and in April 2018, the Environmental Protection Agency designated the eastern portion of the county as a "Marginal" nonattainment zone for the new standard. Based on

the Environmental Protection Agency review of data, which included an exceptional events coding being applied to ozone data during the 2018 and 2020 wildfire events, the county was found to be meeting the National Ambient Air Quality Standards design value of 70 parts per billion by the prescribed date. The county is currently designated as attaining all other National Ambient Air Quality Standards.

San Luis Obispo County is designated as a nonattainment area for the state 1-hour and 8-hour ozone standards, as well as the state 24-hour and annual PM10 standards. The County is designated as attaining the state annual PM2.5 standard.

San Luis Obispo Air Pollution Control District Clean Air Plan

As part of the California Clean Air Act, the San Luis Obispo Air Pollution Control District is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The San Luis Obispo Air Pollution Control District's 2001 Clean Air Plan (CAP) addresses the attainment and maintenance of state and federal ambient air quality standards.

The Clean Air Plan was adopted by the San Luis Obispo Air Pollution Control District on March 26, 2002. The Clean Air Plan outlines the district's strategies to reduce ozone-precursor pollutants (i.e., reactive organic gas and nitrogen oxide) from a wide variety of sources. The Clean Air Plan includes a stationary-source control program, which includes control measures for permitted stationary sources; as well as transportation and land use management strategies to reduce motor vehicle emissions and use. The stationary-source control program is administered by the San Luis Obispo Air Pollution Control District. Transportation and land use control measures are implemented at the local or regional level, by promoting and facilitating the use of alternative transportation options, increased pedestrian access and accessibility to community services and local destinations, reductions in vehicle miles traveled, and promotion of congestion management efforts. In addition, local jurisdictions also prepare population forecasts, which are used by the San Luis Obispo Air Pollution Control District to forecast population-related emissions and air quality attainment, including those contained in the Clean Air Plan.

According to the San Luis Obispo Air Pollution Control District's CEQA Air Quality Handbook (2012), a consistency analysis with the Clean Air Plan is required for a program-level environmental review and may be necessary for a larger project-level environmental review, depending on the project being considered. Project-level environmental reviews, which may require consistency analysis with the Clean Air Plan, include large residential developments and large commercial/industrial developments. For such projects, evaluation of consistency is based on a comparison of the project with the land use and transportation control measures and strategies outlined in the Clean Air Plan. If the project is consistent with these measures, the project is considered consistent with the Clean Air Plan.

The project is not considered a large development project that would have the potential to result in a substantial increase in population or employment (increase in only 29 future employees). The project is inconsistent with existing agriculture zoning designation, but local zoning designations do not apply to state-owned property. In addition, as noted in Impact AQ-3, construction-generated emissions of reactive organic gas and nitrogen oxide would not exceed the San Luis Obispo Air Pollution Control District's recommended significance threshold of 137 pounds per day. For these reasons, this impact is considered Less than Significant.

Particulate Matter Report – Implementation of Senate Bill 656 Requirements

In July 2005, the San Luis Obispo Air Pollution Control District adopted the Particulate Matter Report (PM Report), which identifies various measures and strategies to reduce public exposure to particulate matter emitted from a wide variety of sources, including emissions from permitted stationary sources and fugitive sources, such as construction activities. As discussed in Impact AQ-3, uncontrolled fugitive dust generated during construction may result in localized pollutant concentrations that may result in increased nuisance concerns to nearby land uses. Therefore, construction-generated emissions of fugitive dust would be considered to have a potentially significant impact. Refer to Impact AQ-2 and Impact AQ-3 for additional discussion of air quality impacts and proposed mitigation measures.

In addition, air pollution sources associated with stationary sources are regulated through the permitting authority of the San Luis Obispo Air Pollution Control District under the "New Source" rule. Owners of any new or modified equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the San Luis Obispo Air Pollution Control District, are required to apply for an Authority to Construct and Permit to Operate. Also, best available control technology is required on specific types of stationary equipment. Through this mechanism, the San Luis Obispo Air Pollution Control District ensures that all stationary sources within the project area would be subject to the standards of the San Luis Obispo Air Pollution Control District and that new developments do not result in net increases in stationary sources of criteria air pollutants. These requirements would apply to the stationary sources associated with the project (e.g., standby generator, fueling station) unless specifically exempt from San Luis Obispo Air Pollution Control District Authority to Construct and Permit to Operate requirements.

As discussed in the following section, the emissions from the construction and operation of the project would not exceed the emission thresholds established by the San Luis Obispo Air Pollution Control District. The project would also comply with the San Luis Obispo Air Pollution Control District's permitting and best available control technology requirements. Therefore, for these reasons, the project would not conflict with or obstruct implementation of the San Luis Obispo Air Pollution Control District's adopted air quality plans and project

implementation, and the impact would be Less-than-Significant Impact with Mitigation Incorporated.

Implementation of Mitigation Measure AQ-1 includes measures to reduce construction-generated emissions. With mitigation, overall emissions of fugitive dust would be reduced by roughly 50 to 60 percent. These measures would also help to ensure compliance with the San Luis Obispo Air Pollution Control District's 20-percent opacity limit (San Luis Obispo Air Pollution Control District Rule 401), nuisance rule (San Luis Obispo Air Pollution Control District Rule 402), and would minimize potential nuisance impacts to nearby receptors. Therefore, this impact is considered Less-than-Significant Impact with Mitigation Incorporated. Refer to Impact AQ-3 and Impact AQ-4 for additional discussion of air quality impacts and proposed mitigation measures.

Mitigation Measure AQ-1: Construction-generated dust control. The following measures shall be implemented to minimize construction-generated emissions:

a. Construction of the proposed project shall use low-volatile organic compound content paints not exceeding 50 grams per liter.

b. Reduce the amount of the disturbed area where possible.

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

d. All dirt stockpile areas should be sprayed daily as needed.

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

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

g. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the Air Pollution Control District.

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

i. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.

j. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114.

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

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

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

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

***Impact AQ-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard* – Less-than-Significant Impact with Mitigation Incorporated**

As discussed in Section 6.3.4, the project site is in the western part of the San Luis Obispo Air Pollution Control District Air Basin that is designated in non-attainment for PM10 and PM2.5. It is assumed that projects that do not have mass emissions exceeding the screening-level significance thresholds would not create a cumulatively considerable net increase in emissions.

Short-Term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the project would result in the temporary generation of emissions associated with demolition, site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. For this analysis, the Diesel

Particulate Matter (DPM) threshold established by the San Luis Obispo Air Pollution Control District has been applied to total PM10 Exhaust emissions.

During construction of the project, the combustion of fossil fuels for construction equipment, material hauling, and worker trips would result in criteria air pollutant emissions. Emissions were estimated using the California Emissions Estimator Model computer modeling program and with information from the Project Description along with site-specific and default assumptions. The project's criteria air pollutant emissions during construction are shown in Table 6.6.

Table 6.6 Daily and Quarterly Construction Emissions

Scenario	Reactive Organic Gas and Nitrogen Oxide	PM10 Exhaust	PM10 Dust
Summer Max (pounds per day)	42.96	1.34	22.09
Winter Max (pounds per day)	152.65	0.34	0.31
Average Max (pounds per day)	16.31	0.28	1.58
Threshold for Daily Max (pounds per day)	137	7	None
Exceeds (Daily Max)	Yes	No	Yes
Exceeds (Average Daily)	No	No	Yes
Quarterly (Max) (tons per quarter)	1.85	0.06	0.14
Threshold (tons per quarter)	2.5	0.13	2.5
Exceeds Quarterly Max	No	No	No

Notes: "None" in a table cell means there is no applicable standard.

As shown in Table 6.6, maximum average daily emissions associated with construction of the project would total approximately 16.31 pounds per day of reactive organic gas and nitrogen oxide, 1.58 pounds per day of PM10 Dust and 0.28 pounds per day of PM10 Exhaust. As shown in Table 6.6, maximum quarterly construction-generated emissions would total approximately1.85 tons per quarter of reactive organic gas and nitrogen oxide, 0.14 tons per quarter of fugitive PM10 Dust and 0.06 tons per quarter of PM10 Exhaust. Maximum winter daily reactive organic gas and nitrogen oxide emissions exceed the San Luis Obispo Air Pollution Control District threshold of 137 pounds per day. However, as mentioned above, for construction projects that would last more than one quarter, the San Luis Obispo Air Pollution Control District's quarterly construction emission threshold applies. Maximum quarterly construction emissions of reactive organic gas and nitrogen oxide

would be 1.85 tons per quarter, and therefore well below the threshold of 2.5 tons. The model predicts that the daily PM10 Dust emissions will exceed the threshold value. However, there is no daily PM10 Dust threshold value set by the San Luis Obispo Air Pollution Control District but instead there is a quarterly threshold value associated with PM10 Dust. The project's Quarterly PM10 Dust emissions are below the 2.5-tons-per-quarter threshold value set by the San Luis Obispo Air Pollution Control District. Maximum daily (summer, winter and average) and quarterly emissions associated with PM10 Exhaust are well below the threshold value set by the San Luis Obispo Air Pollution Control District.

There are no annual construction emissions threshold set by the San Luis Obispo Air Pollution Control District. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. It is also important to note that the project is anticipated to be Leadership in Energy and Environmental Design Silver certified and would use low-volatile organic compound content (50 grams per liter, or less) architectural coatings, which would significantly reduce reactive organic gas emissions during the architectural coating phase.

With implementation of Mitigation Measure AQ-1, overall emissions of fugitive dust would be reduced by approximately 50 to 60 percent. These measures would also help to ensure compliance with the San Luis Obispo Air Pollution Control District's 20-percent opacity limit (San Luis Obispo Air Pollution Control District Rule 401) and nuisance rule (San Luis Obispo Air Pollution Control District Rule 402) and would minimize potential nuisance impacts to nearby receptors. Additional measures have been included to require the use of low-volatile organic compound content paints having a maximum volatile organic compound content of 50 grams per liter, or less. Therefore, the construction emissions impact of increasing criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard would be considered a Less-than-Significant Impact with Mitigation Incorporated.

Mitigation Measure AQ-1 applies.

Long-Term Operational Emissions

Long-term increases in operational emissions associated with the project would be mostly associated with area sources (such as landscape maintenance activities, use of consumer products), mobile exhaust and energy use. Daily and annual operational emissions associated with the project are summarized in Table 6.7. The project would result in annual emissions of approximately 2.69 tons per year of reactive organic gas and nitrogen oxide, 0.02 ton per year of PM10Exhaust, 1.03 tons per year of PM10Dust, and 6.56 tons per year of carbon monoxide. The project would result in average maximum daily emissions of approximately 14.77 pounds

per day of reactive organic gas and nitrogen oxide, 0.12 pounds per day of PM10Exhaust, 5.66 pounds per day of PM10Dust, and 36.9 pounds per day of carbon monoxide.

Table 6.7 Daily and Annual Operational Emissions

Scenario	Reactive Organic Gas (pounds per day)	Nitrogen Oxide (pounds per day)	Reactive Organic Gas and Nitrogen Oxide Total (pounds per day)	PM10 Exhaust (pounds per day)	PM10 Dust (pounds per day)	Carbo Monoxide (pounds per day)
Summer (Max)	13.0	6.08	19.08	0.14	7.92	47.9
Winter (Max)	12.0	6.51	18.51	0.14	7.92	45.1
Average (Max)	9.94	4.83	14.77	0.12	5.66	36.9
Threshold for Daily Max	None	None	*25.0*	*1.25*	*25.0*	550
Exceeds (Daily Max)	Not Applicable	Not Applicable	*No*	*No*	*No*	*No*
Exceeds (Average Daily)	Not Applicable	Not Applicable	*No*	*No*	*No*	*No*

Operational emission analysis for mobile sources was conducted using Caltrans Emission Factors model, 2021 version. Operational emissions from mobile sources were calculated for Buckley Road Extension and Higuera Road over the length of 0.3 and 0.4 mile, respectively. Average Annual Daily Traffic (AADT) data provided by Advanced Civil Technologies was used to calculate the mobile source operational emissions for the project. The mobile source operational emissions analysis compares forecasted emissions for existing/baseline, No-Build scenario, and the Build Alternative. This analysis covers the baseline year (2023), the year of opening (projected to be 2027), and the forecasted future year (2045). Table 6.8 shows criteria pollutant emissions from operational mobile sources.

The model results show that mobile source operational emissions do not change significantly between the No-Build and Build scenario. A small increase in emissions for the Build Alternative is associated with 29 additional employees and the relocation of trips from existing Caltrans D5 Maintenance Station and Equipment Shop locations to the proposed new location. However, none of these emissions exceed the threshold value of 25 pounds per day for PM10 or 25 pounds per day for reactive organic gas and nitrogen oxide. Since a portion of these emissions already takes place under baseline conditions at the existing facilities, the increase in emissions over baseline would be even lower than the values provided and the net increase in operational emissions associated with the project would not exceed San Luis

Obispo Air Pollution Control District significance thresholds. Therefore, the operational emissions impact of increasing criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard would be considered a Less-than-Significant Impact.

Table 6.8 Daily Operational Mobile Source Emissions

Scenario	Carbon Monoxide (pounds per day)	PM_{10} (pounds per day)	$PM_{2.5}$ (pounds per day)	Nitrogen Monoxide (pounds per day)	Reactive Organic Gas (pounds per day)
Buckley Road Extension Baseline 2023	2.54	1.97	0.31	0.38	0.18
Buckley Road Extension No-Build 2027	2.13	2.18	0.34	0.30	0.16
Buckley Road Extension Build 2027	2.37	2.43	0.38	0.34	0.18
Buckley Road Extension No-Build 2045	3.88	6.42	0.99	0.36	0.27
Buckley Road Extension Build 2045	4.03	6.66	1.03	0.38	0.29
S Higuera Road Baseline 2023	6.56	6.49	1.01	1.11	0.38
S Higuera Road No-Build 2027	5.27	6.91	1.07	0.81	0.34
S Higuera Road Build 2027	5.30	6.95	1.08	0.81	0.34
S Higuera Road No-Build 2045	5.45	11.68	1.80	0.44	0.32
S Higuera Road Build 2045	5.47	11.72	1.80	0.44	0.32

Impact AQ-3 Expose sensitive receptors to substantial pollutant concentrations – Less-than-Significant Impact with Mitigation Incorporated

Short-Term Construction Emissions

Sensitive receptors near the project site would potentially be exposed to various toxic air contaminants during the project's construction activities. The project would result in emissions of diesel particulate matter and gasoline fuel combustion pollutants from construction equipment use. Mass emissions of these pollutants were calculated but their health effects to nearby sensitive receptors were not quantified because of the uncertainty of estimating chronic health effects over a short period. Because emissions health effects were not quantified, and due to the presence of nearby sensitive receptors, the project's toxic air contaminant emissions have been conservatively assumed

to have potential to expose sensitive receptors to substantial pollutant concentrations. Implementation of Mitigation Measure AQ-2 would reduce the amount of construction emissions to the extent feasible through a combination of newer equipment, alternative fuel-powered equipment, after market emission control equipment, equipment maintenance, and work practices to minimize engine use. These construction practices would ensure that health effects from construction-related toxic air contaminant emissions of the project would be minimized for nearby sensitive receptors.

Construction of the project would result in the generation of fugitive PM emitted during construction. Fugitive PM emissions would be associated mostly with earth-moving, demolition, and material-handling activities, as well as vehicle travel on unpaved and paved surfaces. If uncontrolled, localized concentrations of PM could exceed air quality standards and may also result in increased nuisance impacts to nearby land uses and receptors. This impact is considered potentially significant. Mitigation Measure AQ-1 includes measures for the control of fugitive dust emitted during project construction. Mitigation Measure AQ-3 has also been included for the control of potential emissions of naturally occurring asbestos and asbestos-containing materials in compliance with applicable regulatory requirements. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the project's effect on nearby sensitive receptors due to construction-related air pollutant emissions would be reduced to a level that is Less-than-Significant Impact with Mitigation Incorporated.

Mitigation Measure AQ-1 applies.

Mitigation Measure AQ-2: Construction-generated exhaust control. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California- and non-California-based vehicles. In general, the regulation specifies that drivers of said vehicles:

a. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,

b. Shall not operate a diesel-fueled auxiliary power system to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

c. Maintain all construction equipment in proper tune according to manufacturer's specifications;

d. Fuel all off-road and portable diesel-powered equipment with Air Resources Board-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

e. Use diesel construction equipment meeting the Air Resources Board's Tier 3 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation;

f. Idling of all on- and off-road diesel-fueled vehicles shall not be permitted when not in use. Signs shall be posted in the designated queuing areas and/or job site to remind drivers and operators of the no idling limitation.

g. Electrify equipment when possible;

h. Substitute gasoline-powered in place of diesel-powered equipment, when available; and,

i. Use alternatively fueled construction equipment onsite when available, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Mitigation Measure AQ-3: Naturally occurring asbestos. Prior to any grading activities, a geologic evaluation shall be conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If naturally occurring asbestos is not present, an exemption request must be filed with the San Luis Obispo Air Pollution Control District. If naturally occurring asbestos is found at the site, the applicant must comply with all requirements outlined in the Asbestos Airborne Toxic Control Measures(ACTM). These requirements may include but are not limited to:

1. Development of an Asbestos Dust Mitigation Plan, which must be approved by the San Luis Obispo Air Pollution Control District before operations begin, and,

2. Development and approval of an Asbestos Health and Safety Program (required for some projects).

3. If naturally occurring asbestos is not present, an exemption request must be filed with the San Luis Obispo Air Pollution Control District.

Long-term Operational Emissions

Stationary sources at the project site could release toxic air contaminants (TAC) to nearby sensitive receptors. However, a health risk assessment will be completed to calculate toxic air contaminant emissions from the back-up generator and gasoline-dispensing facility (if necessary) during the permitting process and before project construction. The San Luis Obispo Air Pollution

Control District permitting process will ensure that these stationary sources do not expose sensitive receptors to significant levels of toxic air contaminants. Operational emissions at the project site, including a minimal increase in mobile source operational emissions, are below San Luis Obispo Air Pollution Control District thresholds. Therefore, impacts to long-term operational emissions will not expose sensitive receptors to substantial pollutant concentrations and therefore are considered a Less-than-Significant Impact with Mitigation Incorporated.

Mitigation Measure AQ-4: Health Risk Assessment. Conduct a Health Risk Assessment (HRA) following San Luis Obispo Air Pollution Control District permitting procedures once final building design and stationary source specifications are complete and obtain an authority to construct permit from the San Luis Obispo Air Pollution Control District for applicable stationary sources.

Impact AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people – Less than Significant

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. However, construction of the project would involve the use of a variety of gasoline- or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel exhaust, may be considered objectionable by some people. In addition, pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the source. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions. For these reasons, potential exposure of sensitive receptors to odorous emissions would be considered Less than Significant.

Chapter 7 Biological Resources

7.1 OVERVIEW

This chapter discusses the potential for the project to affect biological resources, including special-status species, sensitive habitats, wetlands, and wildlife movement routes. The chapter also describes consistency with applicable plans and policies that protect these resources. Specifically, this chapter describes the existing environmental setting in the project area, discusses federal and state regulations relevant to vegetation and wildlife resources that might be affected by the project, identifies biological resources potentially affected by the project, and proposes mitigation measures to avoid or reduce the potentially significant impacts on these resources.

7.2 REGULATORY SETTING

7.2.1 Federal Laws, Regulations, and Policies

Federal Endangered Species Act (FESA)

The Federal Endangered Species Act provides legal protection for plants and animals that are in danger of extinction and are classified as either threatened or endangered. Federal Endangered Species Act Section 7 requires federal agencies to make a finding on all federal actions as to the potential to jeopardize the continued existence of any listed species potentially affected by the action, including the approval by an agency of a public or private action, such as Federal Highway Administration funding or the issuance of a permit by the U.S. Army Corps of Engineers. Critical habitat is defined in Federal Endangered Species Act Section 3 as: (i) The specific areas within the geographic area occupied by a species at the time it is listed in accordance with the act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Federal Endangered Species Act Section 7 requires that federal agencies shall, in consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. Per Federal Endangered Species Act Section 9, it is unlawful to, “remove and reduce to possession” federally listed plant species from areas under federal jurisdiction. Federal Endangered Species Act Section 9 also protects federally

listed fish and wildlife species from unlawful “take.” “Take” is defined by the Federal Endangered Species Act as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” The U.S. Fish and Wildlife Service and National Marine Fisheries Service regulate activities that may result in take of federally endangered or threatened species, or candidate species. The documentation submitted to U.S. Fish and Wildlife Service and/or National Marine Fisheries Service analyzing impacts to federally listed species and critical habitat is typically a Biological Assessment. Once the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service review a Biological Assessment for a project, they may issue a federal Biological Opinion and Incidental Take Statement under Federal Endangered Species Act Section 7 that includes provisions for legal take, provided that specific mitigation measures are used for construction.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act protects all migratory birds, including their eggs, nests, and feathers. The Migratory Bird Treaty Act was originally drafted to end the commercial trade in bird feathers popular in the latter part of the 1800s. The Migratory Bird Treaty Act is enforced by the U.S. Fish and Wildlife Service, and potential constraints to species protected under this law may be evaluated by the U.S. Fish and Wildlife Service during the consultation process.

Clean Water Act Section 404/Rivers and Harbors Act Section 10

The U.S. Army Corps of Engineers is responsible for the issuance of permits for the placement of dredged or fill material into “Waters of the United States” pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344).

Federally regulated wetlands are “waters of the United States” that are identified as areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and similar areas but can also include other periodically inundated areas that produce wetland conditions. Federally regulated “other waters” are bound by an ordinary high-water mark and lack one or more of the three recognized wetland indicators (i.e., wetland vegetation, hydric soils, and/or wetland hydrology).

In any event where project activities would result in placement of fill or other impacts to “waters of the U.S.” (wetlands or non-wetland other waters), the project could be subject to either a general or an individual permit or may be exempt from regulatory requirements under Section 404 of the Clean Water Act based on review by the U.S. Army Corps of Engineers. If certain conditions are met, some activities are granted a blanket authorization under the provisions of a general permit through the nationwide permitting system.

The federal jurisdictional status of waters has been the subject of numerous court cases and rulemaking efforts. Rules defining the extent of U.S. Army Corps of Engineers jurisdiction and situations requiring case-by-case evaluation have changed recently, and procedures are expected to be further modified in the near future.

Section 10 of the Rivers and Harbors Act pertains to construction affecting navigable waters and any obstruction, excavation, or filling. Navigable waters are defined as those that are subject to the ebb and flow of the tide and susceptible to use in their natural condition or by reasonable improvements as means to transport interstate or foreign commerce. The U.S. Army Corps of Engineers grants or denies permits based on the effects on navigation. Most activities covered under this act are also covered under Section 404 of the Clean Water Act. All activities involving navigable waters of the United States require a Section 10 permit.

Clean Water Act Section 401

Section 401 of the Clean Water Act ensures that federally permitted activities comply with the federal Clean Water Act and state water quality laws. Section 401 is implemented through a review process that is conducted by the California Regional Water Quality Control Board and is triggered by the Section 404 permitting process.

7.2.2 State Laws, Regulations, and Policies

Porter-Cologne Water Quality Control Act

Under California's Porter-Cologne Water Quality Control Act, discharges to wetlands and other "waters of the state" are subject to state regulation. Under California State law, dischargers of "waste" (including clean fill, riprap or other revetment, excavation side-casting, dredge spoils, soil displaced while clearing vegetation, etc.) where it could affect waters of the State must first file a report with the appropriate Regional Water Quality Control Board, which will regulate the discharge as necessary to protect the beneficial uses of the waters. Discharging without filing the required report may result in civil penalties and the discharger may also be required to remove the discharged material and restore the condition of the water body.

In general, the Regional Water Quality Control Board will regulate discharges to isolated waters in much the same way as it does for federal-jurisdictional waters, using Porter-Cologne rather than Clean Water Act authority. The Regional Water Quality Control Board issues a Waste Discharge Requirements permit that contains various conditions (best management practices, compensatory mitigation) that mitigate potential impacts to waters of the state.

California Fish and Game Code Section 1602

Section 1602 of the State of California Fish and Game Code requires any person, state or local agency, or public utility proposing a project that may affect a river, stream, or lake to notify the California Department of Fish and Wildlife before beginning the project. If activities will result in the diversion or obstruction of the natural flow of a stream, substantially alter its bed, channel, or bank, impact riparian vegetation, or adversely affect existing fish and wildlife resources, a Streambed Alteration Agreement is required, which lists California Department of Fish and Wildlife conditions of approval relative to the project.

Other Sections of the California Fish and Game Code

Fish and Game Code Section 3503 includes provisions to protect the nests and eggs of birds. Sections 3511, 4700, 5050, and 5515 include provisions to protect Fully Protected species and afford protections to indigenous non-game mammal species such as bats, regardless of their listing status. The California Department of Fish and Wildlife is unable to authorize incidental take of Fully Protected species when activities are proposed in areas inhabited by those species; however, recent legislature will reclassify the status of these species. Any take of nesting birds and Fully Protected species must be avoided.

7.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

7.3 ENVIRONMENTAL SETTING

The project site is a 56.5-acre state-owned parcel in San Luis Obispo County and just south of the City of San Luis Obispo. In general, the project site is surrounded by urban land to the north and more open space and agricultural land to the east, south, and west. Highway 101 parallels the project about 0.25 mile to the west. The project site is mostly undeveloped and has been used historically for agricultural activities, including dry land farming and dairy. The site has also been used to support different Caltrans District 5 functions, including trailer/modular office space and materials/equipment storage, over the last 20 years.

The East Fork of San Luis Obispo Creek runs along the eastern property line south of the Buckley Road Extension and includes associated riparian habitat. A human-made culvert retaining pond, which was constructed with the Buckley Road Extension, is also present near the existing buildings. The remaining land consists of areas of high disturbance and invasive plant species.

San Luis Obispo Creek runs as close as 0.1 mile west of the property site where it runs between South Higuera Road and the Highway 101. The two creeks converge near the South Higuera Highway 101 northbound onramp about 0.5 mile west of the project site. Before converging with San Luis Obispo Creek, the East Fork of San Luis Obispo Creek runs about 3,000 linear feet through 75 acres of land owned and conserved as open space by the City of San Luis Obispo.

7.3.1 Biological Study Area

The Biological Study Area is defined as the area that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities. The project's Biological Study Area is shown in Figure 7-1. The size of the Biological Study Area is approximately 56.5 acres within the state-owned property, but also includes adjacent public road right-of-way on South Higuera, Buckley Road, and Vachell Lane. Offsite utility improvements associated with the project are likely to include connections to existing facilities within public road right-of-way. Installation of the proposed utilities is described in Section 2.4.2, Construction Activities, of the Project Description.

Multiple biological surveys within the Biological Study Area were completed between 2019 and 2023. More discussion about these surveys is included in Section 7.3.2. At the time of these surveys, the Biological Study Area included the following characteristics, as shown in Figure 7-1.

Agricultural

Most of the Biological Study Area within the 56.5 acres of state-owned property is composed of cultivated oats. The cultivated oaks are actively dry farmed and maintained for agricultural operations and have minimal potential to support habitat for sensitive species.

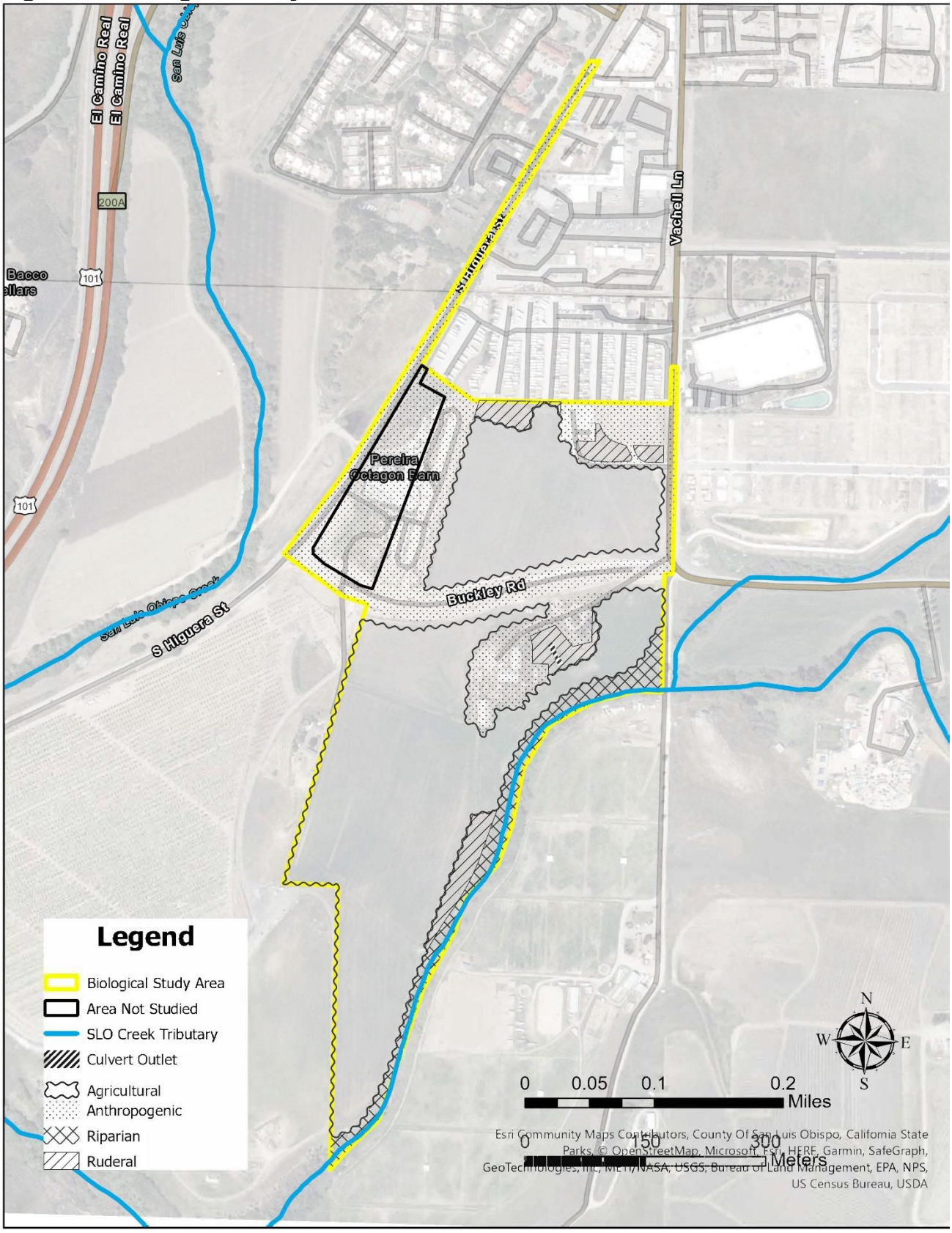
Arroyo Willow Thickets

Approximately 3.7 acres of the Biological Study Area is composed of arroyo willow thickets. This area is located just east of the project area footprint and is dominated by arroyo willow species (*Salix lasiolepis*) with a low tree canopy. (Holland 1986). Pacific willow (*S. lasiandra*) is also present within this habitat. This riparian habitat borders the East Fork of San Luis Obispo Creek. The associated wetland has potential to support habitat for sensitive species. Plant species found occurring along the streambanks and understory include California mugwort, (*Artemisia douglasiana*), wild teasel, (*Dipsacus fullonum*), Canada horseweed, (*Erigeron canadensis*), hairy cat's ear, (*Hypochaeris radicata*), hood canarygrass (*Phalaris species*,paradoxa), cut leaf plantain, (*Plantago coronopus*), English plantain, (P. lanceolata), curly dock, (*Rumex cripsus*), and hardstem bulrush. (*Schoenoplectus acutus var. occidentalis*).

Stream/Other Waters

The East Fork of San Luis Obispo Creek runs east of the project area within the Biological Study Area. The stream is seasonal and has potential to support habitat for sensitive animal species. Protocol California red-legged frog (*Rana draytonii*) surveys were conducted in 2022, and no California red-legged frogs or other sensitive species were observed. However, nonnative invasive species, including the American bullfrog (*Lithobates catesbeianus*), crayfish (*Pacifastacus leniusculus*), and an unknown mosquito fish species. (*Gambusia* sp.), were observed in the riparian area.

Figure 7-1 Biological Study Area and Habitats



Ruderal/Disturbed

Ruderal/disturbed vegetation dominates about 1 acre between the active agricultural area and the East Fork of San Luis Obispo Creek associated riparian area. An additional 1.5 acres of ruderal/disturbed vegetation exists north of Buckley Road between the active agricultural area, the Caltrans construction office, and the Department of Motor Vehicles driving pad. These areas are dominated by weedy species such as brome grasses (*Bromus* spp.), slender wild oat (*Avena barbata*), and black mustard (*Brassica nigra*). These areas are subjected to routine disturbance from agricultural activities, Caltrans, and Department of Motor Vehicle use, and have minimal potential to support habitat for sensitive species.

Anthropogenic

Within the state-owned property are approximately 14 acres of developed anthropogenic land. This land includes existing structures and uses south of Buckley Road, the Buckley Road Extension, and the Caltrans office and Department of Motor Vehicle driving pad north of Buckley Road. Additional anthropogenic land outside of the state-owned property is included as sections of the roadways at Buckley Road, Vachell Lane, and South Higuera.

Migration and Travel Corridors

The Biological Study Area sits at the southern edge of the urban landscape of San Luis Obispo. Ample open space is present to the south toward Pismo Beach, but little opportunities for wildlife movement are present north of the Biological Study Area. The tributary to San Luis Obispo Creek does provide a wildlife travel corridor into limited open space areas within San Luis Obispo such as northeast through Tank Farm to South Hills Open Space and east toward Los Padres Forest or Edna Valley. The stream corridor offers potential amphibian migration opportunities. Mammals, such as deer, have been observed using the Biological Study Area as a travel corridor, and birds forage and nest within the Biological Study Area.

Federally Designated Critical Habitat

The project's Biological Study Area does not include any federally designated critical habitats, nor were any listed plant or animal species observed within the Biological Study Area.

Invasive Species

A total of 29 invasive plant species identified by the online California Invasive Plant Council (Cal-IPC) Database (2021) were observed within the Biological Study Area. Two of these species observed within the Biological Study Area have a Cal-IPC invasiveness rating of "High" [yellow starthistle (*Centaurea solstitialis*) and red brome (*Bromus madritensis* ssp. rubens)]. A total of 17 plant species were observed within the Biological Study Area with a Cal-IPC invasiveness rating of "Moderate," and 11 species were observed with an

invasiveness rating of “Limited.” The invasive plant species are sparsely scattered throughout the Biological Study Area.

7.3.2 Surveys and Methods

A query of the California Natural Diversity Database was originally conducted on March 4, 2019 and updated on November 3, 2023. for the search area encompassing the following U.S. Geological Survey California quadrangles: Pismo Beach and San Luis Obispo California quadrangles.

A request for an official U.S. Fish and Wildlife Service species list from the Ventura U.S. Fish and Wildlife Service Office was initially made online on March 4, 2019, via the U.S. Fish and Wildlife Service Information, Planning and Conservation System (IPaC) website (IPaC 2023). A request for an official National Marine Fisheries Service species list was requested and received via email on March 4, 2019. Both U.S. Fish and Wildlife Service and National Marine Fisheries Service lists were updated on November 3, 2023. The California Natural Diversity Database search and U.S. Fish and Wildlife Service/National Marine Fisheries Service species list requests were updated biannually to ensure that they were up to date and included all species requiring consideration.

The studies conducted for this project included botanical surveys for sensitive plant species, general reconnaissance-level wildlife surveys, and formal California red-legged frog protocol surveys. Botanical surveys for sensitive plants and reconnaissance wildlife surveys were conducted by Caltrans on March 16, 2022, May 18, 2022 and August 14, 2023. The botanical surveys were floristic (conducted when target species would be flowering and identifiable) following the guidelines of U.S. Fish and Wildlife Service (2000) and California Department of Fish and Wildlife (2009) Plants were identified with dichotomous keys using The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012). General reconnaissance-level wildlife surveys coincided with the botanical surveys, and species that were observed were documented. A list of all plant and animal species observed during surveys is included in Appendix E.

Table 7.1 shows the biological surveys conducted, along with the dates, personnel involved, and methodology used.

Table 7.1 Biological Survey Information

Study or Survey	Date	Personnel	Methodology
Botanical Survey; General Wildlife Survey	March 16, 2022	Shelby Sanchez, Mindy Trask	U.S. Fish and Wildlife Service (2000) and California Department of Fish and Wildlife (California Department of Fish and Wildlife 2009) for plants; no protocol for wildlife.
California Red-Legged Frog Breeding Season Night Surveys	April 7, 2022; April 13, 2022; April 22, 2022; April 25, 2022; May 2, 2022; May 11, 2022	Connor Ritchie, Shelby Sanchez	(California Department of Fish and Wildlife 2005) Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog.
California Red-Legged Frog Breeding Season Day Surveys	April 12, 2022; May 18, 2022	Connor Ritchie, Shelby Sanchez	(California Department of Fish and Wildlife 2005) Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog.
Botanical Survey; General Wildlife Survey	May 18, 2022	Connor Ritchie, Shelby Sanchez	U.S. Fish and Wildlife Service (2000) and California Department of Fish and Wildlife (California Department of Fish and Wildlife 2009) for plants; no protocol for wildlife.
California Red-Legged Frog Non-Breeding Season Night Survey	August 4, 2022	Connor Ritchie, Shelby Sanchez, Alexandra Thiel	(California Department of Fish and Wildlife 2005) Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog.
California Red-Legged Frog Non-Breeding Season Day Survey	August 9, 2022	Connor Ritchie, Shelby Sanchez	(California Department of Fish and Wildlife 2005) Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog.
Preliminary Roosting Bat and Nesting Bird Assessment	August 23, 2022	Jennifer Moonjian, Shelby Sanchez, Jessica Copeland	No formal protocol.
Roosting Bat Survey, daytime inspection	September 15, 2022	Jennifer Moonjian, Shelby Sanchez, Audrey Weichert	No formal protocol.
Botanical Survey; General Wildlife Survey (adjacent public roadways)	August 14, 2023	Matthew Willis, Shelby Sanchez, Jessica Copeland, Laura Riccardelli	U.S. Fish and Wildlife Service (2000) and California Department of Fish and Wildlife (California Department of Fish and Wildlife 2009) for plants; no protocol for wildlife.

7.3.3 Special-Status Species and Habitats

For the purposes of this Draft EIR, special-status species and habitats are those that meet one or more of the following criteria:

- Federally or state listed as endangered, threatened, or rare.
- Candidates for federal or state listing as endangered, threatened, or rare.
- Proposed for federal or state listing as endangered, threatened, or rare.
- Considered special species of concern by the federal government (i.e., former federal species of concern) and California species of special concern.
- Sensitive species also include those afforded protection or considered sensitive under various laws or under sections of the California Fish and Game Code, such as nesting birds.
- Species recognized as locally important or sensitive by the California Native Plant Society (CNPS 2022) or the scientific community.
- Sensitive natural communities/habitats include those that are regulated or considered sensitive by federal, state, and/or local agencies.

Plant Species of Concern

The California Natural Diversity Database documents 48 special-status plant species as occurring within the search area. The official federal species list for the vicinity of the project area received from the U.S. Fish and Wildlife Service included nine additional federal listed species. No special-status plant species were observed during surveys.

Potential habitat was identified for Aparejo grass (*Muhlenbergia utilis*) and Congdon's tarplant (*Centromadia parryi ssp. congdonii).* Aparejo grass is a perennial grass-like herb that occurs in coastal sage scrub, creosote bush scrub, and wetland-riparian, and is found mostly in wetlands and occasionally in non-wetlands. Congdon's tarplant is an annual herb that occurs in valley and foothill grassland and is found in depressions on alkaline soils, sometimes described as heavy white clay.

Animal Species of Concern

The California Natural Diversity Database documents 32 special-status animal species as occurring within the search area. The official federal species list for the vicinity of the project area received from U.S. Fish and Wildlife Service also included 14 federal listed species. For this project's analysis, an "other nesting birds" category was added for the numerous species of birds with potential for occurrence, and an "other roosting bats" category was added for the various species of bats that are protected and known to roost in human-made structures. Special animal species observed during surveys included other nesting birds.

Potential habitat for special-status animal species was identified during surveys for the California red-legged frog (*Rana draytonii*), coast range newt (*Taricha torosa*), western pond turtle (*Emys marmorata*), tricolored blackbird (*Agelaius tricolor*), white-tailed kite (*Elanus leucurus*), Other Nesting Birds, American badger (*Taxidea taxus*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*).

Habitats of Concern

The California Natural Diversity Database documents five regional habitats of concern that are considered sensitive as occurring within the search area. No habitats of concern were observed during surveys.

Jurisdictional Wetlands/Areas and Other Waters

The East Fork of San Luis Obispo Creek and its associated riparian habitat exist within the Biological Study Area along the western edge of the project footprint. Approximately 4 acres of riparian habitat (arroyo willow thicket) and 2,400 linear feet of stream are present within the Biological Study Area, but these sensitive areas are not within proposed grading limits. A full jurisdictional delineation was not conducted because the project is designed to completely avoid stream, stream banks, and associated riparian vegetation.

7.4 IMPACT ANALYSIS

7.4.1 Methodology

The biological resources impact analysis is based on data collected during database searches, biological surveys, and review of aerial photographs and satellite imagery.

Potential impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats in the project area under baseline conditions to the anticipated conditions during construction and operation of the project. Direct and indirect impacts on special-status species were assessed based on the potential for the species or their habitats to be disturbed or enhanced by construction or operation of the project.

7.4.2 Criteria for Determining Significance

The project would result in a significant impact on biological resources if it would:

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

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

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

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

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

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

The analysis considers both species and their habitats. A less-than-significant impact generally refers to a situation in which there is a measurable impact, but the impact is not likely to result in either an adverse outcome for the survival or reproductive success of a particular species or a widespread or long-lasting adverse effect on a natural community. Conversely, an impact is considered potentially significant if it might substantially decrease the likelihood of survival or reproductive success of a particular species (e.g., substantial decrease in a local population size or extirpation) or result in widespread or long-lasting adverse effects on a natural community.

7.4.3 Environmental Impacts

Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries? **- Less than Significant with Mitigation Incorporated**

Special-Status Plant Species

The project is not anticipated to impact any special-status plant species. Although the Biological Study Area supports suitable habitat for a couple special-status plant species, none were observed during appropriately timed floristic surveys (which included reference population checks), and none are

expected to occur within the Biological Study Area. Therefore, there will be No Impact to special-status plant species because of the project.

Special-Status Animal Species

California Red-legged Frog

The California red-legged frog is federally threatened and considered a Special Species of Concern by the California Department of Fish and Wildlife. This frog historically ranged from Marin County southward to northern Baja California. Presently, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining California red-legged populations within California. California red-legged frogs use aquatic, riparian, and upland habitats and breed from January to July. California red-legged frogs use riparian and upland habitats for foraging and shelter and have been found sheltering in both natural and human-made refuges.

Formal breeding and nonbreeding season protocol surveys were conducted for the California red-legged frog during April, May, June, July, and August 2022. The surveys were conducted in compliance with the August 2005 U.S. Fish and Wildlife Service Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog. Surveys involved biologists walking through the creek with headlamps, flashlights, and binoculars to detect eyeshine. No California red-legged frogs were detected during surveys.

The potential for the project to impact the California red-legged frog is anticipated to be low due to the absence of the species within the Biological Study Area during protocol-level surveys. A pre-construction training for construction workers will further reduce the potential impacts, and therefore this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure BIO-1: Conduct Pre-construction survey. Prior to construction, a qualified biologist shall survey the Project's impact area for the presence of special-status species, including California red-legged frog. If a special-status species is found, the appropriate agencies would be notified by Caltrans prior to proceeding with work. Observations of special-status species shall be documented on California Natural Diversity Database forms and submitted to California Department of Fish and Wildlife upon project completion

Mitigation Measure BIO-2: Conduct Pre-construction Training. Prior to beginning project activities, a biologist will conduct a pre-construction training session for all construction personnel. The training will include a description of potential special-status species to occur during construction, their habitat types, and the project area boundaries. Training materials may be used for the training session, provided a biologist is available to answer any questions.

Mitigation Measure BIO-3: ESA Fencing. Prior to ground-disturbing activities, boundary markers or fencing will be installed around the perimeter of the impact area adjacent to any habitats for special-status species, including the nearby East Fork of San Luis Obispo Creek.

Mitigation Measure BIO-4: Control trash that attracts predators. During project activities, all trash that may attract predators or scavengers 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.

Mitigation Measure BIO-5: Guidance for Vehicle Use. Project employees shall be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards. Construction activity shall be confined within the project site, which may include temporary access roads and staging areas specifically designated and marked for these purposes.

Mitigation Measures BIO-6: Refueling, Maintenance, and Staging. During construction and long-term operation of the project, refueling, maintenance, and staging of equipment and vehicles will occur at least 100 feet from aquatic or riparian habitat and not in a location from where a spill would drain directly toward aquatic habitat.

Mitigation Measure BIO-7: Stormwater BMPs. Storm water BMPs will be installed and maintained during construction and long-term operation. See Chapter 12, Hydrology and Water Quality for more detail.

Western Pond Turtle

The western pond turtle is a medium-sized (to 8.5 inches) olive, brown, or blackish turtle with a low shell occasionally without pattern but usually with a network of spots, lines, or dashes of brown or black often radiating from the growth centers of the shell. The western pond turtle has been present from Oregon to Mexico on Pacific slope drainages where water persists year-round. Breeding takes place in sunny water between April and July.

No western pond turtles were observed in the Biological Study Area during surveys for this project. Many focused day and night surveys were conducted for California red-legged frog and during those surveys pond turtle was not detected. The nearest California Natural Diversity Database occurrence for western pond turtle is approximately two miles northeast. However, marginally suitable aquatic habitat occurs just outside the Biological Study Area for this species, but no impacts are anticipated to occur there.

Although the project will avoid impacts to creek and riparian habitat, project construction could result in the injury or mortality of western pond turtle (if present) during grading activities in uplands adjacent to the riparian zone. Injury or mortality could occur via accidental crushing by construction

equipment. The potential for these impacts is anticipated to be low due to no observations of the species within the Biological Study Area during surveys. Avoidance and minimization measures are included that will reduce these potential impacts and therefore this impact is considered Less than Significant with Mitigation.

Mitigation Measures BIO-1 through BIO-7 apply

Coast Range Newt

The Coast Range newt is a mid-sized salamander that occurs along the Coast Range in the valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral. The Coast Range newt's range is from upland refugia to aquatic breeding locations during the winter and spring. Both juveniles and adults spend portions of their life in aquatic environments and upland habitat.

No Coast Range newt life stages were observed in the Biological Study Area during surveys for this project. Many focused day and night surveys were conducted for the California red-legged frog and during those surveys Coast Range newt was not detected. The nearest California Natural Diversity Database occurrence for the Coast Range newt is about 5 miles north of the Biological Study Area (Occurrence #59) and about 2 miles northeast for the western pond turtle (Occurrence #1019). However, marginally suitable aquatic habitat occurs just outside the Biological Study Area for this species, but no impacts are anticipated to occur there.

Although the project will avoid impacts to creek and riparian habitat, project construction could result in the injury or mortality of Coast Range newt (if present) during grading activities in uplands adjacent to the riparian zone. The potential need to capture and relocate these species would subject these animals to stresses that could result in adverse effects. Injury or mortality could occur via accidental crushing by worker foot-traffic or construction equipment. The potential for these impacts is anticipated to be low due to no observations of the species within the Biological Study Area during surveys, but this could change through time, where these species could potentially expand populations or colonize within the streams in the Biological Study Area. Mitigation measures are included that will reduce these potential impacts, and therefore this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measures BIO-1 through BIO-7 apply.

Mitigation Measure BIO-8: Pre-construction survey and handling of special-status species. Prior to construction, a biologist determined qualified by Caltrans shall survey the project's impact area and, if present, capture and relocate any Coast Range newts to suitable habitat downstream.

American Badger

The American badger is a California state Special Species of Concern. It is a moderate-sized mammal with blackish-brown fur with white stripes on the head and face. American badgers are found throughout most of the state and occur mostly in dry, open stages of shrub, forest, and herbaceous habitats. The species burrows in friable soils, often using previously occupied ground squirrel burrows, and preys on small rodents, reptiles, insects, and birds. American badgers help control small mammal populations and can be tolerant of human activities. However, habitat loss, trapping, and poisons have caused a severe population decline.

No American badgers were observed in the Biological Study Area during surveys for this project. Also, many focused night surveys were conducted for the California red-legged frog using eyeshine survey techniques throughout the Biological Study Area, which detected other mammals but did not detect badgers. The nearest California Natural Diversity Database occurrence for the American badger is about 1.4 miles northeast of the Biological Study Area. However, marginally suitable habitat occurs within the Biological Study Area for this species.

The Biological Study Area supports marginal habitat for American badgers. However, the consistent agricultural operations may be a limitation to their activity, and it is unlikely that this species would burrow in the Biological Study Area. No ground squirrel burrows meeting size criteria were discovered within the Biological Study Area, constituting less denning and breeding habitat for the species. With the implementation of avoidance and minimization measures, impacts to the American badger are not anticipated, and this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measures BIO-1 through BIO-7 apply.

Mitigation Measure BIO-9: Pre-construction survey for American badger. No less than 14 days and no more than 30 days prior to any construction activities or any project activity likely to impact the American badger, a pre-construction survey shall be conducted. The status of all dens should be determined and mapped. Known dens, if found occurring withing the footprint of the activity, shall be monitored for three days to determine the current use. If American badger activity is observed during this period, the den shall be monitored for at least five consecutive days from the time of observation to allow any resident animal to move to another den during its normal activity.

Mitigation Measure BIO-10: No pets or firearms. No canine or feline pets or firearms (except for law enforcement officers and security personnel) shall be permitted on construction sites to avoid harassment, killing, or injuring the American badger.

Mitigation Measure BIO-11 Cover 2-foot-deep Excavations. Maintenance and construction excavations greater than 2-feet deep shall be covered (i.e., with plywood, sturdy plastic, steel plates, or equivalent), filled in at the end of each working day, or have earthen escape ramps no greater than 200 feet apart to prevent trapping the American badger.

Mitigation Measure BIO-12 Inspect 3-inch-or-greater-Diameter Pipes for American Badgers. All construction pipes, culverts, or similar structures with a diameter of 3 inches or greater stored in the construction site overnight will be thoroughly inspected for American badgers prior to being buried, capped, or otherwise used or moved. If an American badger is discovered inside a pipe, the pipe should not be moved until the U.S. Fish and Wildlife Service has been consulted. If the American badger is in direct harm's way, the pipe may be moved to a safe location on time under the direct supervision of a qualified biologist.

Tricolored Blackbird, White-tailed Kite, and Other Nesting Birds

The tricolored blackbird is a state threatened species native to California and has nesting colonies in Oregon, Washington, Nevada, and Baja California. The tricolored blackbird resides in California's Central Valley and breeds from March to August in wetlands.

The white-tailed kite is a fully protected species (soon to be reclassified) in California and is found in coastal areas and valley lowlands. The white-tailed kite feeds on rodents, small birds, and insects and nests in the tops of trees. The tricolored blackbird and white-tailed kite are protected by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. In addition to these species, numerous other nesting bird species protected by these two regulatory laws have the potential to nest in habitats within the Biological Study Area.

Several active black phoebe and barn swallow nests were observed throughout the existing buildings on August 23, 2022. Barn owls were also observed roosting in the existing buildings and are expected nest there as well. Potential nesting habitat for bird species also occurs in trees and shrubs within the Biological Study Area.

Demolition of existing buildings and barns and removal of vegetation could directly impact active bird nests and any eggs or young residing in nests. Indirect impacts could also result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. While temporary loss of vegetation supporting potential nesting habitat would occur, this would be mitigated by habitat restoration. Removal of the abandoned buildings and barns would be a permanent impact to the birds that nested within the structures. The implementation of the avoidance and minimization measures such as appropriate timing of vegetation removal, pre-activity surveys, installation of owl boxes, and exclusion zones will reduce the

potential for adverse effects to nesting bird species. Therefore, this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure BIO-1 through BIO-7 apply.

BIO-13: Nesting Bird Survey. Prior to construction, vegetation removal shall be scheduled to occur from September 2 to February 14, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 15 to September 1), a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than three (3) days prior to construction. If an active nest is found, Caltrans shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that juveniles have fledged.

Mitigation Measure BIO-14: Active Nests Shall not be Disturbed. During construction, active bird nests shall not be disturbed and eggs or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time. Readily visible exclusion zones where nests must be avoided within 100 feet of disturbance shall be established by a qualified biologist using Environmentally Sensitive Area fencing. Work in exclusion zones shall be avoided until young birds have fledged (permanently left the nest) or the qualified biologist has determined that nesting activity has otherwise ceased.

If tricolored blackbird or white-tailed kite nests are observed within 500 feet of the area of potential impact during construction, project activities in that area shall immediately cease, and California Department of Fish and Wildlife shall be contacted within 48 hours. Caltrans shall then initiate California Endangered Species Act consultation with California Department of Fish and Wildlife and implement additional measures as necessary. A qualified biologist shall implement an exclusion zone and work shall be avoided within the exclusion zone until chicks have fledged or the nest is otherwise determined by a qualified biologist to be inactive.

Mitigation Measure BIO-15: Tree ESA Design and Install. Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around the dripline of trees to be protected within project limits.

Mitigation Measure BIO-16: Install Owl Boxes. Prior to demolition of existing structures, owl boxes shall be installed onsite in areas determined suitable by a Caltrans biologist.

Mitigation Measure BIO-17: Monitor Initial Clearing and Grubbing. All initial clearing/grubbing and vegetation removal as well as building demolition shall be monitored and documented by a biological monitor(s) regardless of time of year.

Mitigation Measure BIO-18 Bird and Bat Exclusion. Birds and bats will be excluded from the existing buildings prior to their demolition. Installation of exclusion methods shall occur outside of the typical nesting season (i.e., implement exclusion methods from September 2 to February 14).

Pallid Bat, Townsend's Big-eared Bat, and Other Roosting Bats

The pallid bat is a Species of Special Concern for the California Department of Fish and Wildlife and has a range over most of the western U.S. Pallid bats are found in lowland areas and are not migratory. They roost in deep crevices and feed mainly on insects. They maintain nursery colonies with 30 to over 100 individuals. Females have one to two pups for each pregnancy, usually born between mid to late June.

Townsend's big-eared bat is also a Species of Special Concern for the California Department of Fish and Wildlife and requires caves, mines, tunnels, or buildings for roosting. It uses different roosts for day and night and form small (less than 100) maternity colonies. Mating occurs from November to February, and births occur from May to June. This species is extremely sensitive to disturbance of roosting sites. A single visit may result in abandonment of the roost. Numbers reportedly have declined steeply in California.

Two occupied roosts were observed in abandoned buildings during daytime inspections conducted in late summer. A single Townsend's big-eared bat was observed in a storage closet within one of the existing barns, and another solitary roosting Townsend's big-eared bat was observed in the attic of the abandoned house. In both roosting locations, guano (bat excrement) was abundant, indicating frequent use by bats and/or greater seasonal abundance at other times of the year. It is likely that other species of bats use these abandoned buildings for day and night roosting habitat because of the various roosting features there (from the open cavern-like attic to crevices in deteriorating wood paneling).

Day and night roosts were observed in two abandoned structures within the Biological Study Area. Demolition of existing buildings will cause loss of bat roost habitat. Direct impacts to bats could result during removal of the existing buildings and/or trees if bats are found to be roosting in these areas. These direct effects would result in the injury or mortality of bats or harassment that could alter roosting behaviors. Indirect impacts could also result from noise and disturbance associated with construction, which could also alter roosting behaviors. The implementation of pre-activity surveys and exclusion zones (if necessary) will reduce the potential for adverse effects to roosting bat

species. Therefore, this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measures BIO-1, BIO-17, and BIO-18 apply.

Mitigation Measure BIO-19: Scheduling of Building Demolition and Tree Removal for bats. Building demolition and tree removal shall be scheduled to occur from September 2 to February 14, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts to roosting bats. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the bat maternity roosting season (February 15 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the pre-construction surveys will also identify the nature of the bat use (i.e., no roosting, night roost, day roost) and determine if passive bat exclusion will be necessary and feasible. If an active bat roost is found, Caltrans shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has ceased.

Mitigation Measure BIO-20: Maternity roosts shall not be disturbed. If bats are found by a qualified biologist to be maternity roosting, active bat maternity roosts shall not be disturbed or destroyed at any time. Readily visible exclusion zones shall be established in areas where roosts must be avoided using Environmentally Sensitive Area fencing. The size/radius of the exclusion zone(s) shall be determined by a qualified biologist.

Mitigation Measure BIO-21: Install Replacement Bat Habitat. Prior to exclusion and demolition of any buildings, install replacement roosting habitat (i.e., “bat condo/structure”) in a nearby location away from the proposed building footprint determined suitable by a qualified bat biologist. This will ensure that displaced bats have alternative roosts at the time of eviction.

***Impact BIO-2: b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Marine Fisheries Service;* - Less than Significant with Mitigation Incorporated**

The East Fork of San Luis Obispo Creek and its associated riparian habitat exist within the Biological Study Area along the western edge of the project footprint. The creek and riparian habitat canopy are about 50 feet away, at the closest point of the disturbance footprint. Approximately 4 acres of riparian habitat and 2,400 linear feet of stream are present within the Biological Study Area, but these sensitive areas are not within proposed grading limits. Table 7.2 shows the estimated impacts (in acres) of the existing habitat types and land uses at the project site. A full jurisdictional delineation was not conducted

because the project is designed to completely avoid streams, stream banks, and associated riparian vegetation.

Table 7.2 Estimated Impacts to Natural Communities/Habitats of Concern

Habitat or Land Use	Permanent Impact (acres)	Temporary Impact (acres)
Agricultural	18 acres south of Buckley Road; 0.1 acre north of Buckley Road with roundabout design option	0
Anthropogenic/Developed	3 acres south of Buckley Road; 0.7 acre on Buckley Road with roundabout design option	5 acres on Buckley Road, Vachell Lane, and South Higuera for Alternative 2 utility work
Ruderal/Disturbed	0.6 acre	0
Arroyo Willow Thicket (Riparian Zone)	0	0
Stream/Other Waters	0	0

The project will avoid any direct impacts to wetlands, the East Fork of San Luis Obispo Creek, and its associated riparian vegetation. The project will have no permanent or temporary impacts to jurisdictional areas. However, due to the proximity to these resources and the potential indirect impacts as the result of the creation of large impervious surfaces adjacent to the riparian habitat, avoidance and minimization measures are included. With implementation of mitigation measures, the project would avoid impacts to the riparian habitat of the East Fork of San Luis Obispo Creek, and therefore the impacts to riparian habitat would be Less than Significant with Mitigation Incorporated.

Mitigation Measures BIO-1 applies.BIO-2, BIO-3, BIO-5, BIO-6, and BIO-7 apply.

Mitigation Measure BIO-22: Invasive Species. To prevent the introduction or spread of invasive species within the project site and potentially into the adjacent riparian habitat, the project will:

- During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.
- Only clean fill shall be imported. When practicable, invasive exotic plants in the project site shall be removed and properly disposed. All invasive vegetation removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. If soil from weedy areas must be removed offsite, the top 6 inches containing the seed layer in areas with weedy species shall be disposed of at a landfill. Inclusion of any species

that occurs on the Cal-IPC Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project shall be avoided.

- Construction equipment shall be certified as "weed-free" by Caltrans before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans in order to avoid/minimize the spread of invasive plants and/or seed within the construction area.

Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? **Less than Significant with Mitigation Incorporated**

As part of their Buckley Road Extension project that bisects the project area, the County of San Luis Obispo installed and maintains a drainage system that outlets into a human-made basin on the state property. This artificially created basin was only recently created and does meet the criteria as a Waters of the U.S. or Waters of the State and thus will not be recognized as such.

As stated above, the project will avoid any direct impacts to wetlands, the East Fork of San Luis Obispo Creek, and its associated riparian vegetation. By design, the project will avoid temporary and permanent impacts to jurisdictional areas, including associated wetlands. However, due to the proximity to these resources and the potential indirect impacts as the result of the creation of large impervious surfaces adjacent to the riparian habitat, avoidance and minimization measures are included. With implementation of mitigation measures, the project would further avoid impacts to the wetlands of the East Fork of San Luis Obispo Creek, and therefore impacts would be Less than Significant with Mitigation Incorporated.

Mitigation Measures BIO-1 BIO-2, BIO-3, BIO-5, BIO-6, and BIO-7 apply.

Impact BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites **– Less than Significant**

The project sits at the southern edge of the urban landscape of San Luis Obispo. Ample open space is present to the south toward Pismo Beach, but little opportunities for wildlife movement are present north of the Biological Study Area. The tributary to San Luis Obispo Creek does provide a wildlife travel corridor into limited open space areas within San Luis Obispo such as northeast through Tank Farm to South Hills Open Space and east toward Los Padres Forest or Edna Valley. The East Fork of San Luis Obispo Creek offers potential amphibian migration opportunities. Mammals, such as deer, have been observed on the project site, along with birds foraging and nesting.

The project will add approximately 18 acres of impervious surface and structures in the portion of the project site that is currently cultivated land or anthropogenic developed features. Although this is low-quality wildlife migration habitat, the project will still contribute to further urban development of area. However, the higher quality stream corridor and associated riparian vegetation will be preserved, and therefore potential impacts are considered Less than Significant.

Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? – **Less than Significant**

The project does not conflict with the protection of biological resources found in the County San Luis Obispo's Conservation/Open Space Element in the San Luis Obispo County General Plan (2010), or the City of San Luis Obispo Conservation. Also, local land use or zoning ordinances are not applicable to the project on state-owned property. Implementation of mitigation measures for the protection of special-status species are included that are generally consistent with the intent of these plans. Therefore, this impact is considered Less than Significant.

Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? – **No Impact**

The project site is not within or adjacent to a habitat conservation plan or natural community conservation plan; therefore, No Impact is expected.

Chapter 8 Cultural Resources

8.1 OVERVIEW

The purpose of this section is to describe cultural resources (archeological and historical) in the project area and evaluate potential impacts on these features.

Cultural resources are archaeological, Native American, traditional, and built environment resources, including but not limited to buildings, structures, objects, districts, and sites. Prehistoric archaeological sites are places where Native Americans lived or carried out activities during the prehistoric period. Historic-era archaeological sites reflect activities conducted after the arrival of colonists in the early 1800s. Prehistoric and historic-era sites may contain artifacts, cultural features, subsistence remains, and human burials.

8.2 REGULATORY SETTING

The term “cultural resources,” as used in this document, refers to the “built environment” (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include those described below.

8.2.1 Federal Laws, Regulations, and Policies

The project does not require any federal permits, is receiving no federal funds, and is not located on federal lands; therefore, federal laws do not apply to the project. The following laws are provided for context only.

The implementing regulations of the National Historic Preservation Act require that cultural resources be evaluated for National Register of Historic Places eligibility if they cannot be avoided by an undertaking (in this instance, the project). To determine site significance through application of National Register of Historic Places criteria, several levels of potential significance must be considered. As provided in Title 36 Code of Federal Regulation Section 60.4, “the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association” and must be considered within the historic context. Resources must also be at least 50 years old, except in rare

cases, and, to meet eligibility criteria of the National Register of Historic Places, must:

A. Be associated with events that have made a significant contribution to the broad patterns of our history; or

B. Be associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

For archaeological sites evaluated under criterion (D) above, integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

8.2.2 State Laws, Regulations, and Policies

State laws require Caltrans, as the lead agency, to determine if a project may have a significant effect on archaeological or historical resources (CEQA Statute, Public Resources Code, Division 13). Cultural resource state regulations include the following:

California Public Resources Code:

- Sections 5024, 5024.5: State-Owned Historical Resources
- Section 5024.1: California Register of Historical Resources
- Section 5028: Emergency Projects
- Sections 5097-5097.6: Archaeological, Paleontological, and Historical Sites
- Sections 5097.7-5097.6: Native American Historical, Cultural, and Sacred Sites
- Section 5097.9 et seq.: Native American Religious Freedom

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code Section 5024.1 established the California Register of Historical Resources and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the California Register of Historical Resources and, therefore, a historical resource. Historical resources are defined in Public Resources Code Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term “tribal cultural resources” to CEQA, and AB 52 is commonly

referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in Public Resources Code Section 21074(a), a tribal cultural resource is a California Register of Historical Resources or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in Public Resources Code Section 21083.2.

Public Resources Code Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the National Register of Historic Places listing criteria. It further requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register of Historic Places or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with Public Resources Code Section 5024 are outlined in a Memorandum of Understanding (MOU) between Caltrans and the State Historic Preservation Officer, effective January 1, 2015. For most federal-aid projects on the State Highway System, compliance with the Section 106 Programmatic Agreement will satisfy the requirements of Public Resources Code Section 5024.

8.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

8.3 ENVIRONMENTAL SETTING

A Caltrans Historical Resources Compliance Report was completed to identify cultural resources at or nearby the project site. The Historic Resources Compliance Report is a composition of the following studies:

- Supplemental Historical Resources Compliance Report (Wiggins, 2023)
- Archaeological Survey and Extended Phase I Testing Report (Nicchitta et al. 2023).
- Archaeological Evaluation Report (Peelo et al. 2023).
- Historical Resources Evaluation Report for the Buckley Road Extension Project (Kozub and Apodaca, 2018)

As described in the Historical Resources Compliance Report, the project site was studied multiple times and included a Phase I pedestrian survey, and Extended Phase I presence/absence investigation, and a Phase II significance and evaluation study. This series of study and evaluation provided the following information documented in the section below.

8.3.1 Prehistoric

Background

In the project area, archaeologists generally recognize six major prehistoric periods of cultural adaptation within the last 10,000-year record of human occupation. The cultural sequence is referred to as the Central Coast sequence (Jones et al. 2007). The initial period, Paleoindian, originated during the Late Pleistocene and continued until approximately 9950 BP (years before present). This was followed by the Millingstone (9950 to 5450 BP), during which milling equipment (manos and metates) become increasingly abundant in the archaeological record and populations apparently followed a generalized subsistence pattern. The next period, the Early Period (5450 to 2550 BP), was a time of new subsistence practices, including a greater reliance on hunting and the exploitation of acorns. The Middle Period (2550 to 950 BP) was marked by the intensification of subsistence practices, especially a greater reliance on marine and coastal foods. During the Middle/Late Transition (950 to 700 BP), central Californian populations are said to have experienced deteriorating environmental parameters, and apparently underwent major adaptive shifts in both subsistence and settlement. Finally, the Late Period (700 to 250 BP) was a time marked by the appearance of numerous projectile points, including small side-notched (Desert side-notched), triangular (Cottonwood series), and leaf-shaped points.

Resource Evaluation and Survey Results

Based on positive results of the pedestrian survey and the sensitivity of a small portion of the project site to contain buried precolonial sites, an Extended Phase I presence/absence investigation for precolonial resources was completed. The results of the Extended Phase I investigation for prehistoric resources were negative.

8.3.2 Historic

Background

The project site sits near the Mexican land grants of Rancho San Miguelito and Ranchita de Santa Fe along San Luis Obispo Creek and Rancho Corral de Piedra between southern San Luis Obispo and present-day Arroyo Grande. In the 1860s, a devastating drought severely affected the rancho cattle populations and altered the landholding patterns in San Luis Obispo

County. After the drought that resulted in nearly all of the cattle on the area's ranchos perishing, the once small group of Mexican Rancho landowners were forced to break up and sell acreage at extremely low rates . In 1871, the project site was granted to American Joseph See, who appears to have used the land for agriculture but did not construct any structures or reside on the property.

When Joseph See passed away in 1905, he divided his landholdings among his six children, and the project site was passed onto his daughter Nancy See Jones and her husband George Jones. Just one year later, George Jones passed away and Nancy leased the property to John Poletti (1908 to 1913). A house was constructed on the property between 1905 and 1913 and was likely inhabited by John Poletti.

In 1913, Nancy See Jones sold the property to Oscar and Bessie Polin, who would build a dairy on the parcel, though it would be managed and operated by separate parties. Prior to the Polins moving to the property, a residence (the original Polin house) was constructed on the property. Building continued on the property in 1915. A dairy was established on the property by 1917. In 1920, two barns were constructed, and in 1924 a "modern" milk house was installed. By 1920, many individuals were living on the dairy ranch property, including Oscar and Bessie, their four children, and two hired workers. The Polin Ranch dairy was operated by George F. Drummond in 1919, by Peter Brughelli in 1922, the Harmony Dairy in 1924, and Charles Eastman in 1927.

In 1935, the Polin family moved from the ranch property to 1831 Garden Street in San Luis Obispo and leased the Polin Ranch to Ulysses "Scotty" Robasciotti and LaVerne Guidetti Robasciotti, who also took over management of the dairy. The Robasciotti family constructed many structures on the property, including a new home (1944), a milking parlor (1940), a main barn (1941), and a garage (1942). Members of the Robasciotti family resided on the property until it was purchased by Caltrans in 2000.

The Polin family also leased other parts of the ranch to additional parties after 1935, including 20 acres to the Hayashi Produce Company, which used the land for agriculture, and 20 acres to Charlene Valarde, who used the land as pasture for cattle grazing; the workers' quarters, two main barns, and yard area were leased to Stephen Weeks who used the space for his company, Stone Solutions. Several of the original structures on the property were destroyed by fires in both 1934 and 1941 and have since been rebuilt.

The Polins retained ownership of the property until it was sold to Caltrans in 2000. Since purchasing the property, Caltrans has installed a temporary construction trailer, demolished and removed buildings, and leased sections of the property for agriculture, cattle grazing, and sheep breeding. In 2022, an extension of Buckley Road was constructed; it bisects the current project area of potential impact that connects a new development with access to Highway 101.

Resource Evaluation and Survey Results

Architectural History

The state-owned property was evaluated in an Historical Resources Evaluation Report that was completed in September of 2018 for the Buckley Road Extension project. Because the entire parcel comprises a single property (the former Polin Ranch), the built-environment resources on the ranch were evaluated together. The Historical Resources Evaluation Report evaluated the former Polin Ranch property for eligibility for the National Register of Historic Places and California Register of Historical Resources, including the house (1944), milking parlor (1940), hay barn (circa 1920), main barn (1941), workers' living quarters (1923), 3 sheds, corrals/fences, and windmill. The evaluation found that the property is not eligible for listing in the National Register of Historic Places or California Register of Historical Resources. The State Historic Preservation Officer concurred with this determination on November 1, 2018. The 1944 house was subsequently removed from the property in 2022 as part of the Buckley Road Extension project.

In addition to an evaluation of the architectural resources on the parcel, the surrounding area was also assessed to determine whether the project could have potential to indirectly affect any adjacent historic properties by altering the setting. One historic property was found to be in the vicinity of the project location: the Pereira Octagon Barn (CA-SLO-1002H), which was listed in the National Register of Historic Places in 2014 under Criteria A and C as a single building. The project was found to not have any potential to affect the setting of the Octagon Barn either directly or indirectly.

Archaeology

The pedestrian (walk-through) survey produced positive results for historic-era artifacts associated with historic residential and dairy land use on the property dating between 1913 and 1968, which falls within the two periods of potential significance. The artifacts compose the site called Albion Site 1. In addition, three isolated potential precolonial artifacts (Isolates 1-3) were found that are not associated with Albion Site 1.

Albion Site 1

The site is characterized by faunal shell (pismo clam, abalone), faunal bone, ceramic tableware and hardware, glass bottles, glass hardware, metal containers, and metal hardware distributed throughout the site boundary, The site is associated with Polin family and Robasciotti family residential and dairy land uses on the property, dating between 1913 and 1968.

Based on an accumulation of information, it is recommended that a portion of the project site be considered eligible for the National Register and California Register under Criterion D/4 for its substantial research potential.

8.4 IMPACT ANALYSIS

A historical resource under CEQA, as defined by California Public Resources Code Part 5020.1(j) is any object, building, site, area, place, record, or manuscript that is historically or archaeologically significant, or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. CEQA further defines a historical resource as any resource listed in or determined eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency. A resource would be automatically listed in the California Register of Historical Resources if it is listed in the National Register of Historic Places or formally determined eligible by an agency for listing in the National Register of Historic Places.

Generally, a cultural resource is considered "historically significant" if it meets the requirements for listing on the California Register of Historical Resources under any one of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage (Criterion A).
- Associated with the lives of persons significant in our past (Criterion B).
- Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion C).
- Has yielded, or may be likely to yield, information important in history or prehistory (Criterion D).

8.4.1 Methodology

To consider potential impacts to cultural resources, the procedures and results detailed in the Historical Resources Compliance Report, dated July 2023, were considered. The studies for this project were carried out in a manner consistent with Caltrans' regulatory responsibilities under the California Environmental Quality Act (CEQA) and Public Resources Code 5024 and pursuant to the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92, addended 2019 (5024 MOU) as applicable.

8.4.2 Criteria for Determining Significance

The project would result in a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5,
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5, or
- Disturb any human remains, including those interred outside of formal cemeteries.

8.4.3 Environmental Impacts

***Impact CR-1: cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5* – Less than Significant**

The Polin Ranch property was evaluated for eligibility for the National Register of Historic Places and California Register of Historical Resources, including the house (1944), milking parlor (1940), hay barn (c. 1920), main barn (1941), workers' living quarters (1923), 3 sheds, corrals/fences, and windmill. The evaluation found that the property is not eligible for listing in the National Register of Historic Places or California Register of Historic Places. The State Historic Preservation Officer concurred with this determination on November 1, 2018. The 1944 house was subsequently removed from the property in 2022 as part of the Buckley Road Extension project. Other structures that are part of the Polin Ranch property still remain but will be removed as a result of the project.

In addition to the evaluation of the architectural resources on the parcel, the surrounding area was also assessed to determine whether the project could have potential to indirectly affect any adjacent historic properties by altering the setting. One historic property was found to be in the vicinity of the project location: the Pereira Octagon Barn (CA-SLO-1002H), which was listed in the National Register of Historic Places in 2014 under Criteria A and C as a single building. The project was found to not have any potential to directly or indirectly affect the setting of the Octagon landforms (hills/road berms) that block the view of the proposed new construction from the Octagon Barn. Therefore, the Octagon Barn was found to be outside of the project site. Also, the setting of the Octagon Barn has been significantly altered from its historic appearance, with the construction of multiple new buildings and parking areas in the area immediately surrounding the barn. No other potentially historic properties were identified in the vicinity of the project site. Therefore, the impact to any historic built-environment properties is considered Less than Significant.

Impact CR-2: cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 - Less than Significant with Mitigation Incorporated

Due to the nature of the Albion Site-1 features and recommendation of consideration for eligibility for the National Register and California Register, there is potential to cause an adverse change in the significance of a historic archaeological resource. Caltrans will commit to measures that avoid, minimize, or mitigate these potential impacts. Therefore, this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure CR-1: Data recovery. Data recovery of the historic archaeological resource (Albion Site-1) will be required to recover important information that will be lost because of the project. A Caltrans Principal Investigator in the appropriate discipline shall determine applicability of data recovery, and, as applicable, the appropriate level of documentation for a data recovery plan.

Mitigation Measure CR-2: Consultation, Outreach, and public education. Caltrans shall consult with Indian tribes that ascribe religious or cultural significance to the affected historical resource, or with other interested parties, to determine whether and how the mitigation will adequately address the effects to those other values, as well as the appropriate methods for incorporating what is learned about the resource's significance into public outreach and education.

Impact CR-3: Disturb any human remains, including those interred outside of formal cemeteries – No Impact

No evidence of human remains was observed within the project site. Human remains are not known to exist in or near the project site. Therefore, the project will have No Impact.

Chapter 9 Geology and Soils

9.1 OVERVIEW

The purpose of this section is to describe geological and soil conditions in the project area and to evaluate potential impacts of the project. This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design of structures. Structures are designed using the Caltrans Seismic Design Criteria. Paleontology, a natural science focused on the study of ancient animal and plant life preserved as fossils, is an additional consideration in this section.

9.2 REGULATORY SETTING

9.2.1 Federal Laws, Regulations, and Policies

Clean Water Act Section 402 (Erosion Control)

The Clean Water Act was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The act requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain nonpoint source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES).

9.2.2 State Laws, Regulations, and Policies

The following state regulations are applicable to the project.

Public Resources Code, Division 4, Chapter 1.7, Section 5097.5

Public Resources Code, Division 4, Chapter 1.7, Section 5097.5 states that "No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands." As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, Caltrans, as well as local project proponents, is required to comply with Public Resources Code 5097.5 for its own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act; Public Resources Code Section 2621 et seq.) was enacted in 1972 to reduce the risk to life and property from surface faulting in California. The Alquist-Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as “active,” and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are “sufficiently active” and “well defined.” A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during the Holocene (defined for purposes of the act as referring to approximately the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

As with the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690 to 2699.6) is intended to reduce damage resulting from earthquakes. The Alquist-Priolo Act addresses surface fault rupture, including strong ground shaking, liquefaction, and seismically induced landslides, and Seismic Hazards Mapping Act provisions are similar in concept in that the State is charged with identifying and mapping areas of risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within Seismic Hazard Zones.

California Building Code and International Building Code

Title 24 of the California Code of Regulation, also known as the California Building Code, specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. The California Building Code specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California. California Building Code standards determine building strength based on regional seismic risks and recommended construction specifications to provide building strength above that risk.

9.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

9.3 ENVIRONMENTAL SETTING

9.3.1 Geology

The project site is in the County of San Luis Obispo, part the Central Coast region of California, and is just south of the municipal boundary for the City of San Luis Obispo. This is part of the Southern Coast Ranges geomorphic province of California. The Coast Ranges extend to the San Francisco Bay to the north and to the Santa Ynez River to the south. The eastern boundary of the Coast Ranges is the Central Valley, and the western boundary extends offshore into the Pacific Ocean. The Coast Ranges are characterized by northwest-southeast trending mountain ranges and intervening valleys that are generally separated by faults.

The project site is within the San Luis Valley (also known as the Edna Valley), which together with the Los Osos Valley to the northwest form a narrow, northwest-trending alluvium-filled basin along the subsiding southwestern margin of the Cambria structural block. San Luis Valley is underlain by alluvium consisting of Holocene- and Pleistocene-age deposits that compose the primary groundwater reservoir in the San Luis Obispo area. The site is on old alluvial deposits (Qoa) derived from the San Luis Obispo Creek, which drains from the Santa Lucia Mountains south to the Pacific Ocean. These late Pleistocene valley-fill deposits are discontinuous with moderately consolidated sands, silts, and gravels. Small bits of serpentinite (Jos) are exposed within the older alluvium.

9.3.2 Seismicity

Rupture of an Earthquake Fault

Fault rupture is the surface displacement that occurs along the surface of a fault during an earthquake. The Alquist-Priolo Earthquake Fault Zoning Act establishes standards regulating development adjacent to active faults and areas designated as Earthquake Fault Zones. The California Geological Survey designates faults as active, potentially active, or inactive. An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years. The project site is not situated within an Earthquake Fault Zone (Alquist-Priolo) as identified by the California Geological Survey, nor it is located within 1,000 feet of a mapped fault that is Holocene-Latest

Pleistocene age or younger (active within the last 11,000 years). Therefore, according to the Caltrans Memo to Designers 20-10, the structures are not considered susceptible to surface fault rupture hazards.

Strong Seismic Ground Shaking

The project parcel is in a seismically active area. The site, located at latitude 35.233830° and longitude -120.679169° is susceptible to strong earthquake-induced ground motions during the design life of the proposed structure. Based on the geologic map and nearby 1997 subsurface investigation, the time-average shear wave velocity (VS30) for the upper 100 feet of soil at the site is estimated to be about 627 feet per second (191 meters per second) which corresponds to Site Class D “Stiff Soil” according to the American Society of Civil Engineers 7 Standard.

The State regulates development in California through a variety of tools that reduce hazards from earthquakes and other geologic hazards. The latest Greenbook for Public Works Construction and/or the latest California Building Code contain provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards.

Seismic-Related Ground Failure, Including Liquefaction

Liquefaction refers to loose, saturated sand or gravel deposits that lose their load-supporting capability when subjected to intense shaking. According to the County of San Luis Obispo’s Planning and Building Department’s Liquefaction Hazards map, the site is in an area of low to moderate liquefaction potential. A search of the California Department of Conservation’s Seismic Hazards Zone online mapping tool does not indicate a seismic-related soil liquefaction potential.

Landslides

Landslides are the downslope movement of geologic materials. The risks associated with landslides occur when buildings or structures are placed on slopes. The project site is in an area of low to high potential for landslide risk on the Landslide Hazards County of San Luis Obispo map. The California Department of Conservation Seismic Hazards Zone online mapping tool does not show the project site in or near a landslide area. Also, the project site is not located in or near an area of reported landslide activities using the following resources:

- California Department of Conservation - Reported California Landslides Database
- California Department of Conservation - California Landslide Inventory

9.3.3 Surface and Groundwater

Surface water on the project site is anticipated to infiltrate the ground surface. Where infiltration does not occur, surface water in the southern portion of the property flows to the south and east toward East Fork San Luis Obispo Creek. Surface water in the northern portion of the property is anticipated to infiltrate the ground surface, or flow overland to the south. Surface water collects in the center of the property and drains southwest toward the confluence of a tributary and the main channel of San Luis Obispo Creek. Historical imagery appears to show that the natural low point within the site has existed since at least 1939.

The property is at the southwest flank of the San Luis Valley Groundwater Basin (3-009) (Department of Water Resources, 2004). This basin underlies the San Luis and Edna valleys and is bounded on the northeast by the Santa Lucia Range, on the southwest by the San Luis Range, and on all other sides by contact with impermeable Miocene and Franciscan Group rocks. The valley is drained by the San Luis Obispo, Prefumo, and Stenner creeks in the northwest, and by tributaries of Pismo and Davenport creeks in the southeast.

Groundwater within the upper sedimentary deposits in the property occurs in two separate zones. The upper Holocene-age alluvium consists of unconsolidated gravel, sand, silt, and clay of fluvial origin that reaches a maximum thickness of approximately 50 feet. The lower Pleistocene-age zone consists of alluvial terrace deposits as thick as 50 feet of the Paso Robles Formation, generally composed of unconsolidated to semi-consolidated conglomerate, sand, silt, gravel, and clay (Department of Water Resources, 1979).

According to published information on the Water Quality Control Board online database Geotracker, the first encountered groundwater in the area of the property is generally 20 feet below ground surface. The groundwater flow direction in the area of the property is variable, but tends to flow south or southeast. The groundwater table in the San Luis Obispo Valley is expected to vary due to seasonal rainfall and groundwater extraction for municipal and agricultural use.

A summary of groundwater conditions for the project area is shown in the Table 9.1.

Table 9.1 Surrounding Groundwater Information

Location of Borehole Number	Ground Surface Elevation (feet)	Groundwater Table Piezometric Depth (feet)	Groundwater Table Piezometric Elevation (feet)	Date Measured	Notes
State Well # 31S12E10H003M	122	12	110	March 2022	About 0.75 mile north of the site
Bridge # 49C-396 SLO-1	79.9	19.9	60.0	March 1997	About 0.65 mile southwest of the site
Bridge # 49C-396 SLO-2	78.6	17.6	61.0	March 1997	About 0.65 mile southwest of the site
Bridge # 49C-396 SLO-3	79.0	18.0	61.0	March 1997	About 0.65 mile southwest of the site

State Well #31S12E10H003M was observed to fluctuate between Elevation 104 to Elevation 115 feet during wetter and drier months such as April and October from the past 17 years of data. The preliminary groundwater table elevation is assumed to be at Elevation 95 feet for design purposes. Groundwater elevations at the project site (south parcel) have not been determined pending further geologic investigations. In comparison to the overall groundwater area and due to the highly variable nature of the existing groundwater flow paths, specific groundwater depths are unknown.

Per the Central Coast Regional Water Quality Control Board's Basin Plan, the general water quality objectives for all groundwater in the Central Coast area include tastes, odors, and radioactivity. Groundwater shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses. In addition, radionuclides shall not be present in concentrations deleterious to humans, plants, animals, or aquatic life.

9.3.4 Soils

Topsoil-Soil Survey Review

The U.S. Department of Agriculture Soil Survey Report for the project area lists the main soil Map Units (MU) as:

- Map Unit 129: Diablo clay (5 to 9 percent slopes): 52.8 percent

- Map Unit 130: Diablo and Cibo clays (9 to 15 percent slopes): 29.1 percent
- Map Unit 143: Gazos-Lodo clay loams (15 to 30 percent slopes): 9.3 percent
- Map Unit 169: Marimel sandy clay loam (occasionally flooded): 7.5 percent
- Map Unit 216: Tierra sandy loam (2 to 9 percent slopes): 1.3 percent

The preliminary site design is planned on Map Unit soils 129, 130 and 143, respectively. These clay soils are described as well drained and classified as soils with very high runoff.

Subsurface Conditions

According to a subsurface investigation for the San Luis Obispo Creek Bridge (49C-396) in 1997, three borings were performed to characterize ground conditions. Older alluvium (Qoa) was encountered around Elevation 70 feet in borings SLO-1 and SLO-2 on both abutments and around Elevation 47 feet in boring SLO-3 at the thalweg of the San Luis Obispo Creek. The older alluvium is mostly composed of interbedded clays with minor layers of sand and gravel less than 4 feet thick. Bedrock (Jos) was not encountered in any of the borings; however, weathered fragments of serpentinite were observed in the older alluvium. Cohesive soils varied between very soft to firm, while coarse-grained soils were loose to slightly dense. Older alluvium is underlain by mostly fill, recent channel alluvium (Qal) and older terrace alluvium (Qt), which is mostly composed of sand, gravel, and lean clays.

The above subsurface conditions are likely representative at the proposed site below approximately Elevation 80 feet. This information does not reflect the soil conditions at the site above approximately Elevation 80 feet due to a gap in elevations, along with a highly variable depositional environment. The soil inside of the drainage in the middle of the property most likely has unfavorable engineering properties due to constant historical erosion from rainfall.

Specific Soil Properties

The information below describes the anticipated soil properties based on information from the U.S. Department of Agriculture soil survey. Prior to the Final EIR, a geotechnical survey will provide more detail about the specific soil properties of the project site.

Erodibility

Erosion is the movement of rock fragments and soil from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. The main soils on

the project site are Map Unit (MU) 129: Diablo clay (5 to 9 percent slopes), MU 130: Diablo and Cibo clays (9 to 15 percent slopes), and MU 143: Gazos-Lodo clay loams (15 to 30 percent slopes). All three soils have a very high surface runoff rating and moderate soil erosion factors for water and wind.

Collapse

Collapse/hydro-consolidation mostly occurs in silt (wind-blown or soluble cementing agent), weakly bonded sand and alluvial or colluvial deposits within semi-arid to arid climate under inundation or submergence. Based on the anticipated soil type from the geologic map and soil map, collapse/hydro-consolidation is unlikely at the project site.

Subsidence

Subsidence is defined as the settlement of native materials due to construction equipment and fill loads during grading. Depending on the construction equipment to be used and proposed fill, ground subsidence is anticipated on an order of 0.15 feet to 0.25 feet for preliminary estimation purposes.

Liquefaction

Liquefaction potential is not known at this time but based on the anticipated subsurface soil type, liquefaction potential is not expected.

Liquefaction-induced Lateral Spreading and Lateral Spreading

Liquefaction-induced lateral spreading is not expected. Lateral spreading is the horizontal movement or spreading of soil toward an open face. The potential for failure from subsidence and lateral spreading is highest in areas where the groundwater table is high and where relatively soft and recent alluvial deposits exist. Lateral spreading hazards may also be present in areas with liquefaction risks. Due to low liquefaction risk, impacts are not expected. However, soils within the project area are characterized as Corducci-Typic Xerofluvents and Ballard fine sandy loams. These soil types in the project area are classified as Type C, which is the least stable type of soil.

Expansive Soil

Expansive soil is a soil/clay that is prone to expansion or shrinkage due directly to variation in water volume. Based on the geologic map and soil map, expansive soil may be present at the site. The U.S. Department of Agriculture soil survey rates all three of the dominant soils as very limited due to shrink-swell properties.

The California Building Code 2016, Chapter 1803.5.3 defines expansive soils the following way: Soils meeting all four of the following provisions shall be considered expansive, except that tests to show compliance with Items 1, 2 and 3 shall not be required if the test prescribed in Item 4 is conducted:

1. Plasticity index (PI) of 15 or greater, determined in accordance with ASTM D4318.

2. More than 10 percent of the soil particles pass a Number 200 sieve (75 µm), determined in accordance with ASTM D422.

3. More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D422.

4. Expansion index greater than 20, determined in accordance with ASTM D4829.

According to the U.S. Department of Agriculture Soil Survey Report, the three predominate soils have the following properties:

- MU 129: PI range 20-40; 50-95% pass a #200 sieve; and AASHTO classifications A-7 and A-6.
- MU 130: PI range 20-40; 70-95% pass a #200 sieve; and AASHTO classifications A-7
- MU 143: PI range 10-20; 45-70% pass a #200 sieve; and AASHTO classifications A-7

These interpretations are that the soils have a high clay and fine content with notable expansive properties. These soils are not best suited for building foundations and basements.

Based on the U.S. Department of Agriculture soil map, all the dominant soil units are rated as very limited due to slow water movement, depth to bedrock, and slope:

- Unit 129 is identified as hydrologic group C, which are soils that have a slow infiltration rate when thoroughly wetted. Unit 129 consists of moderately fine to fine texture, and commonly has a layer that impedes downward movement of water.
- Unit 130 is identified as hydrologic group D, which are soils that have a very slow infiltration rate when thoroughly wetted. Unit 130 chiefly consists of clay soils that have a high swelling potential, soils that have a permanent high-water table, soils that have a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material (Natural Resources Conservation Service 2007).

9.3.5 Paleontological Resources

Paleontological resources are the remains or traces of once-living organisms that are preserved in the geologic record as fossils. In geologically diverse California, vertebrate, invertebrate, and plant fossils are usually found in

sedimentary and metasedimentary deposits. Paleontological resources can include body fossils such as bones, teeth, shells, and leaves, trace fossils such as tracks, trails, burrows, and coprolites, and microfossils such as pollen grains, spores, diatoms, and foraminifera. Fossils are generally considered to be older than about 11,700 years (end of the Pleistocene Epoch), but organic remains older than middle Holocene age (about 5,000 years) can also be considered to represent fossils because they are part of the record of past life. Paleontological resources are considered to include not only the actual fossil remains and traces, but also the fossil-collecting localities and the geologic units containing those localities.

Wiegers (2011) delineates the alluvial units underlying the project site as Young alluvial valley deposits, unit 2, which are Holocene in age (less than about 11,000 years old), and Old alluvial valley deposits, which are late to middle Pleistocene in age (about 11,000 to 770,000 years old). A pedestrian (walk-through) survey of the project site was conducted on November 17, 2021 by Caltrans Environmental Engineering staff, while freshly graded cut slopes for the Buckley Road Extension project could be inspected. As observed during the survey, the old alluvial deposits were consistent with the description provided by Wiegers (2011) and were dominated by interbedded gravel-to-cobble conglomerates with silts and sands. Clasts were angular to subrounded and predominantly represented the Franciscan Assemblage. No fossils were observed during the survey.

Based on the known occurrence of vertebrate fossils from Pleistocene-age alluvial deposits in San Luis Obispo County, Pleistocene-age old alluvial valley deposits are assigned a high paleontological potential. Holocene-age alluvial valley deposits adjacent to San Luis Obispo Creek have a low paleontological potential due to their young geologic age (less than about 11,000 years old). It should also be noted that fossils are unlikely to be discovered in recent agricultural soils that may cover the upper roughly 2 feet of the project site.

9.4 IMPACT ANALYSIS

9.4.1 Methodology

The methods used to evaluate the environmental impacts of the project on geology, soils, seismicity, and paleontological resources include a review and assessment of the District Preliminary Geotechnical Report for D5 Maintenance State Relocation dated August 14, 2023, Paleontological Identification Report/Paleontological Evaluation Report dated August 29, 2023, U.S. Department of Agriculture soil survey, County of San Luis Obispo Planning and Building Department resources, and California Department of Conservation resources.

9.4.2 Criteria for Determining Significance

The project would result in a significant impact on geology, soils, seismicity, and paleontological resources if it would:

- 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? Refer to Division of Mines and Geology Special Publication 42.
  - Strong seismic ground shaking
  - Seismic-related ground failure, including liquefaction
  - Landslides
- Result in substantial soil erosion or the loss of topsoil
- 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
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property
- 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
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

9.5 Environmental Impacts

***Impact GEO-1: directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving a rupture of a known earthquake fault, seismic-related ground failure (including liquification), or landslides* – Less than Significant**

The project site is not within an Earthquake Fault Zone (Alquist-Priolo) as identified by the California Geological Survey, nor it is within 1,000 feet of a mapped fault that is Holocene-Latest Pleistocene age or younger (active within the last 11,000 years).

No liquefaction hazards were found on the County of San Luis Obispo's Planning and Building Department's Liquefaction Hazards map, or the

California Department of Conservation's Seismic Hazards Zone online mapping tool.

The project site is in an area of low to high potential for landslide risk on the Landslide Hazards County of San Luis Obispo map. The California Department of Conservation Seismic Hazards Zone online mapping tool does not show the project site in or near a landslide area. Also, the project site is not located in or near an area of reported landslide activities using the following resources:

- California Department of Conservation - Reported California Landslides Database
- California Department. of Conservation - California Landslide Inventory

For these reasons the project impacts would be Less than Significant.

***Impact GEO-2: directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking* – Less than Significant**

No known fault lines are on or in the immediate vicinity of the project site. However, the project is within a seismically active region of the state of California, and strong ground shaking should be expected during the life of the project. As a result, the site design will be engineered to withstand significant seismic activity. All onsite structures shall comply with applicable provisions of the 2010 California Building Code, local codes, and the most recent California Department of Transportation seismic design standards. As a result, impacts associated with potential seismic activity are expected to be Less than Significant.

***Impact GEO-3: result in substantial soil erosion or the loss of topsoil-* Less than Significant**

According to the U.S. Department of Agriculture Soil Survey Report for the project, the predominant three soils on the site have a very high surface runoff rating and moderate soil erosion factors for water and wind. Standard construction-related erosion control Best Management Practices will be implemented to address temporary erosion impacts during construction and long-term operation. Therefore, this impact is considered Less than Significant.

Impact GEO-4: be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence,

liquefaction or collapse - Less than Significant with Mitigation Incorporated

The soil zone within the upper 2 to 3 feet of the project site has the potential to be affected by seasonal changes in moisture content. Seasonal fluctuations in soil moisture and proximity to adjacent drainages (such as the East Fork of San Luis Creek) can result in geologic hazards from expansive soils, especially within the lower-elevation areas of the site where shallow groundwater is present. The volume change associated with this soil movement can stress and damage foundations, concrete flatwork, interior slabs-on-grade, and roadway pavements. These loose and saturated soils beneath the project site could potentially result in damage to permanent grading and structures (below and aboveground) proposed if not properly designed and constructed. Alternative 1 includes the potential for subsidence associated with the withdrawal of groundwater to be used for an onsite potable water system.

Construction of the project site would involve large amounts of grading. Earthmoving to balance the site will be completed by cutting into the higher elevations on the western edge of the site and moving that as fill on the eastern edge of the site. For this reason, a large retaining wall is proposed along the western edge of the project site. Import of engineered fill foundations is anticipated under proposed buildings and structures. Underground stormwater vaults are proposed to control flows on the northern half of the site, and a retention basin is proposed to control flows on the southern half of the site. Based on the project features and the generally known geologic conditions at the site, the following Mitigation Measures are proposed to reduce impacts.

Mitigation Measure GEO-1: Geotechnical Study and Design. A geotechnical study shall be prepared for the project site prior to site development. This report shall include an analysis of the liquefaction potential, soil settlement, subsidence, expansive soils, and an onsite wastewater disposal system.

If the project site is confirmed to be in an area prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures, transportation infrastructure, and subgrades shall comply with applicable methods of State and Local Building Codes, and all transportation infrastructure shall comply with the most current California Department of Transportation design standards. Suitable measures to reduce liquefaction impacts could include one or more of the following techniques, as determined by a registered geotechnical engineer:

- Specialized design of foundations by a structural engineer.
- Removal or treatment of liquefiable soils to reduce the potential for liquefaction.
- Drainage to lower the groundwater table to below the level of liquefiable soil.
- In-situ densification of soils or other alterations to the ground characteristics; or other alterations to the ground characteristics.

If the project site is identified to be in a high potential for settlement zone based on the Site Geotechnical Investigation, the building foundations, transportation infrastructure, and subgrades shall be designed by a structural engineer to withstand the existing conditions, or the site shall be graded in such a manner as to address the conditions. Suitable measures to reduce settlement impacts could include one or more of the following techniques, as determined by a qualified geotechnical engineer:

- Excavation and recompaction of onsite or imported soils.
- Treatment of existing soils by mixing a chemical grout into the soils prior to recompaction. Or,
- Foundation design that can accommodate certain amounts of differential settlement such as post tensional slab and/or ribbed foundations designed in accordance with the California Building Code.

If the potential for subsidence is found to be significant, then structural and grading engineering measures shall be implemented to incorporate the results of the geotechnical study. These measures would be like those recommended to mitigate impacts to soil settlement.

If the project site is identified to be in a high expansive soil zone based on the Site Geotechnical Investigation, the foundations and transportation infrastructure shall be designed by a structural engineer to withstand the existing conditions, or the site shall be graded in such a manner as to address the conditions. Suitable measures to reduce impacts from expansive soils could include one or more of the following techniques, as determined by a qualified geotechnical engineer:

- Excavation of existing soils and importation of non-expansive soils; and
- Foundation design to accommodate certain amounts of differential expansion such as post tensional slab and/or ribbed foundations designed in accordance with the California Building Code.

Mitigation Measure GEO-2: Groundwater use limitations during drought. Alternative 1 proposes an onsite groundwater well to support a potable drinking water system. Although the estimated water demand for the project is minimal, there is still a potential for subsidence. Therefore, during drought

periods, groundwater pumping limitations for the unconsolidated aquifer underlying the project site shall be assessed and implemented to prevent soil subsidence as necessary.

***Impact GEO-5: be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property*- Less than Significant with Mitigation Incorporated**

Based on U.S. Department of Agriculture soil survey information, there are potentially expansive soils at the project site. Mitigation Measure GEO-1 is included to reduce impacts.

Mitigation Measure GEO-1 applies.

***Impact GEO-6: 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* - Less than Significant with Mitigation Incorporated**

Alternative 1 proposes an onsite wastewater disposal system in the form of a septic tank and leach field along the western edge of the project site. The existing soil conditions could create a significant impact on the ability of the soil to be used for this purpose. Soils would need to be amended, or the design of the system would need to address incompatible soils. Mitigation Measure GEO-1 applies to lessen the potential impact.

Mitigation Measure GEO-1 applies.

***Impact GEO-7: directly or indirectly destroy a unique paleontological resource or site or unique geologic feature* - Less than Significant with Mitigation Incorporated**

Construction of the project would involve extensive earthwork, primarily during grading to level the site, excavations for building foundations, and trenching for installation of utilities. Much of this earthwork would occur in previously undisturbed deposits of high paleontological potential (Pleistocene-age old alluvial valley deposits) and therefore has the potential to unearth scientifically significant fossils, the destruction of which would adversely affect paleontological resources.

Placement of generated fill or other earthwork that does not involve disturbance of native sediments would not affect paleontological resources because it would not disturb paleontologically sensitive strata. Similarly, surficial earthwork that would only disturb the upper 1 to 2 feet (such as clearing and grubbing) is expected to be limited to agricultural topsoil where fossils are unlikely to be found.

Potential impacts to paleontological resources can be reduced with the development and implementation of a paleontological mitigation plan that centers around paleontological monitoring during construction. Implementation of a plan would involve paleontological monitoring of earthwork in high paleontological potential deposits, salvage of discovered fossils that are scientifically significant, preparation and identification of the recovered fossils, and curation of the prepared fossils into an accredited scientific repository where they would remain in perpetuity. After construction, a paleontological mitigation report should be prepared to summarize the results and conclusions of the paleontological mitigation plan.

The following measures are recommended to reduce potential impacts to paleontological resources:

Mitigation Measure GEO-PAL-1: Develop a Paleontological Mitigation Plan. Caltrans shall retain a Principal Paleontologist that meets Caltrans qualifications to prepare or oversee preparation of a paleontological mitigation plan during the project design phase once more detailed project plans are available.

Mitigation Measure GEO-PAL-2: Implement a Paleontological Mitigation Plan. During construction, Caltrans shall retain a Principal Paleontologist that meets Caltrans qualifications to implement the prepared paleontological mitigation plan during construction. Implementation of the paleontological mitigation plan will follow Caltrans standards and involve:

- Conducting Worker Environmental Awareness Training.
- Paleontological monitoring of earthwork operations that disturb high paleontological potential deposits.
- Evaluating fossil discoveries and collecting scientifically significant fossils. Paleontological monitors have the authority to temporarily halt or divert earthwork in the vicinity of a fossil discovery.
- Preparation, identification, and cataloguing collected fossils. Fossils will be curated into an accredited scientific repository as designated in the paleontological mitigation plan.
- Preparation of a final Paleontological Mitigation Report that summarizes results of construction monitoring and conforms with Caltrans guidelines.

CHAPTER 10 Greenhouse Gas Emissions and Energy

10.1 OVERVIEW

This chapter describes the regulatory and environmental setting and potential impacts of the project related to greenhouse gas emissions and energy and then evaluates impacts related to the project's forecasted energy usage and greenhouse gas emissions. This may include fuel and electricity consumption during construction and operation, as well as consistency with state or local plans for renewable energy or energy efficiency.

10.2 REGULATORY SETTING

10.2.1 Federal Laws, Regulations, and Policies

Corporate Average Fuel Economy and Greenhouse Gas Emissions Standards

The federal government is responsible for establishing regulations to improve fuel economy and energy efficiency to address climate change and its associated effects

The most important of these was the Energy Policy and Conservation Act of 1975 (42 U.S. Code Section 6201) as amended by the Energy Independence and Security Act of 2007, and Corporate Average Fuel Economy Standards. The U.S. Department of Transportation's National Highway Traffic and Safety Administration sets and enforces the Corporate Average Fuel Economy standards based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

The National Highway Traffic and Safety Administration Corporate Average Fuel Economy standards regulate how far vehicles must travel on a gallon of fuel. The National Highway Traffic and Safety Administration sets Corporate Average Fuel Economy standards for passenger cars and for light trucks (collectively, light-duty vehicles), and separately sets fuel consumption standards for medium- and heavy-duty trucks and engines (National Highway Traffic and Safety Administration 2021).

Jointly with Corporate Average Fuel Economy, National Highway Traffic and Safety Administration also regulates greenhouse gas emissions from vehicles of various weight classes.

The Corporate Average Fuel Economy and greenhouse gas standards have been rolled out in multiple phases. Between 2011 and 2021 the Environmental Protection Agency and National Highway Traffic and Safety Administration have announced and amended standards to reduce greenhouse gas emissions and improve fuel efficiency. In 2021 the Environmental Protection Agency and National Highway Traffic and Safety Administration repealed certain standards that may have overstepped the agency's authority by issuing regulations in preemption of state and local laws related to fuel economy standards

On December 7, 2022, the Biden-Harris Administration announced the first-ever Federal Building Performance Standard. The Federal Building Performance Standard requires agencies to cut energy use and electrify equipment and appliances to achieve zero scope 1 emissions in 30 percent of the building space owned by the Federal government by square footage by 2030. Several states have joined the President's National Building Performance Standard Coalition. The National Building Performance Standards Coalition comprises a nation-wide group of state and local governments that have committed to inclusively design and implement equitable building performance standards and complementary programs and policies, working to advance legislation and/or regulation, with a goal of adoption by Earth Day, 2024. With the coalition and the new Federal Building Performance Standard, one quarter of all commercial, Federal, and multifamily buildings in the United States are now either covered by or moving toward sustainable building performance standard policies.

The U.S. EPA has implemented a mandatory greenhouse gas emission reporting regulation (40 Code of Federal Regulation Part 98) which requires certain industries to report annually their greenhouse gas emissions. The project is not a mandatory industry and will likely be below the reporting threshold.

The U.S. EPA, under the Greenhouse Gas Tailoring rule, has mandated Prevention of Significant Deterioration and Title V requirements applies to facilities whose stationary source carbon dioxide equivalents emissions exceed 100,000 tons per year. The project will have greenhouse gas emissions less than 100,000 tons so the tailoring rule is not applicable.

Energy Policy Act

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. This act included establishing energy-related tax incentives for energy efficiency and conservation; renewable energy; oil and gas production; and electricity generation and transmission. The act also established increased amounts of renewable fuel (such as ethanol or biodiesel) to be used in gasoline sold in the U.S.; provisions to increase oil

and natural gas production on federally owned lands; and federal reliability standards regulating the electrical grid.

10.2.2 State Laws, Regulations, and Policies

Greenhouse Gas Emissions

In recent years, California has enacted a number of policies and plans to address greenhouse gas emissions, energy, and climate change.

In 2005, Executive Order S-3-05 was passed with the goal to reduce California's greenhouse gas emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which set the overall goals for reducing California's greenhouse gas emissions to 1990 levels by 2020. Senate Bill (SB) 32 codified an overall goal for reducing California's greenhouse gas emissions to 40 percent below 1990 levels by 2030.

In 2012, Executive Order B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050.

In 2015, Executive Order B-30-15 establishes an interim statewide greenhouse gas emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets. It also directs the Air Resource Board to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. [greenhouse gases differ in how much heat each traps in the atmosphere, called global warming potential. Carbon dioxide is the most important greenhouse gas, so amounts of other gases are expressed relative to carbon dioxide, using a metric called "carbon dioxide equivalent,". The global warming potential of carbon dioxide is assigned a value of 1, and the global warming potential of other gases is assessed as multiples of carbon dioxide.] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every 3 years, and to ensure that its provisions are fully implemented.

In 2016, SB 32, Chapter 249, codifies the greenhouse gas reduction targets established in Executive Order B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

California Air Resources Board has completed rulemaking to implement several greenhouse gas emission reduction regulations and continues to investigate the feasibility of implementing additional greenhouse gas emission reduction regulations.

These include the low carbon fuel standard, which reduces greenhouse gas emissions associated with fuel usage, and the Renewables Portfolio Standard , which requires electricity suppliers to increase the amount of electricity generated from renewable sources to certain thresholds by various deadlines. In 2018, Senate Bill 100 updated the Renewables Portfolio Standard to require 50 percent renewable resources by the end of 2026, 60 percent by the end of 2030, and 100 percent renewable energy and zero carbon resources by 2045.

In 2018 Executive Order B-55–18 signed by Governor Brown set a goal of statewide carbon neutrality by 2045 and net negative emissions thereafter. This goal is in addition to existing statewide targets of reducing greenhouse gas emissions.

The California Building Code (Title 24) governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect greenhouse gas emissions associated with buildings.

California Air Resources Board approved the First Update to the Assembly Bill 32 Scoping Plan on May 22, 2014 (California Air Resources Board 2014). This update defines climate change priorities for the next 5 years and also sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012. The update also highlights California’s progress toward meeting the near-term 2020 greenhouse gas emission reduction goals and evaluates how to align the State's longer term greenhouse gas reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. California Air Resources Board released and adopted a 2017 Scoping Plan Update (California Air Resources Board 2017) to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 (California Air Resources Board 2021a). The Scoping Plan Update developed statewide inventory projection data for 2030, as well as identified reduction strategies capable of securing emissions reductions that allow for achievement of the Executive Order’s new interim goal (California Air Resources Board 2017). Emission reduction strategies in the 2017 Scoping Plan Update include continuation of the Cap-and-Trade Program through 2030 and incorporates a Mobile Source Strategy that includes strategies targeted to increase Zero Emission Vehicle fleet penetration and a

more stringent target for the Low Carbon Fuel Standard by 2030. The Second Update also incorporates approaches to cutting short-lived climate pollutants under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by California Air Resources Board in March 2017) and acknowledges the need for reducing emissions in agriculture and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon.

California Air Resources Board has implemented a mandatory reporting regulation for greenhouse gas emissions for several industries. The project is not a mandatory industry and will likely be below the reporting threshold.

State Vehicle Fleet Regulations

SB 498 requires state agencies, starting no later than the 2024-2025 fiscal year, to ensure that at least 50 percent of the light-duty vehicles purchased for the state vehicle fleet each year are zero-emission. In addition to the statutory targets for transitioning the state fleet to increasing levels of zero-emission vehicles, ZEV-first purchasing mandates are applicable to all state agencies that purchase vehicles for the state fleet. These mandates prioritize pure ZEVs (battery electric and hydrogen fuel-cell vehicles), though allowing for plug-in hybrids and other vehicles to be purchased if the purchasing agency can demonstrate why a pure ZEV cannot meet their transportation requirements.

Energy

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (California Energy Commission 2021). The 2019 Integrated Energy Policy Report (California Energy Commission 2020) describes California's progress in renewable electricity sources and notes that additional solar and wind resources are needed to reach the goal to cut emissions from the electricity sector to zero while meeting an increasing demand and maintaining energy reliability, controlling costs, and ensuring that benefits reach all Californians. A key challenge is that about 75 percent of the available flexible capacity comes from natural gas power plants as the electricity market grows resources such as energy storage and demand management will help to better integrate renewables and decrease the use of natural gas especially for flexible capacity. Improving building energy use including transitioning to electric water and space heating options as well as integration of smart technologies are a key part of the energy policy. A key policy is implementation of zero-emission vehicles to reduce air pollution. This will require increasing the availability of refueling infrastructure.

The California Energy Commission also provides rules and regulation for building energy efficiency and publishes the Building Energy Efficiency Standards for residential and nonresidential Building. The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then and directed by statute. The Building Energy Efficiency Standards contains energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the California Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Building Energy Efficiency Standards includes both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. The 2022 Energy Code development and adoption process continues a longstanding practice of combining technical rigor, challenging but achievable design and construction practices, public engagement, and full consideration of the views of stakeholders.

Renewables Portfolio Standard

California's Renewables Portfolio Standard, updated in 2018 under SB 100, sets a goal of obtaining 100 percent zero-carbon electricity for the State by 2045. Interim targets are established to achieve 33 percent electricity produced from renewable sources by 2020 and 50 percent by 2026.

California Building Code Title 24

The California Building Code (Title 24) governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect greenhouse gas emissions associated with buildings.

Climate Change Scoping Plan

The energy sector is one of the key sectors targeted in the Climate Change Scoping Plan, which has the following goals and actions related to energy that may apply to the project, reasonably foreseeable distribution components, and alternatives (California Air Resources Board 2017):

- Achieve sector-wide, publicly owned utility, and load-serving entity specific greenhouse gas reduction planning targets set by the State through Integrated Resource Planning.
- Reduce fossil fuel use.
- Reduce energy demand.

- Reduce dependence on fossil natural gas.

Federal Building Performance Standard

In December 2022, the State of California announced it is joining the President's National Building Performance Standard Coalition, and have committed to inclusively design and implement equitable building performance standards and complementary programs and policies, working to advance legislation and/or regulation

10.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

10.3 ENVIRONMENTAL SETTING

10.3.1 Greenhouse Gas Emissions

Climate change results from the accumulation in the atmosphere of greenhouse gas, which are produced primarily by the burning of fossil fuels for energy. Because greenhouse gases (carbon dioxide, methane, and nitrous oxide) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. greenhouse gas emissions are typically reported in quantities of carbon dioxide equivalent which converts all greenhouse gases to an equivalent basis taking into account their global warming potential compared to carbon dioxide.

Anthropogenic (human-caused) emissions of greenhouse gases are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

In 2020, emissions from greenhouse gas emitting activities statewide were 369.2 million metric tons of carbon dioxide equivalent, 35.3 million metric tons of carbon dioxide equivalent lower than 2019 levels and 61.8 million metric tons of carbon dioxide equivalent below the 2020 greenhouse gas Limit of 431 million metric tons of carbon dioxide equivalent. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. Economic recovery from the pandemic may result in emissions increases over the next few years. As such, the total 2020 reported emissions are likely an anomaly, and any near-term increases in annual emissions should be considered in the context of the pandemic. The most notable highlights in the 2022 edition inventory include:

- The transportation sector showed the largest decline in emissions of 27 million metric tons of carbon dioxide equivalent (16 percent) compared to 2019. This decrease was most likely from light-duty vehicles after shelter-in-place orders were enacted in response to the COVID-19 pandemic.
- Industrial sector emissions dropped 7 million metric tons of carbon dioxide equivalent (9 percent) compared to 2019. The decrease is driven by lower emissions from both the refining sector and the oil and gas production sector.
- Electricity sector emissions remained at a similar level as in 2019 despite a 44 percent decrease in in-state hydropower generation (due to below average precipitation levels), which was more than compensated for by a 10 percent growth in in-state solar generation and cleaner imported electricity incentivized by California’s clean energy policies.
- Between 2019 and 2020, California’s Gross Domestic Product contracted 2.8 percent, while the greenhouse gas intensity of California’s economy (greenhouse gas emissions per unit Gross Domestic Product) decreased 6.2 percent.

In May 2010, San Luis Obispo County adopted a greenhouse gas inventory as part of the Conservation and Open Space Element of the General Plan. The inventory calculates municipal and community-wide emissions caused by activities in 2006, including transportation, waste, agriculture, energy, and aircraft related activities. The inventory establishes a baseline against which future changes in emissions can be measured. The inventory update found that the unincorporated San Luis Obispo community emitted 917,700 metric tons of carbon dioxide equivalent in 2006. On-road vehicles were the greatest

contributor to the county's baseline emissions (40 percent). Commercial/industrial energy use and residential energy use were the next largest contributors, with 24 percent and 15 percent of overall emissions, respectively.

The project would replace and relocate two existing facilities that currently use energy for employee travel and operations. The existing facilities compose approximately 71,000 square feet of structures, including office space, shops, storage, and other miscellaneous uses. The existing facilities have 155 employees that conduct activities similar to those that would take place at the proposed project facility.

10.3.2 Climate Setting

The County's climate is Mediterranean with warm dry summers and cool damp winters. Inland areas typically experience a wider range of temperatures than on the coast due to the separation of regions by coastal mountain ranges. The warmest month in the County is generally September and the coolest month is January. Maximum temperatures in the summer in coastal areas average about 70 degrees Fahrenheit, while temperatures in the high 90s are typical in the inland valleys. Average minimum winter temperatures is 48 degrees Fahrenheit, but can drop to the 30s along the coast to the 20s inland (Western Regional Climate Center 2016).

The County's meteorology is largely controlled by a persistent high-pressure system over the eastern Pacific Ocean. The Pacific high-pressure system remains generally fixed several hundred miles offshore from May through September. Coastal fog and low clouds often form in the marine layer along the coast, lessening in the warmer interior valleys (City of San Luis Obispo 2014).

The speed and direction of local winds are influenced by the location and strength of the Pacific high-pressure system, by topographical features and by circulation patterns resulting from temperature differences between land and sea. In spring and summer, when the Pacific high-pressure system is at its strongest, onshore winds from the northwest generally prevail during the day. In the fall, onshore surface winds decline, and the marine layer grows shallow, allowing an occasional weak offshore wind. Strong inversions, or a deviation in the typical decrease in temperature with respect to altitude, can form at this time; this effect is intensified when the Pacific high-pressure system weakens and moves inland to the east. This may produce a condition known as Santa Ana winds where air is transported into the County from the east and southeast. The break-up of this condition generally occurs within seven days.

Local meteorological conditions in the Project vicinity typically consist of average temperatures varying from 40 to 70 degrees Fahrenheit seasonally,

with precipitation observed 33 percent of the year, mainly from December through March. Wind speeds vary from 0 to 20 miles per hour throughout the year, and the wind is most often out of the northwest and west. Approximately 90 percent of the total annual rainfall in the County occurs between November and April; however, rainfall amounts can vary considerably among different regions in the County. Annual rainfall averages from 16 to 28 inches in the Coastal Plain, while the Upper Salinas River Valley receives approximately 12 to 20 inches of rain annually. The Carrizo Plain is the driest area of the County, receiving an average of less than 12 inches of rain per year (San Luis Obispo County Air Pollution Control 2001)

10.4 IMPACT ANALYSIS

10.4.1 Methodology

Construction-Related Emissions

The project construction-related emissions were modeled using the California Emissions Estimator Model (CalEEMod). Construction emissions were quantified based on the preliminary construction schedule provided by the Design group. Approximately 15,000 square feet of existing structures would be demolished. Additional construction information, such as equipment use, worker vehicle trips, and equipment load factors, was not available and was based on default parameters contained in the model. Modeling assumptions and output files are included in Appendix B of the Air Quality Report.

Operational Emissions

Long-term operational emissions of criteria air pollutants associated with the project were also calculated using the CalEEMod, computer program. The CalEEMod program includes quantification of emissions from various emission sources, including energy use, area sources, and motor vehicle trips. Non-transportation and transportation source emissions were quantified based largely on the default parameters contained in the model. Also, transportation source operational emission analysis was conducted using the CT-EMFAC model.

Mobile Sources

The operational analysis assumes that 29 additional workers will be needed to support operations related to the project. Trip distances were derived from the Transportation Study developed for the project. Mobile source emissions related to these vehicle trips and the associated fugitive dust (brake wear, tire wear, and re-entrained roadway dust) from vehicle trips were estimated using CalEEMod, with the default trip rates and distances adjusted to reflect the above-noted project-specific data inputs. Note that, for the purposes of modeling emissions in CalEEMod to reflect the vehicle miles traveled (VMT) estimates provided by the Traffic Study for the project, the “Trip Purpose”

inputs in CalEEMod were revised to account for 100 percent of trips as primary trips, thereby not resulting in a discounted vehicle miles traveled by the CalEEMod model for diverted or pass-by trips. In addition, the vehicle miles traveled outputs from CalEEMod are slightly higher than those provided in the traffic study for the project, as the traffic study accounted for daily worker commute trips, but not the intermittent walk-in or delivery vehicle trips, which were accounted for in the estimates of air pollutant as they may not contribute to traffic impacts due to the intermittent nature of such trips, but would contribute to annual operational emissions resulting from the project.

10.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines and professional expertise, it was determined that the project would result in a significant impact related to greenhouse gas emissions if it would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

The project would result in a significant impact to energy if it would:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

For construction-related greenhouse gas emissions, there is no significance of threshold value set by San Luis Obispo Air Pollution Control District. According to the San Luis Obispo Air Pollution Control District's 2012 CEQA handbook, greenhouse gases from construction projects must be quantified and amortized over the life of the project. The amortized construction emissions must be added to the annual average operational emissions and then compared to the operational thresholds for Project-Level Operational Emissions analysis. To amortize the emissions over the life of the project, it is advised to calculate the total greenhouse gas emissions for the construction activities, divide it by the project life (i.e., 50 years for residential projects and 25 years for commercial projects), then add that number to the annual operational phase greenhouse gas emissions.

For operational-related greenhouse gas emissions, the San Luis Obispo Air Pollution Control District's bright-line threshold of 1,150 metric tons of carbon dioxide equivalent per year and the efficiency threshold of 4.9 metric tons of

carbon dioxide equivalent per year service population were previously applicable to residential and commercial projects. These thresholds were based on a gap analysis and were used in CEQA evaluations for projects to demonstrate their consistency with the state's 2020 greenhouse gas emission reduction goal from the Global Warming Solutions Act (AB 32) and the 2008 California Air Resources Board's (California Air Resources Board) Climate Change Scoping Plan. In 2015, the California Supreme Court issued an opinion in the Center for Biological Diversity versus California Department of Fish and Wildlife (Newhall Ranch), which determined that AB 32-based thresholds derived from a gap analysis are invalid for projects with a planning horizon beyond 2020.

Since the bright-line and service population greenhouse gas thresholds in the San Luis Obispo Air Pollution Control District Handbook are Assembly Bill 32 based and project horizons are now beyond 2020, the San Luis Obispo Air Pollution Control District does not recommend the use of these thresholds in CEQA evaluations. In lieu of these thresholds, the following can be considered:

1.Consistency with a Qualified Climate Action Plan: Climate Action Plans conforming to CEQA Guidelines Sections 15183 and 15183.5 would be qualified and eligible for project streamlining under CEQA. San Luis Obispo Air Pollution Control District recommends reviewing the Newhall Ranch case, where the California Supreme Court identified that compliance with a local qualified Climate Action Plan is one potentially acceptable method for meeting CEQA requirements. The San Luis Obispo Air Pollution Control District also recommends reviewing guidance from other existing and future relevant court cases.

2.No-net Increase: On page 101, California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) states that no-net increase in greenhouse gas emissions relative to baseline conditions "is an appropriate overall objective for new development." The Newhall Ranch project demonstrated that no-net greenhouse gas increase was feasible and defensible. Or,

3.Lead Agency Adopted Defensible CEQA greenhouse gas Thresholds: Meeting Local greenhouse gas Emission Targets with Best Management Practices: On April 23, 2020, the Sacramento Metropolitan Air Quality Management District adopted Greenhouse Gas Thresholds for Sacramento County. This substantial evidence-based document sets Senate Bill 32-based local greenhouse gas emission targets for 2030 by evaluating the greenhouse gas inventory for local emission sectors relative to statewide sector inventories and the state's greenhouse gas reduction target of 40 percent below 1990 levels.

4.Greenhouse gas Bright-line and Efficiency Thresholds: Senate Bill 32-based local bright-line and operational efficiency thresholds can be

established by evaluating local emission sectors in a jurisdiction's greenhouse gas inventory relative to statewide sector inventories and the state's greenhouse gas reduction target of 40 percent below 1990 levels. This approach is found in earlier drafts of the Sacramento Metropolitan Air Quality Management District SB 32 threshold work, and the Association of Environmental Professionals Climate Change Committee may provide guidance on a similar approach.

For the project's greenhouse gas impact analysis, Caltrans has used the Sacramento Metropolitan Air Quality Management District-adopted Greenhouse Gas Thresholds for Sacramento County (item number 3 above). The greenhouse gas thresholds from the Sacramento Metropolitan Air Quality Management District-adopted Greenhouse Gas Thresholds for Sacramento County are shown in Table 10.1.

Table 10.1 Greenhouse Gas Thresholds of Significance (Sacramento Metropolitan Air Quality Management District, 2020)

Project Phase	Requirement and/or Threshold
Construction Phase	1,100 metric tons per year greenhouse gas as carbon dioxide equivalent
Operational Phase	All projects must implement tier 1 Best Management Practices (Best Management Practices 1 and 2): Best Management Practice 1 - projects shall be designed and constructed without natural gas infrastructure. Best Management Practice 2 - projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle ready. Projects that exceed 1,100 metric tons per year after implementation of tier 1 Best Management Practice must implement tier 2 Best Management Practice (Best Management Practice 3): BMP 3 - residential projects shall achieve a 15 percent reduction in vehicle miles traveled per resident and office projects shall achieve a 15 percent reduction in vehicle miles traveled per worker compared to existing average vehicle miles traveled for the county, and retail projects shall achieve a no net increase in total vehicle miles traveled to show consistency with SB 743.

10.4.3 Environmental Impacts

***Impact GHG/E-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment —* Less than Significant**

Short-term Construction Impacts

Construction-related greenhouse gas emissions would result from the combustion of fossil-fueled construction equipment, material hauling, and worker trips. These emissions were estimated using the CalEEMod computer model, with default assumptions as described in the methodology section. The project's construction-related greenhouse gas emissions are estimated at 665 metric tons of carbon dioxide equivalents, which are amortized over the 25 years and added to estimated annual the long-term emissions for impact consideration discussed below.

In compliance with Caltrans construction standards meant to minimize the greenhouse gas emissions generated from construction activities, the project will reduce construction waste and maximize the use of recycled materials, conserve water use, prioritize the use of recycled water, limit idling time to 5 minutes for construction equipment not in active operation, and reduce the need for transport of earthen materials by balancing the cut and fill quantities. Therefore, the greenhouse emissions related to construction are considered Less than Significant.

Long-term Operational Impacts

Operational greenhouse gas emissions would result from fossil-fueled equipment and motor vehicles, building energy use, water use, and solid waste. The project's operational emissions were estimated with the CalEEMod model using assumptions detailed in the methodology above. Long-term increases in operational emissions associated with the project would be predominantly associated with area sources (e.g., landscape maintenance activities, use of consumer products), mobile exhaust and energy use. Some additional sources of greenhouse gas emissions were likely not quantified at this time due to lack of sufficient detail available at this conceptual stage of the project.

Table 10.2 shows the estimated long-term operational greenhouse gas emissions of the project. Further details of these greenhouse gas emissions calculations can be found in Appendix B of the Air Quality Report. The operational emissions are estimated to be 1,560 metric tons of carbon dioxide equivalents per year. This annual carbon dioxide equivalent estimation includes 68.3 percent (1,065 metric tons of carbon dioxide equivalents) emissions associated with mobile exhaust source. Mobile exhaust emissions related to the Caltrans Maintenance fleet is expected to decrease as it transitions to electric vehicles. The Maintenance Fleet will add approximately 10 electric vehicles in the next 5 years. Therefore, a potential increase of

mobile emissions would be related to an increase of 29 employees and their associated daily trips. As mentioned in the vehicle miles traveled screening memo prepared by Advanced Civil Technologies (Appendix A of the Air Quality Report), the project will generate approximately 90 trips per day. In other words, the net increase in mobile source emissions of the project is associated with the generation of 90 daily trips located 2 miles away from the existing facility. As a result, the annual carbon dioxide equivalent increase in emissions from mobile exhaust source will be minimal. The remaining 31.7 percent (522 metric tons of carbon dioxide equivalents per year) is used to determine whether the project exceeds the annual threshold of significance and requirements established by Sacramento Metropolitan Air Quality Management District in Table 10.1.

The net carbon dioxide equivalent emission of 522 metric tons per year is less than 1,100 metric tons carbon dioxide equivalent threshold identified in Table 10.1, without implementation of Best Management Practices. Also, the estimated net carbon dioxide equivalent emission of 522 metric tons carbon dioxide equivalent per year does not account for the annual emissions associated with the existing facilities, meaning the net carbon dioxide equivalent will likely be less than 522 metric tons. Operational emissions of the new facility would be partially or fully offset by eliminating emissions from the existing facilities. In addition, the new facility would be constructed consistent with current California building codes and with a target to achieve a Leadership in Energy and Environmental Design Silver certification and CalGreen Tier 2 standards, which substantially reduce the energy and water use for new buildings compared to the standards in effect when the existing facilities were constructed. Therefore, the greenhouse gas emissions related to long-term operation are considered Less than Significant

Table 10.2 Annual Operational Greenhouse Gas Emissions

Operational Emission Scenario	Carbon Dioxide Equivalent
Annual maximum metric tons per year	1,560
Amortized Construction Annual metric tons per year	27
Total Operation + Construction metric tons per year	1,587

Impact greenhouse gas/E-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases — Less than Significant

The State of California has implemented Assembly Bill 32, Senate Bill 32, and multiple Executive Orders to reduce greenhouse gas emissions. The project does not pose any conflict with the most recent list of California Air Resources Board’s early action strategies, nor is it one of the sectors at which measures

are targeted. The First Update to the Assembly Bill 32 Scoping Plan and California's 2017 Climate Change Scoping Plan (California Air Resources Board 2017b) did not mention similar projects as a specific target for additional strategies, but emission reductions at the project site would be influenced by decisions relating to target sectors such as water, waste, natural resources, clean energy, transportation, and land use.

The project is consistent with the State's and Caltrans' fleet policies to increase zero electric vehicles to the extent feasible while still performing their service to the state highway system. The project would not be required to report emissions to California Air Resources Board. Therefore, emissions generated by the project would not be expected to have a substantial contribution to the ongoing impact on global climate change. For these reasons, the project would not conflict with Assembly Bill 32 and the Climate Action Plan. Therefore, this impact would be Less than Significant.

Impact GHG/E-3: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation — Less than Significant

This evaluation considers the extent to which the project would affect energy resources during construction and operation of the project. Effects on energy resources are evaluated based on the energy demand of the project. This includes the direct consumption of diesel, gasoline, natural gas, and electricity.

The indirect life cycle of the various products and equipment to be used during construction activities would include several forms of energy consumption that are imbedded in a product's manufacturing and distribution. For example, petroleum products may serve as precursors that would be the raw material used in manufacturing construction equipment, and the manufacturing process would likely use natural gas and electricity. Petroleum-based fuels would be used to bring products from the place they are manufactured to the location where they are to be used. Other raw materials such as steel and cement contain large amounts of embodied energy to produce the material that may be used onsite during construction. Since the details of embodied energy in material is complex and would be speculative as to the amount of energy embedded, the indirect life-cycle energy is not included in this analysis.

The project's construction activities would require the consumption of energy (fossil fuels) for construction equipment, worker vehicles, and truck trips. Caltrans construction standards to reduce greenhouse emissions and energy consumption will be utilized. The project's operations would require electricity-based energy use for the building, diesel for the emergency generator, and gasoline/diesel for employee and fleet vehicle trips. Energy consumption

during operations would be minimized by building the facility to meet Title 24 energy and resource standards requirements and help achieve Leadership in Energy and Environmental Design Silver and CalGreen Tier 2 standards.

The energy consumption during construction and operations is necessary for the continued successful maintenance of the District 5 state highway system. The future operational activities will not be a new source of energy consumption as the same operations are currently ongoing at the existing facilities. These activities would not cause wasteful, inefficient, and unnecessary consumption of energy or cause a substantial increase in energy demand and the need for additional energy resources; therefore, the impact would be Less Than Significant.

***Impact GHG/E-4: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency* — Less than Significant**

The project would not conflict with or obstruct any state or local goals, policies, or implementation action identified in the applicable energy plans such as the Integrated Energy Policy Report because the project would be completed as efficiently as possible, and the building would be designed to meet required efficiency standards. Therefore, the project would not conflict with any plans relating to renewable energy or efficiency, and the impact would be Less than Significant.

CHAPTER 11 Hazards and Hazardous Materials

11.1 OVERVIEW

This section describes potential impacts of the project concerning hazards and hazardous materials. Risks from hazardous material and/or hazardous waste include storage, spills and releases, or existing contamination. Hazards related to proximity to airports, wildland fires, and emergency response are also addressed.

Hazardous materials include, but are not limited to, petroleum-based products (such as solvents, fuels, lubricants), paints, sealants, pesticides, herbicides, reprographic fluids, and electrical waste (such as batteries, electronics, light bulbs, and ballasts). Hazardous materials may be encountered due to illegal releases, accidental spills, or past land uses. The discovery of hazardous materials may require both an immediate emergency response and/or a longer-term remedial action by an identified responsible party.

11.2 REGULATORY SETTING

11.2.1 Federal Laws, Regulations, and Policies

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (42 U.S. Code Section 6901 et seq.) was enacted in 1976 to address the increasing problems the nation faced from the growing volume of municipal and industrial solid waste. The Resource Conservation and Recovery Act sets national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner. To achieve these goals, the Resource Conservation and Recovery Act established three interrelated programs: the solid waste program, the hazardous waste program, and the underground storage tank program.

The hazardous waste program established a system for controlling hazardous wastes from the time they are generated to the time they are disposed ("cradle-to-grave" management). Under the Resource Conservation and Recovery Act, owners and operators of hazardous waste treatment, storage, and disposal facilities must follow a set of standards (such as facility design and operation, contingency planning and emergency preparedness, and

recordkeeping) to minimize risk and impacts on human health and the environment, codified in Title 40 of the Code of Federal Regulations Part 264.

Clean Water Act

The Clean Water Act is the main federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. Section 402 of the Clean Water Act regulates stormwater discharges to surface waters through the National Pollutant Discharge Elimination System program. The U.S. Environmental Protection Agency has delegated authority to the State Water Resources Control Board for administration of the National Pollutant Discharge Elimination System program in California, where it is implemented by the State's nine Regional Water Quality Control Boards. Under the National Pollutant Discharge Elimination System Phase II Rule, any construction activity disturbing 1 acre or more must obtain coverage under the State's General Permit for Storm Water Discharges Associated with Construction Activity (General Permit). General Permit applicants are required to prepare and implement a Storm Water Pollution Prevention Plan that describes the Best Management Practices that will be implemented to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

Hazardous Materials Transportation Act

The transportation of hazardous materials is regulated by the Hazardous Materials Transportation Act, which is administered by the U.S. Department of Transportation. The act governs the safe transportation of hazardous materials by all modes, excluding bulk transportation by water. The U.S. Department of Transportation regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers. The U.S. Department of Transportation regulations pertaining to the actual movement govern every aspect of the movement, including packaging, handling, labeling, marking, placarding, operational standards, and highway routing.

Spill Prevention, Control, and Countermeasure Rule

The U.S. Environmental Protection Agency's Spill Prevention, Control, and Countermeasure Rule (40 Code of Federal Regulations Part 112) applies to facilities with a single above-ground storage tank with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges into navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement Spill Prevention, Control, and Countermeasure plans.

Occupational Safety and Health Administration Regulations

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration to ensure safe and healthful conditions for workers by setting and enforcing standards and by providing training, outreach, education, and assistance. To fulfill this purpose, the Occupational Safety and Health Administration develops and enforces mandatory job safety and health standards These standards, codified in 29 Code of Federal Regulations Part 1910, address issues that range in scope from walking and working surfaces, to exit routes and emergency planning, to hazardous materials and personal protective equipment (such as protective equipment for eyes, face, or extremities; protective clothing; respiratory devices). They include exposure limits for a wide range of specific hazardous materials, as well as requirements that employers provide personal protective equipment to their employees wherever it is necessary (29 Code of Federal Regulations Section 1910.132).

Federal Communications Commission Requirements

There is no federally mandated radio frequency exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 U.S. Code 224), the Federal Communications Commission established guidelines for dealing with radio frequency exposure, as presented below. The exposure limits are specified in 47 Code of Federal Regulations 1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by the Federal Communications Commission must either comply with these limits or an applicant must file an environmental assessment with the Federal Communications Commission to evaluate whether the proposed facilities could result in a significant environmental effect.

Licensees at co-located sites (such as towers supporting multiple antennas, including antennas under separate ownerships) must take “actions necessary” to bring the accessible areas that exceed the Federal Communications Commission exposure limits into compliance. This is a shared responsibility of all licensees whose transmission power density levels account for 5 or more percent of the applicable Federal Communications Commission exposure limits (47 Code of Federal Regulations 1.1307[b][3]).

Since the project would include a communications dish, it may be required to obtain a license from Federal Communications Commission.

11.2.2 State Laws, Regulations, and Policies

California Health and Safety Code—Hazardous Waste and Hazardous Materials

Several sections of the California Health and Safety Code deal with hazardous waste and hazardous materials. Division 20, Chapter 6.5 addresses hazardous waste control and contains regulations on hazardous

waste management plans, hazardous waste reduction, recycling and treatment, and hazardous waste transportation and hauling. Under Chapter 6.5, Article 6, persons generating hazardous wastes that are to be transported for offsite handling, treatment, storage, or disposal must complete a hazardous waste manifest before transport, indicating the facility to which the waste is being shipped for treatment, disposal, or other purposes.

Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

The Safe Drinking Water and Toxic Enforcement Act, or Proposition 65, requires the Governor to maintain and publish a list of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Once a chemical has been listed, businesses are responsible for providing a warning before knowingly or intentionally exposing their employees or the public to an amount of the chemical that poses a significant risk. The Office of Environmental Health Hazard Assessment is the lead agency responsible for implementing Proposition 65, with input from California Department of Pesticide Regulation and other agencies so that the best scientific information is used in listing chemicals. In its current state, the Proposition 65 list contains a wide variety of chemicals (Office of Environmental Health Hazard Assessment 2019).

Unified Program—Certified Unified Program Agencies

The Unified Program consolidates and coordinates several regulatory programs in California related to hazardous wastes and materials (California Environmental Protection Agency 2012). Codified in 27 California Code of Regulations Division 1 and Chapter 6.11 of the California Health and Safety Code, the Unified Program consolidates the following programs: Hazardous Materials Business Plans, California Accidental Release Program, Underground Storage Tank, Aboveground Petroleum Storage Act, Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting), and California Uniform Fire Code Hazardous Materials Management Plans.

The Unified Program also transfers responsibility for implementation of these hazardous waste and materials regulatory programs to local agencies, such as cities and counties (California Environmental Protection Agency 2012). After local agencies are certified by the California Environmental Protection Agency as Certified Unified Program Agencies, they must establish a program that consolidates, coordinates, and makes consistent the administrative requirements, permits, inspection activities, enforcement activities, and hazardous waste and hazardous materials fees associated with programs under the Unified Program. With oversight from the California Environmental Protection Agency, Certified Unified Program Agencies conduct inspections for all program activities according to the standards contained in the relevant statute or regulation (California Environmental Protection Agency 2012).

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 Code of Federal Regulations Part 355 Appendix A) (California Office of Emergency Services 2014). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees.

In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable Certified Unified Program Agency, and transmitted to agencies responsible for the protection of public health and safety (such as local fire departments, hazardous material response teams, and local environmental regulatory groups).

Fire Prevention

Sections 51175 to 51181 of the California Government Code outline the responsibilities of CAL FIRE and local agencies with respect to fire prevention. CAL FIRE is legally responsible for providing fire protection on all State Responsibility Area lands. State Responsibility Area lands do not include lands within city boundaries or under federal ownership.

California Department of Toxic Substances Control

The California Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the Resource Conservation and Recovery Act and the California Hazardous Waste Control Law. Both laws impose “cradle to grave” regulatory systems for handling hazardous waste in a manner that protects human health and the environment. Regulations implementing the hazardous waste control laws list 791 hazardous chemicals as well as 20 to 30 more common materials that may be hazardous; establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management practices for hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal and transportation; and identify hazardous waste that commonly would be disposed of in landfills. Hazardous waste manifests must be retained by the generator for a minimum of three years. The generator must match copies of the hazardous waste manifests with copies of manifests receipts from the treatment, disposal or recycling facility.

Government Code Section 65962.5(a), Cortese List

The Hazardous Waste and Substance Sites Cortese List is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least

annually an updated Cortese List. The Department of Toxic Substances Control 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.

Hazardous Waste Transportation

In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by Department of Toxic Substances Control. The Department of Toxic Substances Control maintains a list of active registered hazardous waste transporters throughout the state. All hazardous waste transporters and permitted treatment, storage and disposal facilities must have ID numbers, which are used to identify the hazardous waste handler and to track the waste from its point of origin to its final disposal ("from Cradle to Grave"). Hazardous waste shall not be accepted for transport without a Uniform Hazardous Waste Manifest that is properly completed and signed. This manifest must be in possession while transporting the hazardous waste.

11.2.3 Local Laws, Regulations, and Policies

The County of San Luis Obispo, Environmental Health Services is the Certified Unified Program Agency that implements oversight, permitting, and compliance with state laws for hazardous materials and waste, including:

- Aboveground petroleum storage tanks: surface and groundwater contamination
- Underground storage tank program: groundwater contamination
- California Accidental Release Prevention Program: uncontrolled release of extremely hazardous substances (EHS)
- Hazardous Materials Business Plan Program: release of hazardous materials at a regulated facility
- Hazardous Waste Generator Program: release of hazardous wastes by industries that generate hazardous waste
- Household Hazardous Waste Disposal: release of hazardous waste by the general public
- Tiered Permitting Hazardous Materials/Waste Program Permit: improper treatment, disposal, and potential release of hazardous waste

The Amended and Restated San Luis Obispo County Regional Airport (SBP) Airport Land Use Plan (2021) states that: "The geographic scope of this ALUP is established through the Airport Land Use Planning Area or Airport Influence Area. The Airport Influence Area for the Airport is the area in which current and projected future airport-related noise, safety, airspace protection, or overflight factors/layers may significantly affect land use or necessitate

restrictions on land use." The purpose of the plan is to review the height, use, noise, safety, and density criteria that are compatible with airport operations, including:

- Noise exposure to aircraft
- Safety from aircraft accidents or emergency landings
- Overflight – general concerns and annoyance related to aircraft overflights
- Protection of airspace
    - physical obstructions to the navigable airspace
    - wildlife hazards
    - land use characteristics that create visual, electronic, or thermal interference with aircraft navigation or communication

The San Luis Obispo County Emergency Operations Plan (Revised 2003) contains emergency response plans for multiple types of threats, including earthquake faults, hazardous materials, fires, storms, aircraft incidents, and others. Relevant topics to this section are hazardous materials, fires, and aircraft incidents.

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

11.3 ENVIRONMENTAL SETTING

11.3.1 Existing Hazards and Hazardous Materials

The project site contains remnant structures associated with a former dairy operation, which included a main residence (no longer onsite), two milking facilities, equipment barn, livestock barn, miscellaneous out buildings, animal pens, and pastureland. On the east parcel boundary is the East Fork San Luis Obispo Creek with headwaters to the east and northeast of the property. The surrounding area is a mix of pastureland, commercial, and residential uses.

The Initial Site Assessment consisted of a records review and onsite visit. The records review revealed the following information: presence of a groundwater plume of tetrachlorethylene (PCE) not located on property but upgradient of groundwater flowlines, a petroleum pipeline release (1989) at the intersection of Buckley Road and Vachell Lane, an upstream oil tank farm release (1926) into East Fork San Luis Obispo Creek upstream of the property, and an onsite well sample analysis (2022) with U.S. Environmental Protection Agency

Drinking Water Standard Maximum Contaminant Level exceedances for Nitrate and Total Nitrate/Nitrite.

The onsite visit was conducted on November 21, 2022. Notable observations included storage of multiple 55-gallon steel drums of unknown substance (with visual leakage), storage of multiple 55-gallon steel drums of road paint, two production wells in the northeast corner of the property, and an electrical transmission tower on the southern portion of the property. Historically underground storage tanks associated with the farm were not observed but assumed highly probable.

The findings along with recommendations are provided in the following tables.

The Initial Site Assessment provided by Stantec in January 2023 evaluates potential Recognized Environmental Conditions associated with the proposed project on Assessor Parcel Number (APN) 076-071-021. Recognized Environmental Conditions can also be described as potential sources of hazards or hazardous materials. The assessment revealed potential sources of hazards or hazardous materials in connection with historical or current practices on the parcel. A Supplementary Initial Site Assessment (September 27, 2023) identified the potential for residual groundwater contamination from petroleum hydrocarbons, tetrachloroethylene (PCE), trichloroethylene (TCE), and per- and polyfluoroalkyl substances (PFAS) in groundwater up gradient from the project location. Table 11.1 shows a summary of potential sources of hazards and hazardous materials and details where further assessment is recommended.

Table 11.1 Potential Existing Hazards and Hazardous Materials

Source	Affected Property	Recommendation
Former Union Oil Tank Farm	A lightning strike occurred at the former Union Oil Tank Farm, northeast of the property. The lightning strike resulted in a fire at the facility and the release of oil into the nearby creek, which borders the southeastern portion of the property. A limited investigation performed in 1999 by Geocon identified limited residual oil in an approximate 1-inch layer in creek bottom sediments on the property.	Residual oil pockets are likely to be present along the creek bordering the southeastern portion of the property parcel. This area is not planned for redevelopment. However, Stantec recommends developing a Soil Management Plan (SMP) for the property parcel. The Soil management Plan should include procedures to follow if soil impacts or orphan underground storage tanks are encountered during grading.

Source	Affected Property	Recommendation
Buckley Road and Vachell Lane Pipeline Release	A pipeline release occurred at the intersection of Buckley Road and Vachell Lane in 1989 from a stress crack, resulting in the release of an unknown volume of semi-refined petroleum product. Soil excavations were performed to remove the bulk of the soil impacts between October 2, 1989 and January 11, 1990. However, due to constraints imposed by the pipeline and other underground utility infrastructure, residual petroleum impacted soil was left in-place. A dual-phase groundwater and soil vapor treatment system operated intermittently from 1993 until 1996. At the time of system shutdown, approximately 6.2 million gallons of groundwater had been extracted and treated, and approximately 6 pounds of total nonmethane hydrocarbons (TNMHC) had been extracted by the vapor recovery system. Groundwater monitoring data at the time of remediation system shutdown indicated that dissolved-phase TPH and BTEX compounds were below water quality thresholds. The case was closed by the Regional Water Quality Control Board in 1999.	This case received regulatory closure in 1999. At the time of closure, no groundwater impacts of TPH or BTEX existed on the property parcel exceeding regulatory thresholds. This area was investigated by Geocon in 1999. That investigation identified residual concentrations of TPH as oil in soil from surface to approximately 12 feet in depth. The reported concentrations are below commercial land use screening criteria. The release appears to be limited to a narrow area near Buckley Road. No further action is recommended at this time.
Leaking Drums	Several 55-gallon steel drums were identified within a small, enclosed storage area in the milking barn in the southern portion of the property parcel. These drums were observed to have leaked an unidentified liquid, likely oil, onto the ground surface. The storage area where the drums are stored was not readily accessible during the inspection; therefore, it is unknown if the ground surface below these drums is paved or unpaved.	The presence of leaking unidentified liquid from these containers is considered a REC. Stantec recommends performing an investigation at this location to evaluate the area of potential soil impacts associated with the leaked liquid. Alternatively, any impacts may be managed during grading in a Soil Management Plan (SMP). The Soil Management Plan should also provide measures for managing any orphan underground storage tanks or other below ground structures encountered during grading.

Source	Affected Property	Recommendation
Asbestos-Containing Materials (ACMs) and Lead-Based Paint (LBP)	If any existing structures within the property are proposed for demolition, it is recommended that an asbestos-containing materials (ACM) survey be conducted prior to disturbance.	An asbestos-containing materials/lead-based paint survey is recommended prior to demolition or disturbance of suspect asbestos-containing materials or lead-based paint. During subsurface work, samples of suspect asbestos-containing materials (e.g., underground utilities, pavements with reinforcing fabric, weep hole liners, etc.) if found, should be collected for laboratory analysis of asbestos prior to any renovation or demolition, to determine the need for compliance with Environmental Protection Agency National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations.
Historic Agricultural Activities	Agricultural cultivation activities appear to have occurred on the property. Evaluation of the presence of pesticides was performed on the property. The investigation did not identify any pesticides at concentrations of concern, or exceeding hazardous waste levels. However, no investigation of arsenic or lead, which are common drying agents in pesticide application, was performed.	Stantec recommends investigating near surface soils in historical agricultural area of the property for accumulation of arsenic and lead.
Groundwater Wells	Multiple groundwater wells were identified in the northeastern corner of the southern property. No information on the ownership of these wells has been identified during the Initial Site Assessment.	As part of the contemplated redevelopment of the property, Caltrans may opt to use the onsite groundwater wells for irrigation purposes. However, if abandonment is desired, the wells should be abandoned in accordance with applicable state and local standards.
Nitrates, Chloride, metals, and Coliform bacteria	Nitrates from dairy and other farming activities can impact groundwater.	Nitrates are a regional problem in San Luis Obispo County related to farming activities. Based on review of groundwater quality data collected from the onsite groundwater well, nitrate and these other pollutants are present in the shallow groundwater below the property. These pollutants in groundwater are not expected to affect construction activities. However, the groundwater would likely require treatment if used for drinking water.

Source	Affected Property	Recommendation
Methane Vapor Encroachment	Dairies can be sources of methane encroachment into buildings.	Soil vapor sampling is recommended in building areas to assess methane levels in subsurface soil.
Unknown Subsurface Conditions	None	Given the long history of commercial use for the property parcel, there is potential that unknown subsurface impacts and/or structures may be encountered during earthwork activities at the property. Therefore, Stantec recommends performing a subsurface geophysical survey in the area of the former commercial operations. Stantec also recommends a Soil Management Plan (SMP) be prepared for the parcel to properly handle these potential issues.

Source	Affected Property	Recommendation
Tetrachloroethylene (PCE)	The Department of Toxic Substances Control (DTSC) is the lead agency overseeing the investigation of the tetrachloroethylene (PCE) groundwater plume in the City of San Luis Obispo along Highway 101 from about Marsh Street to Los Osos Valley Road. PCE is a chlorinated solvent that was historically used for dry cleaning fabrics, fabric manufacturing, and degreasing metals at automotive repair shops and other types of industrial facilities. PCE impacts to San Luis Obispo aquifers were first documented in the 1990s, with numerous follow-up investigations occurring since 2005. The most recent study was completed by the City in 2022 as part of the Groundwater Cleanup Project and involved boring at 30 locations to collect groundwater and soil samples to investigate the extent of the plume. The investigation is ongoing and has determined that PCE originated from multiple source areas. Seven public water supply wells have been impacted by PCE, three of which have been contaminant at levels exceeding the maximum contaminant level (MCL) of 5.0 micrograms per liter established by the California Department of Public Health and the U.S. Environmental Protection Agency. The City is leading the effort to continue to investigate and clean the plume so it can provide high quality drinking water to the community.	Prior to installation of any wells to be used for drinking water by the proposed project, preliminary and/or detailed groundwater investigations would be completed in cooperation with the Regional Water Quality Control Board and Department of Toxic Substances Control, which are expected to include the collection of subsurface data and groundwater modeling.

Source	Affected Property	Recommendation
Trichloroethylene (TCE)	The Central Coast Regional Water Quality Control Board (Central Coast Water Board) is the lead agency overseeing the investigation of trichloroethylene (TCE) in groundwater in the Buckley Road area, adjacent to the San Luis Obispo County Regional Airport. The initial investigation area included properties along Buckley Road, Thread Lane (also known as Noll Road), Davenport Creek Road, Evans Road, Angie Lou Lane, Mello Lane, Three Sisters Road, Hidden Springs Road, Edna Road, Windmill Road, Rancho Oaks Drive, Sherpa Ranch Road, and Airport Drive. Based on the distribution of TCE detected in supply wells, Central Coast Water Board staff focused the primary area for further investigation to the Thread Lane, Davenport Creek Road, Evans Road, Angie Lou Lane, Mello Lane, and Three Sisters Road area, where TCE concentrations are near or above the drinking water standard. From 2015 to 2020, Central Coast Water Board staff conducted drinking water testing at 69 well locations as part of the investigation, including repeated sampling at some locations to monitor the TCE plume. Under a Central Coast Water Board Cleanup and Abatement order, responsible parties took over testing of wells in June 2020. Initially, up to 14 supply wells were found to be impacted by TCE above the drinking water standard of 5 micrograms per liter. As of March 2021, 10 supply wells (seven private domestic wells and three industrial wells), out of 70 locations tested since 2015 exceed the drinking water standard for TCE of 5 micrograms per liter (µg/L). The current maximum detected concentrations of TCE in a private domestic well and industrial well are 93 and 52 µg/L, respectively, and occur in the Thread Lane area. This compares with a maximum historical TCE concentration of 320 µg/L detected in a Thread Lane industrial supply well in 2003.	Prior to installation of any wells to be used for drinking water by the proposed project, preliminary and/or detailed groundwater investigations would be completed in cooperation with the Regional Water Quality Control Board and Department of Toxic Substances Control, which are expected to include the collection of subsurface data and groundwater modeling.
Per- and Polyfluoroalkyl Substances (PFAS)	In recent years, health, environmental and regulatory officials around the world have begun to pay close attention to a	Prior to installation of any wells to be used for drinking water by the proposed project, preliminary and/or

Source	Affected Property	Recommendation
	group of chemicals that have the potential to cause health problems in humans. Known as per- and polyfluoroalkyl substances (PFAS), these chemicals have been around since the 1940s and are commonly used in the manufacture of thousands of different consumer products. PFAS group chemicals are commonly found in food, packaging materials, non-stick cooking surfaces, stain- and water-resistant fabrics, polishes, waxes, paint, cleaning products and fire-fighting foams, among many other consumer products. They are also industrial by-products of chrome plating, oil recovery and in manufacturing of various electronics components. Due to their chemical structure, PFAS are very stable in the environment and are resistant to breaking down. These chemicals can be found in aquifers in the San Luis Obispo area. In March 2019, airports in California, including the San Luis Obispo County Regional Airport, were ordered by the State Water Resources Control Board to investigate the presence of PFAS in soil and groundwater due to the link between PFAS and aqueous film-forming foam fire suppressants used during firefighting and training operations. Since 2022, the County and CAL FIRE have conducted sampling of groundwater wells, documenting the presence of PFAS near the airport and surrounding community. In July 2023 the Regional Water Quality Control Board ratified a Voluntary Cleanup and Abatement Agreement whereby the County and CAL FIRE agreed to work cooperatively to further investigate and remediate PFAS contamination in soil, soil vapor, and groundwater, as well as to install and monitor PFAS treatment systems at affected wells and residences to ensure consumer safety. The evaluation and cleanup of PFAS is ongoing, and more information including a conceptual model of the airport PFAS plume is expected to be released in the coming months.	detailed groundwater investigations would be completed in cooperation with the Regional Water Quality Control Board and Department of Toxic Substances Control, which are expected to include the collection of subsurface data and groundwater modeling.

11.3.2 Airports

The San Luis Obispo County Regional Airport is about 1.5 miles east of the project site. The project is near the edge but within the Airport's Area of Influence. The project is not located within any designated Airport Safety Zones. The project site sits in the path of the arrival/departure pattern for Runway 7-25, a runway used for smaller aircraft, with the lowest level of use.

11.3.3 Wildfire Hazards

The project is not in State Responsibility Areas identified by the California Department of Forestry and Fire Protection (CAL FIRE) as very high fire hazard severity zones (CAL FIRE 2022). The project is in a moderate fire severity zone. The site is within a quarter mile of a very high severity fire zone to the west and within 100 yards of a high severity fire zone is to the northwest.

11.3.4 Sensitive Receptors

Sensitive receptors are those segments of the population most susceptible to poor air quality: children, the elderly, and individuals with serious pre-existing health problems affected by air quality (e.g., asthma) (California Air Resources Board 2005). Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds include play areas associated with parks or community centers.

A single residence sits directly west of the project site on adjacent property. Multiple single-family residences recently built as part of the Avila Ranch Housing Development are more than 500 feet northeast of the project and east of Vachell Lane. A list of non-residential sensitive receptors within 1.2 miles of the project site are shown in Table 11.2.

Table 11.2 Sensitive Receptor Locations

Name	Address
Octagon Barn	4400 Octagon Way
Montessori Children's School	4200 South Higuera Street
Calvary SLO Church	4029 South Higuera Street
Trust Children's Center	4085 Earthwood Lane
3 public parks within Avila Ranch Housing Development	211 Bravo Street

11.4 Impact Analysis

11.4.1 Methodology

Consistent with the Caltrans Deputy Directive 16 (Hazardous Materials), California Health and Safety Code Section 25501(n)(1) defines a hazardous material as any material that, "because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment."

Information and resources used in this analysis include the following:

- Caltrans Supplemental Initial Site Assessment (September 27, 2023)
- Initial Site Assessment dated January 24, 2023, and the Preliminary Site Investigation Field Sampling and Analysis Plan dated January 24, 2023 from Stantec.
- California State Water Resources Control Board GeoTracker online data website
- Amended and Restated San Luis Obispo County Regional Airport (SBP) Airport Land Use Plan dated March 26, 2021
- San Luis Obispo County Emergency Operations Plan dated December 2016

11.4.2 Criteria for Determining Significance

The project would result in a significant effect related to hazards and hazardous materials if it would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

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

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

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

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

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

11.5 Environmental Impacts

Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. – Less than Significant

Construction

Construction activities for the project would require onsite handling of hazardous materials, such as fuels, lubricating fluids, and solvents for use with construction equipment. Accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storms) to the underlying soils and groundwater.

Although these hazardous materials could pose a hazard as described above, project activities would be required to comply with extensive regulations so that substantial risks would not result. Examples of compliance include preparation of a hazardous materials business plan, as described above, which would include a training program for employees, an inventory of hazardous materials, and an emergency plan. All storage, handling, and disposal of these materials would be done in accordance with applicable regulations and Caltrans construction standards.

In addition, a Storm Water Pollution Prevention Plan would be prepared for the project as part of its compliance with applicable National Pollutant Discharge Elimination System permits and would include appropriate spill prevention and other construction Best Management Practices. These Best Management Practices would protect the environment (water quality) from hazardous materials, and may include, but not be limited to, developing and implementing a spill prevention and emergency response plan, minimizing use or storage of hazardous materials, and other measures.

As a result of compliance with the applicable regulations as described above and implementation of applicable Best Management Practices, no significant risks would result to construction workers, the public, or the environment from

the construction-related transport, use, storage, or disposal of hazardous materials. Therefore, this impact would be Less than Significant.

Operation

Operation of the project would necessitate the use and storage of several hazardous items and materials. Items and materials that would be onsite and could pose a risk to human health and safety and the environment include the following:

- Quart containers of new oil for use in onsite automobile servicing.
- Miscellaneous lubricants from the automobile service station.
- Approximately one 5,000-gallon above-ground tank of gasoline and diesel for vehicle refueling.
- Approximately one 275-gallon waste oil tank.
- Storage area for tires.
- One above-ground tank of diesel fuel for the standby generator.
- A communication dish.

Hazardous materials would be stored onsite and used or disposed of at regular intervals. If adequate precautions are not taken, accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storms) to the underlying soils and groundwater. However, all hazardous materials would be either contained within the buildings or have appropriate containment measures.

Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment, and also would be equipped with safe wells downstream of the containers that would capture any leaks or spills in the event of a failure and allow for appropriate treatment and disposal. All storage, handling, and disposal of these materials would comply with the applicable regulations and under the oversight of the County of San Luis Obispo Environmental Health Services Department, which is the local Certified Unified Program Agency. As a result, no significant risks would result to workers, the public, or the environment from the operation-related transport, use, storage, or disposal of hazardous materials.

The project would include the installation and use of a communications dish. Compliance with existing Federal Communications Commission regulations regarding radiofrequency radiation would reduce potential for any adverse effects to human health or the environment associated with radiofrequency exposure from the communications dish proposed as part of the project. Therefore, this impact would be Less than Significant.

Overall, in operation of the facilities with compliance with the applicable regulations and implementation of applicable Best Management Practices, this impact would be Less than Significant.

***Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.* -Less than Significant with Mitigation Incorporated**

Construction

Project construction would require the use, transport, and disposal of hazardous materials; however, as detailed above, compliance with the applicable regulations and implementation of a Storm Water Pollution Prevention Plan and permit Best Management Practices would ensure that no significant risks would result to construction workers, the public, or the environment from reasonably foreseeable upset or accident conditions involving the use of hazardous materials for the project's construction activities.

The private residence directly west of the project site and the residents along Vachell Lane in the Avila Ranch Development are the closest sensitive receptors. Construction activities associated with the project, including building demolition, clearing, grubbing, and soil excavation, have the potential to come into contact with existing sources of contamination. As shown in Table 11.1, the site includes various potential sources of hazards and contamination. A measure to further evaluate these potential hazards and sources of contamination is included. Also, the dust control measures identified and other measures in Chapter 6, Air Quality, will help reduce the accidental release of hazardous materials into the environment during construction Therefore, this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure HAZ-1: Phase II Environmental Site Assessment. During design of the project, a Phase II Environmental Site Assessment will be completed to confirm the presence/absence and characteristics (sources, concentrations, and extent of contamination) of existing hazards or contaminants within the project limits. The Phase II Environmental Site Assessment may include but would not be limited to 1) soil sampling, 2) asbestos-containing materials and lead-based paint survey,3) subsurface geophysical survey in the areas of historic farming and other uses (residential and dairy).

Mitigation Measure HAZ-2: Soil Management Plan. Prior to any grading activities, a Soil Management Plan will be completed that includes procedures related to the handling, treatment, and disposal (if necessary) of contaminated soils or other hazards.

Mitigation Measures AQ-1 and AQ-3 apply.

Operation

Onsite uses during operation would continue to store and use materials that may be categorized as hazardous, consistent with existing operations. These chemicals would have the potential to be unintentionally released into the environment during transport, unloading, transfer, or storage. Given the proximity of residences and other receptors in the area, an accidental spill may have the potential to result in adverse health effects to the public or environment. However, operations would be required to comply with all federal, state, and local laws, which would minimize any potential for accidental release or upset of stored or spent hazardous materials, therefore reducing the impact to Less than Significant. This finding is applicable to Alternative 2.

Alternative 1 includes the use of an onsite water well for a potable drinking water system. As shown in Table 11.1, there are several known and potential contaminants in the surrounding groundwater. Mitigation measures are included to prevent the exposure of Caltrans staff and visiting public to contaminated drinking water and also prevent changes to contamination plumes by the pumping of groundwater.

Alternative 1 also includes use of an onsite sewer system. The onsite sewer system would create a new source of potential groundwater contamination. Mitigation measures are included to reduce the risk of contamination with long-term operation of a septic tank. Therefore, the long-term operation of an onsite drinking water well and sewer system creates significant sources of potential hazards to Caltrans employees and the public, but with mitigation measures proposed, the potential hazards are considered Less than Significant with Mitigation Incorporated.

Mitigation Measure HAZ-1: Groundwater Investigation for Drinking Water Well. Prior to installation of a drinking water well for the project, preliminary and/or detailed groundwater investigations would be completed in cooperation with the Regional Water Quality Control Board and Department of Toxic Substances Control, which are expected to include the collection of subsurface data and groundwater modeling.

Mitigation Measure GEO-1: Geotechnical Study and Design applies to the onsite sewer system.

Impact HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school – No Impact

No school or proposed school is within one-quarter mile, so there would be No Impact.

***Impact HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment* – No Impact**

The project is not on or near a Historic Cortese list site. Because the project site is not included on the Cortese list of hazardous materials sites compiled by the Department of Toxic Substances Control in accordance with Government Code Section 65962.5, the project would not create a hazard to the public or the environment. Therefore, there would be No Impact.

***Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area* – Less than Significant**

The project site is just inside the Airport Influence Area as designated in the Amended and Restated San Luis Obispo County Regional Airport (SBP) Airport Land Use Plan (2021). The following criteria were used to determine a Less than Significant impact.

- The project site is not within any of the determined Community Noise Equivalent Level zones and would not likely contribute excessive noise to staff working at the site.
- The project site is considered a non-residential land use. The project is not located within any of the designated airport safety zones and therefore is not likely to be at risk for aircraft accidents or emergency landings.
- No objects will be constructed greater than 200 feet above ground level or above 409 feet mean sea level.
- The project will not create electronic interference or lighting concerns, create smoke hazards, or attract additional wildlife. The project would comply with the rules and regulations of Code of Federal Regulations Title 47, Telecommunication, regarding the location and construction of the communications dish, registering the communications dish with Federal Communications Commission, and marking and lighting of the communications dish.
- No use of airspace is planned during construction or operation of the site except for unmanned drones. All drone flights within 5 miles of the airport must provide prior notice to the airport operator.

Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan – Less than Significant with Mitigation Incorporated

Project Construction

Construction-related employee vehicle trips and truck trips for the project would potentially increase traffic on South Higuera, Buckley Road, Los Osos Valley Road, and Highway 227. An increase in traffic could impair emergency responders. However, construction-related traffic would be temporary, and only a limited number of employee vehicles and trucks would travel to and from the project site on a daily basis. Access to the project site and surrounding properties for fire and emergency response vehicles would be maintained at all times. To minimize the potential for the project to interfere with an adopted emergency response plan or emergency evacuation plan, implementation of a traffic management plan, as detailed in Chapter 19, Transportation, would be required. Therefore, the construction impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure TRA-1 Prepare, and Implement a Construction Traffic Management Plan, applies.

Project Operation

Project operations would result in an increase in trips to the project site; however, this is not anticipated to interfere with any emergency responders. The project is not anticipated to interfere with any emergency response plan or emergency evacuation plan. The facility maintains its own emergency response plans and coordinates, when necessary, with other agencies in particular any event involving potential release of hazardous material or events involving other hazards. Therefore, the operational impact would be Less than Significant.

HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. – Less Than Significant

The project site is in a moderate fire severity zone as defined by the California Department of Forestry and Fire Protection (CAL FIRE). The site is within a quarter mile of a very high severity fire zone to the west and within 100 yards of a high severity fire zone to the northwest. The project will include onsite designated fire access routes for emergency personnel, a Project Specific Evacuation Plan, use of California Building Code best management practices for building materials, use of erosion control and fire-resistant landscaping, and adequate water supply for emergencies. Therefore, this impact is considered Less than Significant.

Chapter 12 Hydrology and Water Quality

12.1 OVERVIEW

This chapter discusses the potential for the project to affect hydrology and water quality and also describes consistency with applicable plans and policies that protect these resources. Specifically, this chapter describes the existing environmental setting in the project area, discusses federal and state regulations relevant to surface and groundwater resources that might be affected by the project, identifies hydrology and water quality resources potentially affected by the project, and proposes mitigation measures to avoid or reduce potentially significant impacts on these resources.

12.2 REGULATORY SETTING

12.2.1 Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act is the main federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. Clean Water Act Section 402 is discussed in this section, as it pertains to stormwater management and hydrology. Clean Water Act Section 404, which regulates the discharge of dredged and fill materials into waters of the United States (waters of the U.S.), is also discussed briefly below.

Section 303(d)

Under Clean Water Act Section 303(d), states are required to identify and make a list of water bodies that are polluted. In California, this responsibility falls to the State Water Resources Control Board and its nine Regional Water Quality Control Boards. In addition to identifying impaired water bodies, states must identify the pollutants causing the impairments, establish priority rankings for waters on the list, and develop a schedule for development of control plans to improve water quality, including development of total maximum daily loads (TMDLs).

Section 402

Clean Water Act Section 402 regulates facilities that discharge pollutants into waters of the U.S. through the National Pollutant Discharge Elimination System. Under the National Pollutant Discharge Elimination System, all facilities discharging pollutants from any point source into waters of the U.S. must obtain a National Pollutant Discharge Elimination System permit. While originally focused on municipal and industrial discharges from pipes or other point sources, Section 402 of the Clean Water Act was amended in 1987 to

include stormwater discharges that may be a non-point source in nature. Phase I of the National Pollutant Discharge Elimination System Storm Water Program imposed permitting requirements on several types of stormwater discharges, including certain industrial activities, medium (serving 100,000 to 250,000 people) and large (serving greater than 250,000 people) municipal separate sanitary sewer systems (MS4s), and construction sites disturbing 5 or more acres. Phase II of the Storm Water Program regulations, issued in 1999, expanded permitting requirements to include small (serving less than 100,000 people) MS4s, construction sites of 1 to 5 acres, and other certain previously exempt industrial facilities.

General Permit

Most construction projects that disturb 1 acre or more of land are required to obtain coverage under the State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities ("Construction General Permit") (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ), in accordance with Clean Water Act Section 402.

The general permit requires the applicant to file a public notice of intent to discharge stormwater and prepare and implement a Storm Water Pollution Prevention Plan. The Storm Water Pollution Prevention Plan must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations and present a list of Best Management Practices that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Enrollees in the Construction General Permit are further required to conduct monitoring and reporting to ensure that Best Management Practices are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Section 404

Clean Water Act Section 404 regulates the discharge of dredged and fill materials into waters of the U.S., or jurisdictional waters, which include oceans, bays, rivers, streams, lakes, ponds, and wetlands. Before any actions that may discharge dredged or fill material into surface waters or wetlands are carried out, a delineation of jurisdictional waters of the U.S. must be completed, following U.S. Army Corps of Engineers protocols (U.S. Army Corps of Engineers 1987), to determine whether the project area encompasses wetlands or other waters of the U.S. that qualify for Clean Water Act protection. Section 404 permits are discussed in detail in Chapter 7, Biological Resources.

Federal Emergency Management Agency (FEMA)

The Federal Emergency Management Agency is the federal agency that oversees floodplains and manages the National Flood Insurance Program (NFIP). The Federal Emergency Management Agency also prepares the Flood Insurance Rate Map for communities participating in the National Flood Insurance Program. The Flood Insurance Rate Map indicates the regulatory floodplain to assist communities with land use and floodplain management decisions, so that the requirements of the National Flood Insurance Program are met in the event of damaging floods. The Flood Insurance Rate Map guides the location development and the amount of grading/regulation necessary for development placed on a floodplain.

12.2.2 State Laws, Regulations, and Policies

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (also known as the Porter-Cologne Act), passed in 1969, established the State Water Control Board and divided the state into nine hydrogeologic regions, each overseen by a Regional Water Quality Control Board. In conjunction with the federal Clean Water Act, the Porter-Cologne Act is the principal law governing water quality regulation in California. The Porter-Cologne Act requires that each Regional Water Quality Control Board develop a water quality control plan (also known as a Basin Plan) to identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. Waters of the State are defined differently than waters of the U.S., described above under Clean Water Act Section 404, and include any surface water or groundwater, including saline waters, that is within the boundaries of the state.

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the National Pollutant Discharge Elimination System permitting program, described above under “Federal Laws, Regulations, and Policies.” Any entity discharging or proposing to discharge materials that could affect water quality must file a report of waste discharge with the applicable Regional Water Quality Control Board.

Municipal Stormwater Permitting Program

The State Water Resources Control Board regulates stormwater discharges from MS4 through its Municipal Stormwater Permitting Program. Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000) and large (population of 250,000 or more) municipalities and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990.

Caltrans’ MS4 Permit, National Pollutant Discharge Elimination System Permit Order Number 2022-0033-DWQ National Pollutant Discharge

Elimination System Number CAS000003(adopted on June 22, 2022, and effective on January 1, 2023) (Permit) regulates stormwater and non-stormwater discharges from Caltrans properties and facilities associated with operation and maintenance of the state highway system. It contains four basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);

2. Caltrans must implement a year-round program in all parts of the state to effectively control stormwater and non-stormwater discharges; and

3. Caltrans stormwater discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs) and other measures deemed necessary by the State Water Resources Control Board and/or other agency having authority reviewing the stormwater component of the project.

4. Caltrans shall comply with the prohibition of discharge of trash to surface waters of the State or deposition of trash where it may be discharged into surface waters of the State through compliance with the requirements of Attachment E of the Permit. With a demonstration of full compliance by December 2, 2030.

Caltrans' 2022 MS4 Permit incorporated the requirements of the State Water Board Resolution 2015-0019, which amended the Water Quality Control Plan for Ocean Waters of California and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California to include trash-related requirements, referred to in the Order as the "Trash Provisions." Implementation of the Trash Provisions includes the following:

- Caltrans shall install, operate, and maintain any combination of full capture systems, other treatment controls, and/or institutional controls for all storm drains that capture runoff from Significant Trash Generating Areas (where trash accumulates in substantial amounts as defined in section E4). Caltrans shall develop and implement monitoring plans that demonstrate that such combinations achieve full capture system equivalency.
- Caltrans shall coordinate efforts with municipal separate storm sewer system permittees subject to National Pollutant Discharge Elimination System permits that implement the Trash Provisions, to install, operate, and maintain full capture systems, other treatment controls, and/or institutional controls in Significant Trash Generating Areas and/or Priority Land Uses.

To comply with the permit, Caltrans developed the Statewide Stormwater Management Plan (SWMP) to address stormwater pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The Statewide Stormwater Management Plan assigns

responsibilities within Caltrans for implementing stormwater management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The Statewide Stormwater Management Plan describes Caltrans' stormwater management program and the minimum procedures and practices Caltrans uses to reduce pollutants in stormwater and non-stormwater discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices. The project will be programmed to follow the guidelines and procedures outlined in the latest Statewide Stormwater Management Plan to address stormwater runoff.

In 2003, the State Water Resources Control Board began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000). The County and City are covered under the most recent Phase II MS4 permit, the General Permit for the Discharge of Stormwater from Small MS4s (Order Number 2013-0001-DWQ), which covers Phase II permittees statewide. Some requirements in the permit that might be applicable are discharge prohibitions, effluent limitations, receiving water limitations, and provisions applicable to all traditional small MS4 permittees (State Water Resources Control Board 2013).

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act, passed in 2014, became law in 2015 and created a legal and policy framework to locally manage groundwater sustainably. The act allows local agencies to customize groundwater sustainability plans to their regional economic and environmental conditions and needs, and establish new governance structures, known as Groundwater Sustainability Agencies (GSAs). The act is intended to prevent undesirable results, which are defined as the following:

- Chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed).
- Significant and unreasonable reduction of groundwater storage.
- Significant and unreasonable seawater intrusion.
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.
- Significant and unreasonable land subsidence that substantially interferes with surface land uses.
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

California Statewide Groundwater Elevation Monitoring Program

In 2009, the California State Legislature amended the California Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring

program to track seasonal and long-term trends in groundwater elevations in California. Pursuant to this amendment, Department of Water Resources established the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, which establishes the framework for regular, systematic, and locally managed monitoring in all of California's groundwater basins. To facilitate implementation of the California Statewide Groundwater Elevation Monitoring Program and focus limited resources, as required by the California Water Code, Department of Water Resources ranked all of California's basins by priority: high, medium, low, and very low based on the following factors:

- Population overlying the basin.
- Rate of current and projected growth of the population overlying the basin.
- Number of public supply wells that draw from the basin.
- Total number of wells that draw from the basin.
- Irrigated acreage overlying the basin.
- Degree to which persons overlying the basin rely on groundwater as their primary source of water.
- Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation.
- Any other information determined to be relevant by Department of Water Resources.

Executive Order N-7-22

Effective March 28, 2022, this executive order prohibits a county, city, or other public agency from:

a. Approving a permit for a new groundwater well or for alteration of an existing well in a basin subject to the Sustainable Groundwater Management Act and classified as medium- or high-priority without first obtaining written verification from a Groundwater Sustainability Agency managing the basin or area of the basin where the well is proposed to be located that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan adopted by that Groundwater Sustainability Agency and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan; or

b. Issue a permit for a new groundwater well or for alteration of an existing well without first determining that extraction of groundwater from the proposed well is 1) not likely to interfere with the production and functioning of existing nearby wells, and 2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

This paragraph shall not apply to permits for wells (i) that will provide less than 2 acre-feet per year of groundwater for individual domestic users, (ii) that will exclusively provide groundwater to public water supply systems as defined in Section 116275 of the Health and Safety Code, or (iii) that are replacing existing, currently permitted wells with new wells that will produce an equivalent quantity of water as the well being replaced when the existing well is being replaced because it has been acquired by eminent domain or acquired while under threat of condemnation.

Assembly Bill 885 (AB 885)

This bill directed the State Water Resources Control Board to develop regulations or standards for onsite wastewater treatment systems (Septic Treatment Systems) to be implemented by qualified local agencies. The State Water Resources Control Board adopted the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems on June 19, 2012 (OWTS policy). The OWTS policy allows local agencies to permit and approve Septic Treatment Systems, based on a local ordinance, after approval of a Local Agency Management Program by the Central Coast Regional Water Quality Control Board (Central Coast Water Board).

12.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

The County policies and programs described below are local implementations of state laws for underground septic systems and groundwater wells.

County Septic System Policy

The Local Agency Management Program (LAMP) is the culmination of the actions required by Assembly Bill 885 (AB 885), which directed the State Water Resources Control Board to develop regulations or standards for onsite wastewater treatment systems (Septic Treatment Systems) to be implemented by qualified local agencies. The County of San Luis Obispo Planning and Building Department's Local Agency Management Program is designed to protect groundwater sources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual Septic Treatment Systems.

The Local Agency Management Program develops minimum standards for the treatment and ultimate disposal of sewage though the use of Septic Treatment Systems in non-sewered unincorporated areas of San Luis Obispo County. The Local Agency Management Program will also expand the ability

of Planning and Building to permit and regulate alternative Septic Treatment Systems while protecting water quality and public health.

County Groundwater Well Program

The County of San Luis Obispo Department of Environmental Health Services Groundwater Well Program regulates and permits the construction and installation of community water supply wells, individual domestic wells, industrial wells, agricultural wells, cathodic protection wells, electrical grounding wells, test and exploratory holes, observation wells and salt water (hydraulic) barrier wells. Under this program, County Environmental Health Services enforces Executive Order N-7-22.

Floodplain Administrator

County Public Works (specifically, the San Luis Obispo County Flood Control and Water Conservation District) is the Federal Emergency Management Agency Floodplain Administrator and will oversee the project's potential impacts to the floodplain.

12.3 ENVIRONMENTAL SETTING

12.3.1 Regional Watershed Setting

According to the Central Coast Regional Water Quality Control Board, the project site is within the San Luis Obispo Creek Hydrologic Subarea of the Estero Bay Hydrologic Unit, an area that corresponds to the coastal draining watersheds west of the Coastal Range. The Estero Bay Hydrologic Unit stretches roughly 80 miles between the Santa Maria River and the Monterey County line and includes numerous individual stream systems (Central Coast Regional Water Quality Control Board 2017). Within the Estero Bay Hydrologic Unit, the San Luis Obispo Creek watershed drains approximately 83 square miles; the East Fork of the San Luis Obispo Creek and the Tank Farm Creek are tributaries of San Luis Obispo Creek. Average seasonal precipitation in the San Luis Obispo Creek watershed ranges from 17 to 33 inches (SLO Watershed Project 2014).

The San Luis Obispo Creek watershed generally drains to the south-southwest via San Luis Obispo Creek where it meets the Pacific Ocean at Avila Beach. San Luis Obispo Creek originates in the Cuesta Grade area north of San Luis Obispo at an elevation of 2,200 feet above mean sea level, in the western slopes of the Santa Lucia Range. San Luis Obispo Creek flows south through the city adjacent to Highway 101 until it reaches the southern extent of the Irish Hills where it veers west to the Pacific Ocean near Avila Beach.

12.3.2 Surface Water

The project site is within the San Luis Obispo Creek watershed. Two tributaries are near the project site: the East Fork of the San Luis Obispo Creek and the Tank Farm Creek. The confluence of these two creeks occurs just southwest of the intersection of Buckley Road and Vachell Lane. After the confluence, the East Fork of the San Luis Obispo Creek (East Fork Creek) flows along the east side of the project site and joins the San Luis Obispo Creek about 3,500 feet downstream of the project site.

The beneficial uses of San Luis Obispo Creek and the East Fork of San Luis Obispo Creek are stated below.

- San Luis Obispo Creek below West Marsh Street – Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), Ground Water Recharge (GWR), Freshwater Replenishment (FRSH), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Commercial and Sport Fishing (COMM), Warm Fresh Water Habitat (WARM), Cold Fresh Water Habitat (COLD) , Wildlife Habitat (WILD), Preservation of Biological Habitats of Special Significance (BIOL), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN).
- San Luis Obispo Creek East Fork– Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Ground Water Recharge (GWR), Freshwater Replenishment (FRSH), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Commercial and Sport Fishing (COMM), Cold Fresh Water Habitat (COLD) , Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN).

Under Section 303(d) of the Clean Water Act, states are required to identify “impaired water bodies” (those water bodies not meeting established water quality standards); identify the pollutants causing the impairment; establish priority rankings for waters on the list; and develop a schedule for adoption of control plans to improve water quality. San Luis Obispo Creek (below Osos Street) is listed in the 303(d) list of impaired waters as being impaired by benthic community effects, chloride, escherichia coli (E.coli), fecal coliform, nitrate, oxygen (dissolved), and sodium.

12.3.3 Storm Water

Storm water infrastructure and maintenance in the project vicinity is provided by the City and the County. City storm water conveyance systems within the Avila Ranch Housing Development and upstream from the project site include the burial of the North-South Creek Segment, removal of the East-West Channel, and excavation of the realigned 850-foot-long segment of the creek to connect through the Tank Farm property. In addition, drainage from north

of the site is intercepted by construction of a 12-foot-wide drainage collection swale along the northern project boundary, which diverts surface flows into three subsurface culverts. Further, a retention basin was installed within the southwest portion of the site, and eight drainage culverts collect runoff for discharge into Tank Farm Creek.

County stormwater infrastructure at and adjacent to the project site controls the flow of water from the County roadway system, including Buckley Road, South Higuera, and Vachell Lane. Within the project site, the Buckley Road Extension stormwater infrastructure includes a brow ditch along the top of slope and north of the road, bioswales along both the north and south shoulders, two culverts that convey stormwater runoff and discharge it south of the road and within the project site. One of the culvert outlets is 180 feet from the edge of the Buckley Road easement; the other is directly adjacent to the new Buckley Road at the Vachell Lane intersection.

The existing project site is mostly agricultural land that drains away from Buckley Road toward the East Fork Creek. The site has a small ridge running roughly north and south that divides the project site into two watersheds, E2 and E3. Another watershed, E1, was delineated for the existing area that drains to the floodplain overflow area near the intersection of Buckley Road and Vachell Lane.

Offsite drainage includes runoff from a portion of the Caltrans property north of Buckley Road. Runoff from the western portion of the northern property is collected in a storm drain system that outlets to the existing culvert along Higuera Street. The eastern portion of the northern property drains to the project via culverts crossing Buckley Road. Both culverts outlet beyond the proposed site improvements near the floodplain overflow area adjacent to the intersection of Buckley Road and Vachell Lane, so neither culvert should be impacted by the project. If the property north of Buckley Road is developed at a future date, onsite detention would need to be provided to reduce peak flows to or below existing conditions.

Figure 12-1 shows the delineation for the existing watersheds within the project site along with the offsite drainage. The proposed grading divides the project site into two areas that drain to the north and to the south, watersheds P2 and P3 respectively. A third watershed, P1, was created for the area within the grading boundary that drains to the floodplain overflow area. All of the runoff from the grading area will be conveyed to proposed onsite detention. Figure 12-2 shows the proposed watersheds and drainage within the area impacted by the project.

Figure 12-1 Existing Drainage

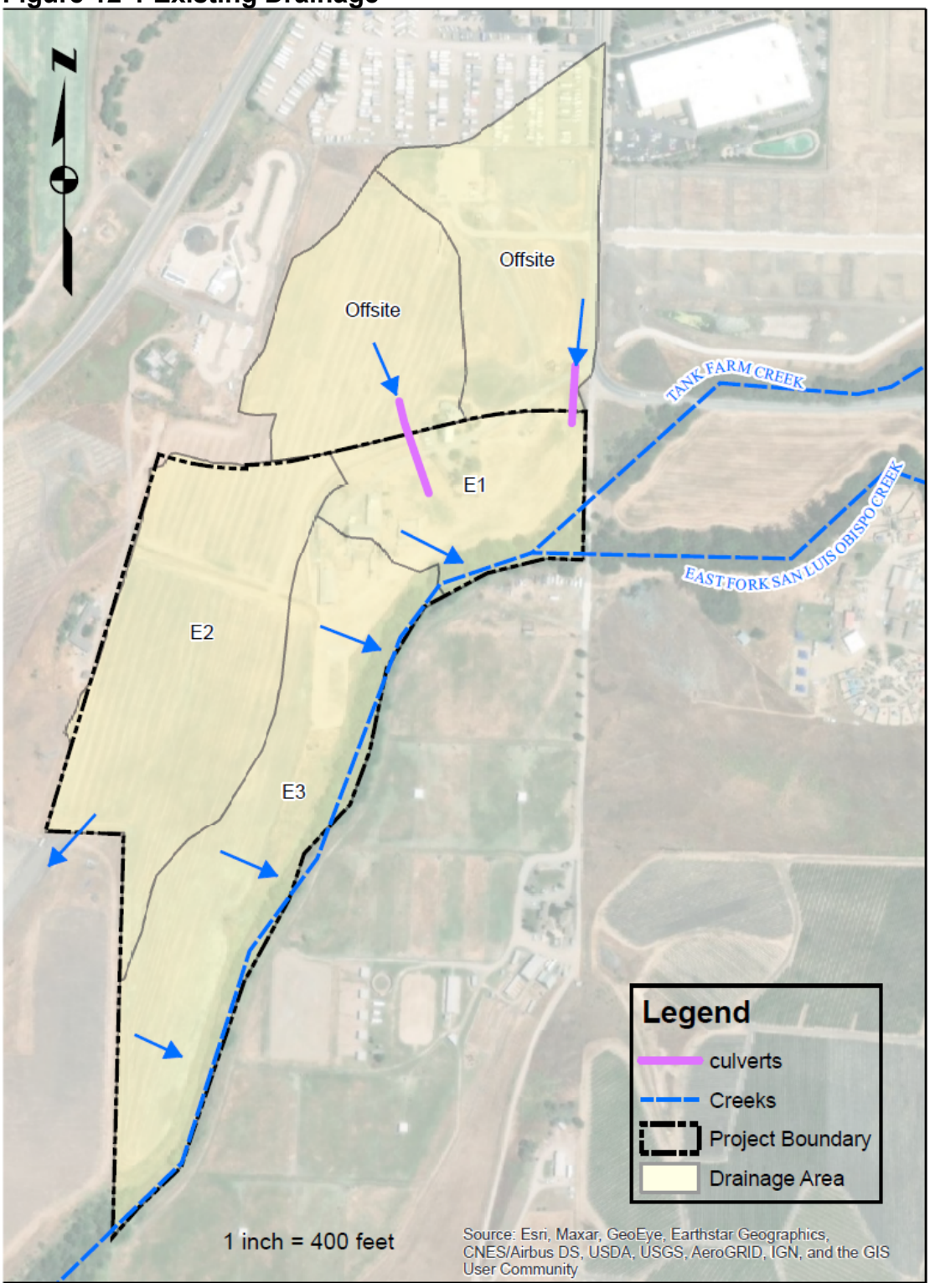
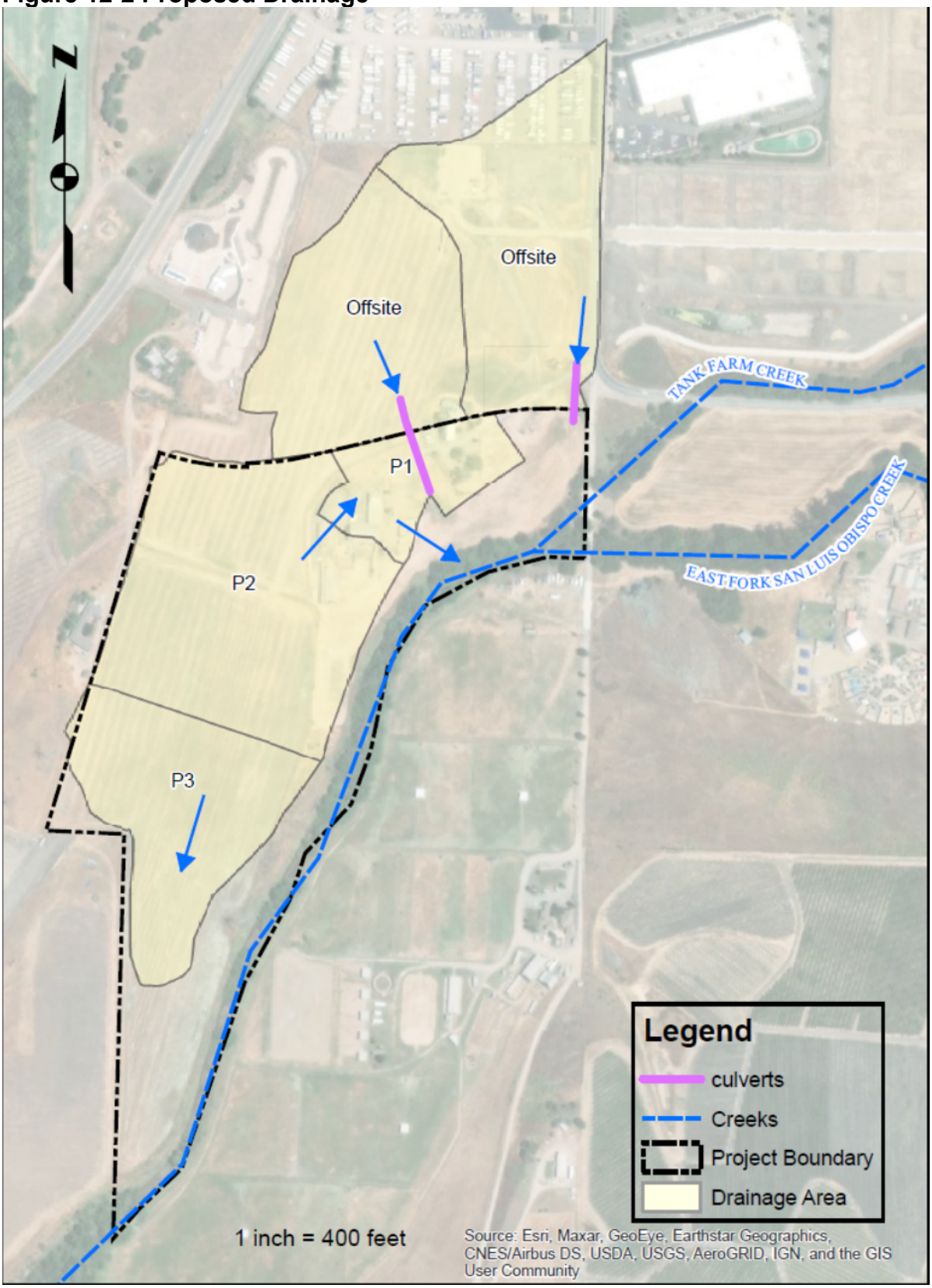


Figure 12-2 Proposed Drainage



12.3.4 Groundwater Basin

General groundwater basin information in this section is taken from the October 2021 San Luis Obispo Valley Groundwater Sustainability Plan. The San Luis Valley Groundwater Basin (3-009), herein called the SLO Basin, is composed of valleys of gentle flatlands and rolling hills ranging in elevation from approximately 100 to 500 feet above mean sea level (AMSL), surrounded by larger mountain ranges. The SLO Basin is within the watershed areas of the San Luis Obispo Creek and Pismo Creek drainages, which are bounded on the northeast by the Santa Lucia Range and on the southwest by the formations of the San Luis Range and the Edna Fault.

The project is within the San Luis Obispo Creek watershed portion of the SLO Basin. The San Luis Valley lies within the San Luis Obispo Creek drainage. A bedrock ridge underlies the ground surface between the San Luis Valley and Edna Valley. Significant tributaries to the San Luis Obispo Creek within the basin include Prefumo Creek, Stenner Creek, and Davenport Creek. Urban areas within the SLO Basin include the City of San Luis Obispo, Cal Poly, Edna, and Verde. Highway 101 is the most significant north-south highway in the basin.

The project property is at the southwest flank and on the margins but outside the current boundaries of the SLO Basin. Groundwater within the upper sedimentary deposits in the property occurs in two separate zones. The upper Holocene-age alluvium consists of unconsolidated gravel, sand, silt, and clay of fluvial origin that reaches a maximum thickness of approximately 50 feet. The lower Pleistocene-age zone consists of alluvial terrace deposits as thick as 50 feet of the Paso Robles Formation, and generally are composed of unconsolidated to semi-consolidated conglomerate, sand, silt, gravel, and clay (Department of Water Resources, 1979).

According to published information on the Water Quality Control Board online database Geotracker, first encountered groundwater in the area of the property is generally 20 feet below ground surface. Groundwater flow direction in the area of the property is variable, but generally flows to the south or southeast. The groundwater table in the San Luis Obispo Valley is expected to vary due to seasonal rainfall and groundwater extraction for municipal and agricultural use. A summary of groundwater conditions is shown in Table 12.1.

Table 12.1 Surrounding Groundwater Information

Location of Borehole Number	Ground Surface Elevation (feet)	Groundwater Table Piezometric Depth (feet)	Groundwater Table Piezometric Elevation (feet)	Date Measured	Notes
State Well # 31S12E10H003M	122	12	110	March 2022	About 0.75 mile north of the site
Bridge # 49C-396 SLO-1	79.9	19.9	60.0	March 1997	About 0.65 mile southwest of the site
Bridge # 49C-396 SLO-2	78.6	17.6	61.0	March 1997	About 0.65 mile southwest of the site
Bridge # 49C-396 SLO-3	79.0	18.0	61.0	March 1997	About 0.65 mile southwest of the site

State Well #31S12E10H003M was observed to fluctuate between Elevation 104 to Elevation 115 feet during wetter and drier months such as April and October from the past 17 years of data. The preliminary groundwater table elevation is assumed to be at Elevation 95 feet for design purposes. Groundwater elevations at the project site (south parcel) have not been determined pending further geologic investigations. In comparison to the overall groundwater area and due to the highly variable nature of the existing groundwater flow paths, specific groundwater depths are unknown.

Groundwater Budget

The San Luis Obispo Valley Basin is composed of two subareas, the San Luis Valley and the Edna Valley. The San Luis Valley is estimated to have a surplus of 700 acre-feet per year; the “surplus” is likely expressed as groundwater discharge to streams in the valley. The Edna Valley is estimated to have an annual average overdraft of 1,100 acre-feet per year. Because the presence of the bedrock ridge beneath the aquifer between Edna Valley and San Luis Valley limits flow between the subareas, the overdraft in Edna Valley is not significantly impacted by conditions of “surplus” in San Luis Valley. The project site is just outside the San Luis Valley subarea.

Groundwater Contamination

Per the Central Coast Regional Water Quality Control Board’s Basin Plan, the general water quality objectives for all groundwater in the Central Coast area include tastes, odors, and radioactivity. Groundwater shall not contain taste or

odor-producing substances in concentrations that adversely affect beneficial uses. In addition, radionuclides shall not be present in concentrations deleterious to humans, plants, animals, or aquatic life.

Residual contamination from petroleum hydrocarbons, tetrachloroethylene (PCE), trichloroethylene (TCE), and per- and polyfluoroalkyl substances (PFAS) is documented in groundwater up gradient from the project location. While activities associated with the source of the contamination no longer appear to be active, the presence of TCE, PCE, and PFAS limits the use of groundwater for drinking water. In an effort to expand local water resources, the City of San Luis Obispo, County of San Luis Obispo, and CAL FIRE are taking steps to study, treat, and clean the plumes and restore the basin so high-quality drinking water can be provided to the community.

Tetrachloroethylene (PCE): The Department of Toxic Substances Control is the lead agency overseeing the investigation of the tetrachloroethylene (PCE) groundwater plume in the City of San Luis Obispo along Highway 101 from about Marsh Street to Los Osos Valley Road. PCE is a chlorinated solvent that was historically used for dry cleaning fabrics, fabric manufacturing, and degreasing metals at automotive repair shops and other types of industrial facilities.

PCE impacts to San Luis Obispo aquifers were first documented in the 1990s, with numerous follow-up investigations occurring since 2005. The most recent study was completed by the City in 2022 as part of the Groundwater Cleanup Project, and involved boring at 30 locations to collect groundwater and soil samples to investigate the extent of the plume. The investigation is ongoing and has determined that PCE originated from multiple source areas.

Seven public water supply wells have been impacted by PCE, three of which have been contaminated at levels exceeding the maximum contaminant level (MCL) of 5.0 micrograms per liter established by the California Department of Public Health and the U.S. Environmental Protection Agency. The City is leading the effort to continue to investigate and clean the plume to provide high quality drinking water to the community.

Trichloroethylene (TCE): The Central Coast Regional Water Quality Control Board (Central Coast Water Board) is the lead agency overseeing the investigation of trichloroethylene (TCE) in groundwater in the Buckley Road area, adjacent to the San Luis Obispo County Regional Airport. The initial investigation area included properties along Buckley Road, Thread Lane (also known as Noll Road), Davenport Creek Road, Evans Road, Angie Lou Lane, Mello Lane, Three Sisters Road, Hidden Springs Road, Edna Road, Windmill Road, Rancho Oaks Drive, Sherpa Ranch Road, and Airport Drive. Based on the distribution of TCE detected in supply wells, Central Coast Water Board staff focused the main area for further investigation to the Thread Lane, Davenport Creek Road, Evans Road, Angie Lou Lane, Mello Lane, and Three

Sisters Road area, where TCE concentrations are near or above the drinking water standard.

From 2015 to 2020, Central Coast Water Board staff conducted drinking water testing at 69 well locations as part of the investigation, including repeated sampling at some locations to monitor the TCE plume. Under a Central Coast Water Board Cleanup and Abatement order, responsible parties took over testing of wells in June 2020. Initially, up to 14 supply wells were found to be impacted by TCE above the drinking water standard of 5 micrograms per liter. As of March 2021, 10 supply wells (seven private domestic wells and three industrial wells), out of 70 locations tested since 2015 exceed the drinking water standard for TCE of 5 micrograms per liter (µg/L). The current maximum detected concentrations of TCE in a private domestic well and industrial well are 93 and 52 µg/L, respectively, and occur in the Thread Lane area. This compares with a maximum historical TCE concentration of 320 µg/L detected in a Thread Lane industrial supply well in 2003.

Per- and Polyfluoroalkyl Substances (PFAS): In recent years, health, environmental and regulatory officials around the world have begun to pay close attention to a group of chemicals that have the potential to cause health problems in humans. Known as per- and polyfluoroalkyl substances (PFAS), these chemicals have been around since the 1940s and are commonly used in the manufacture of thousands of different consumer products.

PFAS group chemicals are commonly found in food, packaging materials, non-stick cooking surfaces, stain- and water-resistant fabrics, polishes, waxes, paint, cleaning products and fire-fighting foams, among many other consumer products. They are also industrial by-products of chrome plating, oil recovery and in manufacturing of various electronics components. Due to their chemical structure, PFAS are very stable in the environment and are resistant to breaking down. These chemicals can be found in aquifers in the San Luis Obispo area.

In March 2019, airports in California, including the San Luis Obispo County Regional Airport, were ordered by the State Water Resources Control Board to investigate the presence of PFAS in soil and groundwater due to the link between PFAS and aqueous film-forming foam fire suppressants used during firefighting and training operations. Since 2022, the County and CAL FIRE have conducted sampling of groundwater wells, documenting the presence of PFAS near the airport and surrounding community. In July 2023, the Regional Water Quality Control Board ratified a Voluntary Cleanup and Abatement Agreement whereby the County and CAL FIRE agreed to work cooperatively to further investigate and remediate PFAS contamination in soil, soil vapor, and groundwater, as well as to install and monitor PFAS treatment systems at affected wells and residences to ensure consumer safety. The evaluation and cleanup of PFAS are currently ongoing.

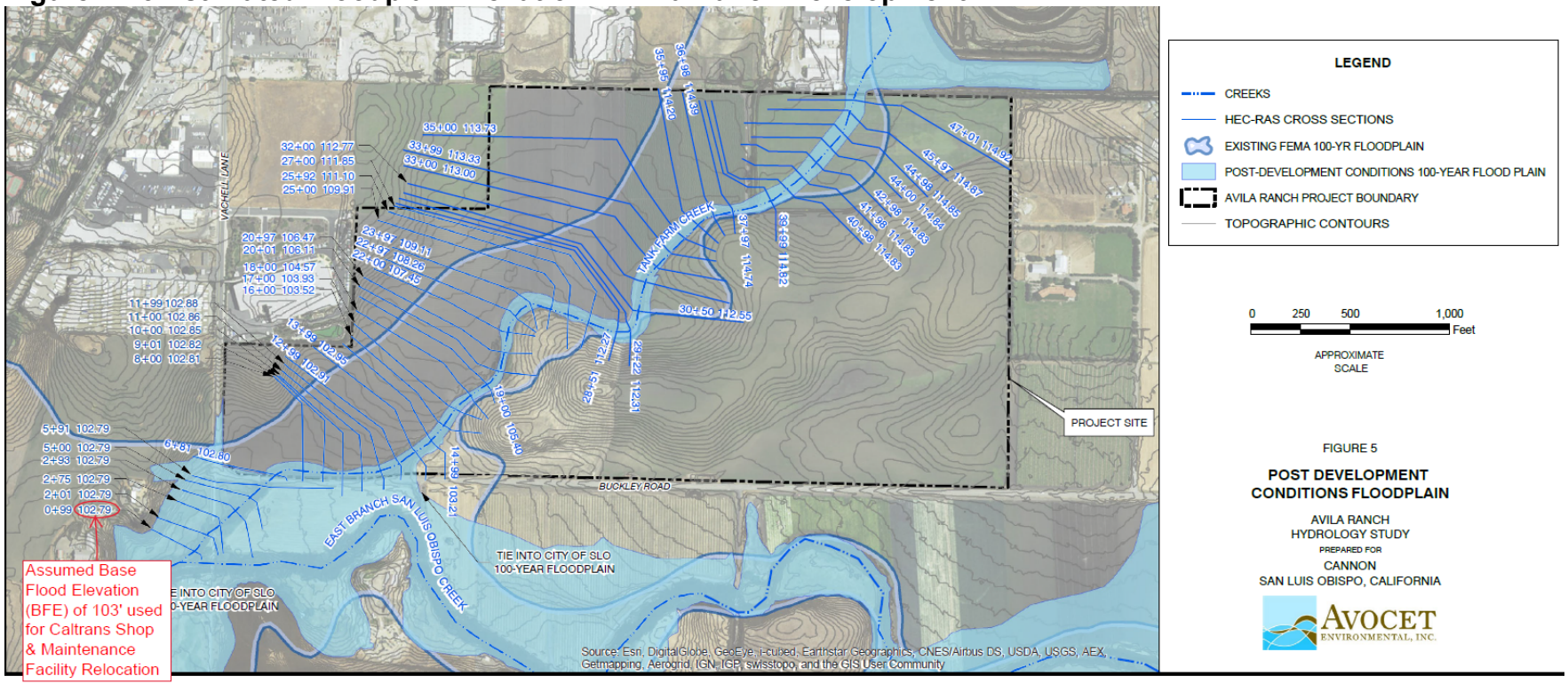
12.3.5 Floodplain

The project site is within the San Luis Obispo Creek watershed. Two tributary creeks are near the project site: the East Fork of the San Luis Obispo Creek and the Tank Farm Creek. The confluence of these two creeks occurs just southwest of the intersection of Buckley Road and Vachell Lane. After the confluence, the East Fork of the San Luis Obispo Creek (East Fork Creek) flows along the east side of the project site and joins the San Luis Obispo Creek about 3,500 feet downstream of the project site.

The project site is on the Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) Panel 06079C1331G and is mapped as Zone A, which are areas within the 1 percent annual chance floodplain boundary or 100-year floodplain where no base elevations have been determined. According to the current Flood Insurance Rate Map, the entire project site is listed as Zone A. However, Federal Emergency Management Agency is in the process of re-evaluating the San Luis Obispo Creek and its tributaries, including the East Fork and Tank Farm Creeks using base-level engineering for incorporation into future Flood Insurance Rate Map updates. According to preliminary Federal Emergency Management Agency results, the floodplain is concentrated near the confluence of the East Fork Creek and Tank Farm Creek, with most of the project site no longer considered within a Federal Emergency Management Agency floodplain.

Federal Emergency Management Agency submitted preliminary results to the County of San Luis Obispo (County) as the floodplain administrator. As part of the Federal Emergency Management Agency re-mapping, the County contracted an additional study of the East Fork and Tank Farm Creeks to better represent known flooding conditions. The County floodplain study is ongoing, and no modeling results are available yet. In the interim, the County recommended Caltrans use the floodplain elevations from a recent study for the Avila Ranch Development project. The floodplain analyses for the Avila Ranch Development project are based on the Draft Drainage Report completed by Avocet Environmental, Inc in September 2015 and by Cannon Associates in December 2015. The Avocet study extends about 4,600 feet from just upstream of the confluence with the East Fork and Tank Farm Creeks to the northern property boundary for the Avila Ranch Development. Figure 12-3 shows the post-development floodplain elevations from the 2015 Avocet environmental study. As shown in Figure 12-3, the floodplain elevation near the confluence and on the project site is approximately 103 feet.

Figure 12-3 Estimated Floodplain Elevation – Avila Ranch Development



12.4 Impact Analysis

12.4.1 Methodology

Impacts related to hydrology and water quality were evaluated qualitatively by considering aspects of the project, reasonably foreseeable distribution components, and alternatives as they relate to applicable CEQA Guidelines Appendix G significance criteria and the existing regulatory and environmental settings.

The following features and standardized measures to be implemented by the project that address permit requirements will minimize temporary or permanent water quality impacts created by the project. These measures are taken into consideration prior to determining project impacts:

- The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order Number 2022-XX33-DWQ, National Pollutant Discharge Elimination System Number CAS000003 and any subsequent permits in effect at the time of construction.
- The project will comply with the provisions of the National Pollutant Discharge Elimination System Construction General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order Number 2022-0057-DWQ, National Pollutant Discharge Elimination System Number CAS000002 and any subsequent permits in effect at the time of construction.
- The project will comply with the Construction General Permit by preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP) to address all construction-related activities, equipment, and materials that have the potential impact water quality for the appropriate Risk Level. The Stormwater Pollution Prevention Plan or Water Pollution Control Plan will identify the sources of pollutants that may affect the quality of stormwater and include Best Management Practices to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-stormwater Best Management Practices. All work must conform to the Construction Site Best Management Practices requirements specified in the latest edition of the Stormwater Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction-related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste

management, materials handling, and other non-stormwater Best Management Practices.

- Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes, and swales, over side drains, flared end sections, and outlet protection/velocity dissipation devices.
- Caltrans-approved treatment Best Management Practices (BMPs) will be implemented consistent with the requirements of National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order Number 2022-XX33-DWQ, National Pollutant Discharge Elimination System Number CAS00003 and any subsequent permits in effect at the time of construction. Treatment Best Management Practices may include biofiltration strips, biofiltration swales, infiltration basins/vaults, detention devices/vaults.

12.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, the project, reasonably foreseeable distribution components, and the alternatives would result in a significant impact on hydrology and water quality if they would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality.
- Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- 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 onsite or offsite.
    - substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite.
    - 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,
    - impede or redirect flood flows.
- Risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

12.5 Environmental Impacts

Impact HYDRO-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality – Less than Significant with Mitigation Incorporated

Project Construction

Construction of the project would involve ground disturbance that could result in sediments being transported into local storm drainage systems along Buckley Road and directly into the East Fork of San Luis Obispo Creek, thereby degrading the quality of receiving waters. Construction would also include the potential storage, use, transport, and/or disposal of hazardous materials (such as fuels, oils, solvents) used for construction equipment. Accidental spills of these materials or improper material disposal could pose a risk to the groundwater underlying the spill or disposal area if the materials seep into the soil or groundwater.

In addition, ground-disturbing activities (such as deeper excavations for structure footings or the underground stormwater vaults) during project construction could potentially expose groundwater, thereby providing a direct pathway by which hazardous materials could enter groundwater and potentially impair its quality. Improper disposal of dewatering effluent could also pose a potential threat to surface water or groundwater quality if the dewatered groundwater was polluted and transported to surface waters or groundwater. Any dewatering will be completed according to the Caltrans Field Guide for Construction Site Dewatering (June 2014). Hazardous materials spills on the project site could affect surface water if they enter the existing stormwater system near the project site and ultimately were transported to the stormwater system's receiving waterbodies.

As discussed further in Chapter 11, Hazards and Hazardous Materials, storage or use of hazardous materials for construction activities would be limited and would be performed in compliance with all applicable federal, state, and local hazardous materials and hazardous waste regulations. No chemical processing or storage or stockpiling of substantial quantities of hazardous materials would take place at the project site other than what would be necessary for standard construction activities. Furthermore, Caltrans and/or its contractor(s) would dispose of hazardous materials at an appropriate hazardous materials disposal facility or landfill in accordance with all applicable federal, state, and local hazardous materials and hazardous waste regulations.

The project also would be required to comply with applicable National Pollutant Discharge Elimination System permits such as the National Pollutant Discharge Elimination System General Permit for Construction Activities. In compliance with this permit, Caltrans and/or its contractor(s)

would prepare a Storm Water Pollution Prevention Plan and prevent polluted dewatered groundwater from being discharged to surface waters or groundwater. The Storm Water Pollution Prevention Plan would identify the sources of pollutants that may affect the quality of stormwater and include Best Management Practices (such as sediment control, erosion control, and good housekeeping) to control the pollutants in stormwater runoff. Compliance with these measures would prevent substantial impacts to surface water or groundwater quality from occurring. Measures in Chapter 7, Biological Resources, will help reduce water quality impacts during construction. Measures in Chapter 11, Hazards and Hazardous Materials would also reduce potential water quality impacts during construction; therefore, the impact is Less than Significant with Mitigation Incorporated.

Measures that Apply

Mitigation Measure BIO-3: ESA fencing along creek.

Mitigation Measures BIO-6: Refueling, Maintenance, and Staging.

Mitigation Measure HAZ-1: Phase II Environmental Site Assessment.

Mitigation Measure HAZ-2: Soil Management Plan.

Project Operation

As detailed in Chapter 11, Hazards and Hazardous Materials, operation of the project would include the use and storage of hazardous materials, including fuel and oils, and would generate hazardous wastes from laboratory activities and truck rinse activities. These hazardous materials and wastes could result in an impact on water quality if transported to downstream surface waters (through the stormwater infrastructure) or into soils or groundwater.

All hazardous materials would either be contained within the buildings (e.g., solvents used for laboratory cleaning) or have appropriate containment measures. Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment. Domestic water used for Alternative 2, would be discharged to the City's sewer system, which would treat the effluent before discharge to the San Luis Obispo Creek. The City has indicated that the sewer system has sufficient capacity to accept discharges from the project. As a result, such effluent would not be expected to violate water quality standards or otherwise degrade water quality. Therefore, the operational impact related to water quality is considered Less than Significant. This finding is applicable to Alternative 2.

Alternative 1 includes the use of an onsite water well for a potable drinking water system. As discussed in Chapter 11, Hazards and Hazardous Materials, several known and potential contaminants occur in the onsite and surrounding groundwater. Mitigation measures are included to prevent the exposure of Caltrans staff and visiting/surrounding public to contaminated

drinking water and prevent changes to contamination plumes by the pumping of groundwater. Alternative 1 also includes use of an onsite sewer system. The onsite sewer system would create a new source of potential groundwater contamination. Mitigation measures are included to reduce the risk of contamination with long-term operation of a septic tank. Therefore, the long-term operation of an onsite drinking water well and sewer system creates a potential to impact water quality standards and waste discharge requirements, but with mitigation measures proposed in Chapter 9, Geology and Soils, and Chapter 11, Hazards and Hazardous Materials, the potential operational impacts are considered Less than Significant with Mitigation Incorporated.

Measures that Apply

Mitigation Measure GEO-1: Geotechnical Study and Design.

Mitigation Measure HAZ-1: Groundwater Investigation for Drinking Water Well.

Impact HYDRO-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin – Less than Significant with Mitigation Incorporated

Construction

The project would develop approximately 24 acres of the 34 acres of state-owned property south of Buckley Road. Approximately 18 acres of this development would be impervious surfaces; the remainder of the site would be unpaved, such as for landscaping and stormwater management. These quantities are subject to change pending final design. Addition of impervious surfaces can reduce groundwater recharge by preventing water falling on the site as precipitation from infiltrating into the soil and groundwater below.

Given that depth to groundwater at the site is possible at locations closest to the creek, those locations are expected to be composed of fill material. Project construction activities are unlikely to encounter substantial quantities of groundwater or require substantial dewatering, so groundwater supplies are unlikely to decrease in this way. Dewatering may be required for the deeper excavation activities associated with construction of structure footings or stormwater vaults but would not be anticipated to substantially reduce the groundwater supplies. Construction Best Management Practices, as required by the Construction General Permit and Storm Water Pollution Prevention Plan, would sufficiently reduce infiltration of pollutants to groundwater during construction.

If groundwater dewatering is required during excavation activities, Caltrans and/or its contractor(s) would follow the Caltrans Field Guide for Construction

Site Dewatering (June 2014). This guidance outlines the permits, methods, testing and treatment (as necessary) of groundwater encountered during groundwater dewatering prior to release. As a result, groundwater dewatering would not introduce pollutants to receiving waters at levels that would violate water quality standards or waste discharge requirements, degrade water quality, increase pollutant discharge, or alter the quality of the receiving water.

Construction-related water demands for dust control over the construction period would be met using water trucks. While the source of water provided by the water trucks could derive from groundwater, the amount of water used during construction would not be sufficient to substantially affect regional groundwater supplies. Construction impacts to groundwater supplies or interference with groundwater recharge such that the project may impede sustainable groundwater management of the basin water quality from groundwater dewatering would be Less than Significant.

Operational

As described in the San Luis Obispo Valley Basin Groundwater Sustainability Plan, the main sources of recharge to the basin aquifer are areal infiltration of precipitation, subsurface inflow from surrounding bedrock, percolation of surface water from streams, and anthropogenic recharge (including percolation of wastewater treatment plant effluent, return flow from irrigation, and return flow from domestic septic systems). The main sources of discharge from the basin aquifer are pumping from wells, evapotranspiration by phreatophytes in areas of shallow groundwater table, and groundwater discharge to streams.

Although the project may result in the creation of approximately 18 acres of impervious surfaces and a corresponding reduction in recharge in this specific area from previous infiltration of precipitation, it would not substantially affect overall rates of recharge in the subbasin since the existing soils make it a low/medium quality area for recharge. Also, water falling on landscaped areas of the project site would still infiltrate into soil and groundwater using stormwater control features and landscaping.

Domestic water used for Alternative 2 would come from the City and be discharged to the City's sewer system, which would treat the effluent before discharge to the San Luis Obispo Creek. The City water source does not currently use groundwater as a drinking water source and has indicated that the sewer system has sufficient capacity to accept discharges from the project. Therefore, the operational impacts to the groundwater supply and recharge would be Less than Significant. This finding applies to Alternative 2.

Alternative 1 includes the use of an onsite water well for a potable drinking water system. The annual water demand estimation for the project is approximately 10-acre feet per year. Currently, the annual surplus of the San Luis Valley subarea is 700-acre feet per year. Or, in other words, the project

would use 1.4 percent of the annual groundwater surplus. The project also would be rated Leadership in Energy and Environmental Design Silver or better and would include water-efficient fixtures and landscaping, which are not considered in the water demand calculations.

Lastly, the project site is near but outside and downgradient of the San Luis Obispo Basin subarea, so although withdrawal and recharge impacts to the basin are unknown, they are expected given the proximity. However, with a better understanding of the groundwater, impacts can be reduced with management practices or engineering/control techniques Therefore, the operational impact of onsite water well is considered Less than Significant with Mitigation Incorporated.

Measures that Apply

Mitigation Measure GEO-2: Groundwater use limitations during drought.

Mitigation Measure HAZ-1: Groundwater Investigation for Drinking Water Well.

***Impact HYDRO-3: 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 onsite or offsite; substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite; 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 impede or redirect flood flows.* – Less than Significant**

Construction

As mentioned in the Methodology Section 12.4.1, there are several features and standardized measures to be implemented during construction of the project that address permit requirements and that minimize temporary water quality impacts (erosion, siltation, and polluted runoff) created by the project. Therefore, any construction impacts are considered Less than Significant.

Operational

The project's Drainage report dated June 21, 2023 is used for the following significance discussion and determination.

The project site is on the Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) Panel 06079C1331G and is mapped as Zone A, which are areas within the 1 percent annual chance floodplain boundary or 100-year floodplain where no base elevations have been determined.

According to the current Flood Insurance Rate Map, the entire project site is listed as Zone A. However, Federal Emergency Management Agency is in the process of re-evaluating the San Luis Obispo Creek and its tributaries, including the East Fork and Tank Farm creeks using base-level engineering for incorporation into future Flood Insurance Rate Map updates. According to preliminary Federal Emergency Management Agency results, the floodplain is concentrated near the confluence of the East Fork Creek and Tank Farm Creek, with most of the project site no longer considered within a Federal Emergency Management Agency floodplain.

The current conceptual design of the project's drainage does not increase storm runoff offsite and into the 100-year floodplain. In order to make this determination, Hydrologic analyses were performed to estimate runoff magnitude from the project site considering the existing and proposed conditions.

Project Site Hydrology

Hydrologic analyses were performed to estimate runoff magnitude from the project site considering the existing and proposed conditions. Computer modeling software was used for runoff estimations. The modeling is based on the hydrograph transformation methodology from TR-55, Urban Hydrology for Small Watersheds for a Soil Conservation Service Type 1 unit hydrograph and uses National Oceanic and Atmospheric Administration Atlas 14 precipitation values for a 24-hour design storm. Table 12.2 shows the precipitation volumes used in the model.

Table 12.2 24-hour Precipitation

Storm Event	Rainfall Depth (inches)
2-year	2.52
10-year	3.86
25-year	4.66
100-year	5.85

Existing Runoff

Runoff rates for the existing conditions were calculated accounting for the hydrologic soil groups (HSG) and land cover to determine the runoff curve number. The project area contains a mix of Diablo and Diablo and Cibo clays, all designated as HSG C according to the Natural Resources Conservation Service Web Soil Survey. HSG C soils have slow infiltration rates when thoroughly wetted. The land cover type for existing conditions is mostly agricultural fields with some farm buildings. The runoff curve number generally ranges from values of 30 for permeable soils with high infiltration rates, and values of 100 for soils with low infiltration rates. Also, a time of

concentration value is used in the model. The time of concentration is defined as the time needed for water to flow from the most remote point in the watershed to the watershed outlet. The 100-year peak discharge rates of the existing conditions are shown in Table 12.3.

Table 12.3 Runoff Rates for Existing Conditions

Watershed	Area - acres	Runoff Curve Number	Time of Concentration	100-year Discharge Rate (cubic feet per second)
E1	6.75	88	15.7	17.6
E2	13.74	84	33.2	25.7
E3	14.20	84	29.8	28.0

Proposed Runoff

For the proposed conditions, the land cover type is urban commercial and business, with a runoff curve number equal to 94. Conservatively, a minimum time of concentration of 5 minutes was assumed for the developed site. Watershed parameters and peak discharges for the proposed conditions are shown in Table 12.4.

Table 12.4 Runoff Rates for Proposed Conditions

Watershed	Area - acres	Runoff Curve Number	Time of Concentration	100-year Discharge Rate (cubic feet per second)
P1	3.08	94	5	10.9
P2	11.92	94	5	46.9
P3	7.21	94	5	28.4

Detention Basin Design

Based on the difference between the existing and proposed runoff rates, the conceptual design for stormwater detention ensures that there will not be an increase to runoff. The basins will detain runoff from the 100-year post development and discharge the equivalent or less of the 100-year pre-development storm event. The 100-year, 24-hour event was used in initial detention sizing to provide maximum storage volume needed.

Two detention basins are proposed on the project site. An underground vault system is proposed for the northern portion of the project site; an above-ground retention basin is recommended in the southern portion of the project

site. The underground vault system will have dual-purpose; it will provide detention for peak storm discharge in addition to providing stormwater treatment. Treatment will take place in an additional underground vault or with the proposed above-ground retention basin in the southern section site. The location of the underground vaults in the northern half of the site and the above-ground retention basin in the southern half of the site are the same for Alternatives 1 and 2 and are shown in Chapter 2, Figures 2-5 and 2-6.

To maintain the existing drainage patterns and limit any additional runoff, the northern portion underground vault system will need a storage capacity of approximately 120,000 cubic feet. The exact dimensions of the underground vault system and whether any infiltration is possible will be determined once a complete Geotech survey has been completed. The vault system will need to be a minimum of 5 feet above the seasonal high groundwater elevation to allow for infiltration to be a potential outlet. For the purpose of this study, orifice outlet structures were assumed rather than infiltration as an outlet method.

Two vault system depths were considered: 3-foot deep and 10-foot deep. Based on the depth of the vault system, the area will vary. The 3-foot deep vault system will require a below-ground area of 40,000 square feet and the 10-foot deep system will require a below-ground area of 12,000 square feet. The southern portions will collect storm runoff and detain the difference between the post- and pre-development runoff. The detention basin will need a storage capacity of approximately 40,000 cubic feet plus freeboard and is currently designed as 23,000 square feet and 4.5 feet deep with 4-to-1 side slopes.

Based on the model results, both vault systems should successfully reduce the peak runoff flow amounts enough to avoid a runoff increase. Tables 12.5 and 12.6 show the maximum outflow rates needed to avoid a runoff increase and the actual outflow rates predicted by the model.

Table 12.5 Runoff Rates Success Criteria – Underground Vault System

Storm Event	Allowed Outflow – cubic feet per second	Modeled Outflow, 3-foot Depth – cubic feet per second	Modeled Outflow, 10-foot Depth – cubic feet per second
2-year	3.3	1.4	1.5
10-year	6.3	3.2	3.8
25-year	8.1	4.4	4.8
100-year	10.9	6.3	6.0

Table 12.6 Runoff Rates – Above-ground Detention Basin

Storm Event	Allowed Peak Discharge Outflow – cubic feet per second	Modeled Peak Discharge Outflow, Detention Basin – cubic feet per second
2-year	4.8	2.1
10-year	10.2	5.8
25-year	13.6	7.3
100-year	18.8	8.8

In summary, the conceptual drainage design accounts for the onsite detention needed to ensure the base floodplain is not negatively impacted. Also, balanced grading is proposed for the Department of Motor Vehicles lot on the northeast corner of the project site, which is the only area encroaching in the floodplain described in Section 12.3.5. All other development proposed in the project site will be at a minimum elevation of 106 feet, which is 3 feet above the approximated floodplain elevation. Therefore, the operational impacts are considered Less than Significant.

***Impact HYDRO-4: Risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones* – Less than Significant**

As described in Chapter 11, Hazards and Hazardous Materials, hazardous materials would be stored onsite and used or disposed of at regular intervals. If adequate precautions are not taken, accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storms) to the underlying soils and groundwater. However, all hazardous materials would be either contained within the buildings or have appropriate containment measures.

Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment and would also be equipped with safe wells downstream of the containers that would capture any leaks or spills in the event of a failure and allow for appropriate treatment and disposal. All storage, handling, and disposal of these materials would comply with the applicable regulations and be under the oversight of the County of San Luis Obispo Environmental Health Services Department, which is the local Certified Unified Program Agency.

As described in the impact discussion above, almost all the project new grading and features would be constructed above the 100-year floodplain elevation of 103 feet that runs along the eastern side of the property with the East Fork of San Luis Obispo Creek. A portion of the Department of Motor Vehicles driver testing pad in the northeast corner would encroach in the 100-year floodplain but would be balanced to avoid an increase in the floodplain

elevation. The Department of Motor Vehicles pad would be constructed with a combination of cut and fill and include fill slopes and retaining walls. No structures or storage of materials will take place on the Department of Motor Vehicles pad, and it will have intermittent driver testing similar to the existing Department of Motor Vehicles pad north of Buckley Road. The Department of Motor Vehicles pad will be designed to handle heavy-duty commercial vehicle loads and any pressure and loads from floodwaters. Lastly, the project site is not in a tsunami or seiche zone. Therefore, this impact is considered Less than Significant.

Impact HYDRO-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. – **Less Than Significant with Mitigation Incorporated**

Domestic water used for Alternative 2 would come from the City and be discharged to the City's sewer system, which would treat the effluent before discharge to the San Luis Obispo Creek. The City water source does not currently use groundwater as a drinking water source, and the City has indicated that the sewer system has sufficient capacity to accept discharges from the project. Therefore, impact would be Less than Significant. This finding applies to Alternative 2.

Alternative 1 includes the use of an onsite water well for a potable drinking water system. The annual water demand estimation for the project is approximately 10-acre feet per year. Currently, the annual surplus of the San Luis Valley subarea is 700-acre feet per year. In other words, the project would use 1.4 percent of the annual groundwater surplus. The project also would be rated Leadership in Energy and Environmental Design Silver or better and would include water-efficient fixtures and landscaping, which are not considered in the water demand calculations.

Lastly, the project site is near but outside and downgradient of the San Luis Obispo Basin subarea, so although withdrawal and recharge impacts to the basin are unknown, they are expected given the close proximity. However, with a better understanding of the groundwater, impacts can be reduced with management practices or engineering/control techniques. Therefore, the impact of an onsite water well and sewer is considered Less than Significant with Mitigation Incorporated.

Measures that Apply

Mitigation Measure GEO-1: Geotechnical Study and Design.

Mitigation Measure HAZ-1: Groundwater Investigation for Drinking Water Well.

Chapter 13 Land Use and Planning

This section describes existing and proposed land uses within the project site and vicinity and analyzes potential impacts that may result from land use conflicts.

13.1 Regulatory Setting

13.1.1 Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies are applicable to Land Use and Planning and the proposed project.

13.1.2 State Laws, Regulations, and Policies

Government Code Section 63450 (Specific Plans)

State law (Government Code Section 63450) authorizes cities to adopt specific plans for implementation of their general plans in a defined area. All specific plans must comply with Sections 65450-65457 of the Government Code. These provisions require that a specific plan be consistent with the adopted general plan and, in turn, that all subsequent subdivisions and development, public works projects, and zoning regulations be consistent with the specific plan. Specific plans are required to include distribution, location and types of uses, development, and improvements to public facilities and infrastructure. Tailored regulations, conditions, programs, standards, and guidelines help implement the vision for long-range development of the specific plan area.

Cortese-Knox Hertzberg Local Government Reorganization Act of 2000

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.) prescribes a “uniform process” for boundary changes for both cities and special districts. This act delegates this process to the Local Agency Formation Commission. A Local Agency Formation Commission is a state agency that performs growth management functions and has approval authority regarding the establishment, expansion, reorganization, and elimination of any city and most types of special districts. Local Agency Formation Commissions establish Spheres of Influence for cities and special districts that define the appropriate and probable future jurisdictional boundary and service area of the agency. In addition to the Cortese-Knox-Hertzberg Act, the San Luis Obispo County Local Agency Formation Commission has adopted local policies that it considers in its review of projects.

13.1.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way.

13.2 ENVIRONMENTAL SETTING

The project site is in an unincorporated area of San Luis Obispo County, directly adjacent to the City of San Luis Obispo's southern city limits. The project is on 56.5 acres of state-owned property bisected by the recent Buckley Road Extension built as traffic mitigation for the Avila Ranch Housing Development. The portion of the state-owned property north of Buckley Road is zoned Commercial and within the San Luis Obispo Urban Reserve Line (URL). The portion of the state-owned property south of Buckley Road is zoned Agricultural and outside the Urban Reserve Line but within the City's Sphere of Influence. The project site is also identified as being within the Airport Review, Flood Hazard, and Renewable Energy Combining Designation areas.

Adjacent land west, south, and east of the project is zoned Agricultural. Land north of the project within the City is more diverse. South Higuera Street runs near the upper northwest corner of the project site and then veers west toward Highway 101 away from the southern limit of the project site. Land west of South Higuera is composed of agricultural land near San Luis Obispo Creek and open space across Highway 101. The northern portion of the site is bounded by Service Commercial land use. The northeastern portion of the project is bounded by manufacturing, medium-density residential, public facility, and conservation open space uses. The southeastern, southern, and southwestern bounds of the project site are surrounded by agricultural land in the unincorporated area of the county. In Chapter 2, Figure 2-4 shows the local zoning at and adjacent to the project site.

Development with the project will occur on land with a County designation and zoned as Agricultural (AG). According to the County General Plan (2010), only certain types of potential land uses are allowed in land zoned Agricultural: agricultural processing, animal facilities, crops and grazing.

13.3 Impact Analysis

13.3.1 Methodology

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may

apply to development activities not located on the project site (such as connections to infrastructure within the public right-of way).

13.3.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, the project, would result in a significant impact to Land Use and Planning if it:

a) Physically divides an established community?

b) Causes 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?

13.4 Impact Analysis

***Impact PLU-1: Physically divides an established community* – Less than Significant**

Projects such as a railroad line, major highway, or a water canal may result in physically dividing an established community by removing existing roadway connections, walkways and bike paths and other types of links between community areas. The project is adjacent to the new Avila Ranch Community and Industrial and Commercial uses within the City, but most of the area is rural agricultural and open space to the west, south, and southwest. Therefore, the project site is on the fringe of an established community, and therefore will not create a physical divide.

***Impact PLU-2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect* – Less than Significant**

The project would be on land purchased by Caltrans in 2001. Development activities on state-owned land are exempt from local laws, regulations, and policies. However, activities associated with the project that are not on the project site (such as utility connections) within the City of San Luis Obispo and on Buckley Road, South Higuera, and Vachell Lane are not exempt and may be subject to local regulations. The proposed required utility connections would mostly occur underground and would not conflict with existing connections already in place. Nevertheless, Caltrans would coordinate with local jurisdictions to reduce any physical consequences or potential land use conflicts to the extent feasible.

The project site is designated and zoned as Agriculture in the County of San Luis Obispo's General Plan. The project land use type (Industrial/Public

Facility) and proposed features are not an allowable land use per the County General Plan. However, state-owned land is exempt from local laws, regulations, and policies. Therefore, the project would not result in any conflicts with applicable land use plans, policies, or regulations; the impact would be Less than Significant.

Chapter 14 Mineral Resources

14.1 OVERVIEW

The purpose of this section is to describe the existing mineral resources of the project site and surrounding areas and to evaluate potential impacts of the proposed project on these features.

Although all mineral commodities mined in California are studied, special emphasis has been given to construction aggregate because it is the state's most important mineral commodity in terms of quantity, value, and infrastructure needs. Non-fuel mineral resources occur in unique geological settings and, therefore, must be mined where they are found. Over 90 percent of these essential construction resources are transported by truck. Because construction minerals are expensive to transport, it is beneficial to mine sand, gravel, and crushed stone resources close to growing communities.

14.2 REGULATORY SETTING

14.2.1 Federal Laws, Regulations, and Policies

There are no federal laws, regulations, or policies related to mineral resources applicable to the project.

14.2.2 State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 mandates that the State Mining and Geology Board and California Department of Conservation, Division of Mines and Geology prepare a mineral resource report for each county. The Surface Mining and Reclamation Act requires land classification into mineral resource zones based on the known or inferred mineral resource potential of the land. Mineral land classification is based solely on geology and focuses on non-fuel mineral resources. The four Mineral Resource Zone (MRZ) classifications used in the Surface Mining and Reclamation Act classification-designation process are as follows:

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

geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.

- MRZ-3: Areas containing known or inferred aggregate resources of undetermined significance.
- MRZ-4: Areas where available information is inadequate for assignment to any other zone.

Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

The County of San Luis Obispo is considered a lead agency with land-use jurisdiction for lands with active aggregate operations. Local jurisdictions are required to create planning and guidance for mineral conservation and extraction and to incorporate mineral resource management policies into their general plans.

County of San Luis Obispo General Plan- Conservation and Open Space Element

The County's Conservation and Open Space Element provides goals, policies, and implementation measures for the protection of natural resources and open space areas (including mineral resources) throughout the region (County of San Luis Obispo 2010). The Conservation and Open Space Element includes policies for the conservation and development of significant mineral deposits in balance with other County General Plan goals and policies.

County of San Luis Obispo Inland Land Use Ordinance (Title 22)

The County's Land Use Ordinance, Title 22 of the County Code, includes regulations that have been adopted by the County to implement the general plan. County Land Use Ordinance Section 22.14.040, Energy and Extractive Resource Area (EX), and Section 22.14.050, Energy and Extractive Resource Area (EX1), defines the purpose, applicability, processing requirements, and development standards of the EX and EX1 designations.

14.3 ENVIRONMENTAL SETTING

San Luis Obispo County's main mined mineral resources are sand and gravel. Other resources include chromite, manganese, mercury, and other metals. The project area is situated in the central-south portion of the county.

Mineral Resource Zones (MRZ), classified by the California Department of Conservation's Division of Mines and Geology, focus on aggregate resources,

in particular Portland cement concrete (PCC) aggregate resources. Mineral Resource Zones in the county include MRZ-1, MRZ-2, and MRZ-3. Surface Mining and Reclamation Act's updated aggregate resources sector map for San Luis Obispo-Santa Barbara Production Consumption Region map (2011) show no areas of MRZ-2 (concrete-grade aggregate).

The project site does not contain any areas listed as a Mineral Resource Area (MRA), Energy/Extractive Area (EX), or Mining Disclosure Zone (MDZ) in the San Luis Obispo County General Plan – Conservation and Open Space Element plan. In the project site and surrounding area, there are no recorded mineral resources, mining districts, or identified mining features, mining districts, or mining disturbed areas.

14.4 IMPACT ANALYSIS

14.4.1 Methodology

To evaluate proposed project impacts on mineral resources, this section is based on an evaluation of the MRZ classifications of project area soils and reference to the following sources:

- California Department of Conservation – Division of Mines and Geology: Mineral Land Classification: Portland Cement Concrete Aggregate and Active Mines of All Other Mineral Commodities in the San Luis Obispo – Santa Barbara Production-Consumption Region; Special Report 162 (1989)
- California Department of Conservation – California Geological Survey: Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region, California; Special Report 215 (2011)
- San Luis Obispo County – General Plan, Conservation and Open Space Element
- San Luis Obispo County – Inland Land Use Ordinance (Title 22)

14.4.2 Criteria for Determining Significance

The proposed project would result in a significant impact on mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state.
- 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.

14.5 Environmental Impacts

Impact MR-1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or the availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? **No Impact**

Based on the lack of mapped, known, or identified mineral resources on the project site and surrounding areas, the project will create No Impact to mineral resources.

Chapter 15 Noise and Vibration

15.1 OVERVIEW

This chapter describes potential impacts related to noise and vibration in the project area. To provide context for the impact analysis, this chapter begins with an environmental setting describing the existing conditions in the project area related to noise-sensitive receptors, noise-generating land uses, and vehicular transportation. Next, the regulatory framework is described, which informs the selection of the significance thresholds used in the impact analysis. The regulatory framework also includes existing general plan policies related to the impact analysis. The chapter concludes with the applicable significance thresholds, the noise and vibration impacts of the project, recommended mitigation measures, and significance conclusions.

15.2 REGULATORY SETTING

15.2.1 Federal Laws, Regulations, and Policies

There are no federal laws, regulations, or policies that are related to noise or vibration for the project.

15.2.2 State Laws, Regulations, and Policies

State of California General Plan Guidelines

In 1971, the State required cities and counties to include noise elements in their general plans (Government Code Section 65302 et seq.). The State of California General Plan Guidelines (Governor's Office of Planning and Research 2017) identify guidelines for the noise elements of local general plans, including a sound level/land-use compatibility chart. The noise element guidelines identify the "normally acceptable" range of noise exposure for low-density residential uses as less than 60 A-weighted decibel Day-Night Level , and the "conditionally acceptable" range as 55 to 70 A-weighted decibel Day-Night Level. The "normally acceptable" range for high-density residential uses is identified as below 65 A-weighted decibel Day-Night Level, and the "conditionally acceptable" range is identified as 60 to 70 A-weighted decibel Day-Night Level.

For educational and medical facilities, levels below 70 A-weighted decibel Day-Night Level are considered "normally acceptable," and levels of 60 to 70 A-weighted decibel Day-Night Level are considered "conditionally acceptable." For office and commercial land uses, levels below 70 A-weighted decibel Day-Night Level are considered "normally acceptable," and levels of

67.5 to 77.5 A-weighted decibel Day-Night Level are considered “conditionally acceptable.” Overlapping noise level ranges are intended to indicate that local conditions (existing sound levels and community attitudes toward dominant sound sources) should be considered in evaluating land use compatibility at specific locations.

State law intended that noise elements guide policymakers in making land use determinations and in preparing noise ordinances that would limit exposure of their populations to excessive noise levels. In 1984, State noise element provisions were revised to “recognize” guidelines prepared by the Office of Noise Control of the California Department of Health Services and to analyze and quantify, “to the extent practicable, as determined by the legislative body,” noise from a long list of sources, including highways, freeways, primary arterials, and major local streets; passenger and freight railroad operations and ground rapid transit systems; commercial, general aviation, and other ground facilities and maintenance functions related to airport operation; local industrial plants; and other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

As noted in the draft update to the General Plan Guidelines, the guidelines have since been incorporated into the General Plan Guidelines for Noise Elements (Office of Planning and Research 2017). The draft update to the General Plan Guidelines also addresses the balance between environmental noise and other planning objectives, including recognition that developed infill locations may experience higher levels of noise but are often desirable places to live and work precisely because they are active. Moreover, design strategies are available that can reduce adverse exposure to noise even in areas with relatively higher ambient noise levels (Office of Planning and Research 2017).

California Department of Transportation Vibration Criteria

The effects of groundborne vibration include movement of building floors, rattling of windows, shaking of items that sit on shelves or hang on walls, and rumbling sounds. In extreme cases, vibration can damage buildings, though this is not a factor for most projects. Human annoyance from groundborne vibration often occurs when vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance can be well below the damage threshold for normal buildings.

Vibration impacts would be significant if vibration levels would exceed the Caltrans-recommended standard of 0.2 inches per second peak particle velocity with respect to the risk of structural damage for normal buildings or Federal Transit Authority’s maximum-acceptable vibration standard of 80 vibration velocity with respect to human response (annoyance) at nearby vibration-sensitive land uses, such as residences.

Table 13.1 shows Caltrans' general thresholds for structural responses to vibration levels.

Table 15.1 Caltrans Vibration Damage Potential Threshold Criteria

Structure and Condition	Vibration from Transient Sources (inches per second sec peak particle velocity)	Vibration from Continuous/Frequent Intermittent Sources (inches per second sec peak particle velocity)
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment (Caltrans 2020).

15.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right- of-way). Also, sensitive receptors potentially affected by noise from the project are outside the state-owned property and within the County and City boundaries. Therefore, County and City noise thresholds are used in this noise and vibration analysis.

15.3 ENVIRONMENTAL SETTING

This section describes the terminology used throughout this report to characterize the noise environment and describes the existing conditions in the project area. The main noise source in the area is Highway 101. Other noise sources in the area include agricultural activities and natural sources (such as wind, birds). The project area does not intersect with any military bases, special use airspaces, or low-level flight paths, and is not in safety

zones or noise contours associated with airfields or airports that are a concern for land use compatibility planning.

15.3.1 Fundamentals of Environmental Noise

Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (such as air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals mostly with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Addition of Decibels

Because decibels are logarithmic units, sound pressure level cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB—rather, they would

combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound pressure level in that range. In general, people are most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of A-weighted decibel) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (such as B-, C-, and D-scales), but these scales are rarely used in conjunction with highway-traffic noise. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels or A-weighted decibel. Table 15.2 describes typical A-weighted noise levels for various noise sources.

Table 15.2 Typical A-Weighted Noise Levels

Activity	A-Weighted decibels (dBA)
Rock band outdoors	110
Jet fly-over at 1000 feet outdoors	105
Gas lawn mower at 3 feet outdoors	95
Diesel truck at 50 feet at 50 mph outdoors	85
Food blender at 3 feet indoors	85
Garbage disposal at 3 feet indoors	80
Noisy urban area, daytime outdoors	75
Gas lawn mower, 100 feet outdoors	70
Vacuum cleaner at 10 feet indoors	70
Normal speech at 3 feet indoors	65

Activity	A-Weighted decibels (dBA)
Commercial area outdoors	65
Heavy traffic at 300 feet outdoors	60
Large business office indoors	55
Quiet urban daytime outdoors	50
Dishwasher next room indoors	50
Quiet urban nighttime outdoors	40
Theater, large conference room (background) indoors	40
Quiet suburban nighttime outdoors	35
Library indoors	30
Quiet rural nighttime outdoors	25
Bedroom at night, concert hall (background) indoors	25
Broadcast/recording studio indoors	15
Lowest threshold of human hearing indoors and outdoors	0

(Source: Caltrans 2013)

Human Response to Changes in Noise Levels

As discussed above, doubling sound energy results in a 3-dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels, when exposed to steady, single-frequency (“pure-tone”) signals in the midfrequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (such as doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable.

Noise Descriptors

Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most used in traffic noise analysis.

- Equivalent Sound Level (Leq): Leq represents an average of the sound energy occurring over a specified period. In effect, Leq is the steady-state sound level containing the same acoustical energy as the time-varying sound that occurs during the same period. The 1-hour A-weighted equivalent sound level (Leq[h]) is the energy average of A-weighted sound levels occurring during a one-hour period and is the basis for noise abatement criteria (NAC) used by Caltrans and the Federal Highway Administration.
- Percentile-Exceeded Sound Level (Lxx): Lxx represents the sound level exceeded for a given percentage of a specified period (for instance, L10 is the sound level exceeded 10 percent of the time, and L90 is the sound level exceeded 90 percent of the time).
- Maximum Sound Level (Lmax): Lmax is the highest instantaneous sound level measured during a specified period.
- Day-Night Level (Ldn): Day-Night Level is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.
- Community Noise Equivalent Level (CNEL): Like Day-Night Level, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a 5-dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m.

15.3.2 Existing Noise Environment

Noise Sensitive Receptors

In determining noise impacts, primary consideration is given to exterior areas where frequent human use occurs that would benefit from a lowered noise level. In general, an area of frequent human use is an area where people are exposed to noise for an extended period of time on a regular basis.

As an example, a parking lot of a place of worship is not considered to be an area of frequent human use that would benefit from a lowered noise level because people only spend a few minutes there getting in and out of their cars and there would be no benefit to a lowered noise level. However, if outdoor worship services are held at this location, this would be an area where people are exposed to noise for an extended period of time and where the ability to hear is important. This then would be considered an area of frequent human use that would benefit from a lowered noise level.

Other examples are outdoor seating areas at restaurants or outdoor use areas at hotels, if those are areas where people spend an extended period of time on a regular basis. One practical test for determining frequent human

use is the presence of existing facilities that invite human use such as benches, barbeque facilities, covered group picnic areas, and uncovered picnic tables.

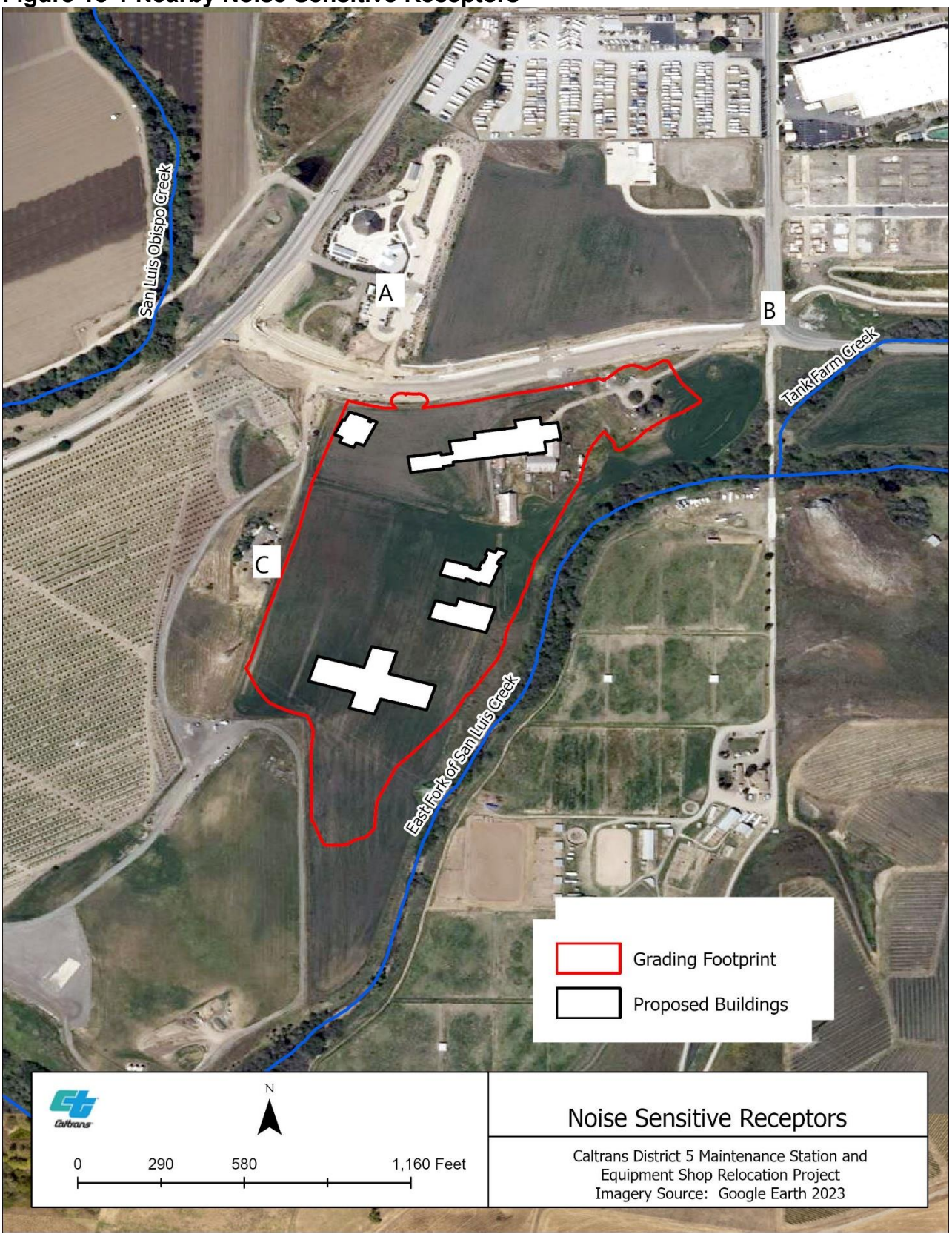
A field visit was made to identify noise sensitive receptors in the project vicinity. Google Earth was also used to assess and identify noise sensitive areas in the project vicinity. Table 15.3 identifies the noise sensitive receptors in the vicinity.

Table 15.3 Noise Sensitive Receptors

Receptor	Distance from the Nearest Building Proposed	Receptor in City or County?
A – Octagon Barn	550 feet from the proposed Regional Maintenance office	County
B – Avila Ranch Development – houses along Vachell Lane	750 feet from the proposed special crews building	City
C -Adjacent resident to the west and uphill	350 feet from the proposed fuel island	County

Figure 15-1 shows the location of noise sensitive receptors in comparison to the project and its features.

Figure 15-1 Nearby Noise Sensitive Receptors



15.3.3 Groundborne Vibration

Various criteria have been established to assist in the evaluation of vibration impacts. Caltrans has developed vibration criteria based on potential structural damage risks and human annoyance. Caltrans-recommended criteria for the evaluation of groundborne vibration levels, with regard to structural damage and human annoyance, are shown in Table 15.4 and Table 15.5. The criteria differentiate between transient and continuous/frequent sources. Transient sources of groundborne vibration include intermittent events, such as blasting; continuous and frequent events would include the operations of equipment, including construction equipment, and vehicle traffic on roadways (Caltrans 2020).

Table 15.4 Vibration Damage Potential Threshold Criteria

Structure and Conditions	Transient Sources Maximum Peak Particle Velocity (inches per second)	Continuous/Frequent Maximum Peak Particle Velocity (inches per second)
Extremely Fragile Historic Buildings, Ruins, Ancient Monuments	0.12	0.08
Fragile Buildings	0.2	0.1
Historic and Some Old Buildings	0.5	0.25
Older Residential Structures	0.5	0.3
New Residential Structures	1.0	0.5
Modern Industrial/Commercial Buildings	2.0	0.5

Notes for Tables 15.4 and 15.5: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 15.5 Guideline Vibration Annoyance Potential Criteria

Human Response	Transient Sources Maximum Peak Particle Velocity (inches per second)	Continuous/Frequent Maximum Peak Particle Velocity (inches per second)
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

15.4 IMPACT ANALYSIS

15.4.1 Methodology

Future anticipated conditions under the project during construction and operation are assessed in comparison to the proximity the noise sensitive receptors. Stationary-source noise levels were obtained from manufacturers' specifications and industry-standard technical reports. Traffic data from the traffic analysis were used to model existing and future traffic noise levels

Construction Noise

To assess the potential short-term noise impacts from construction, sensitive receptors and their relative levels of exposure were identified. Construction noise was predicted using construction noise levels published by the Federal Traffic Administration as shown in Table 15.4. Noise levels of specific construction equipment and resultant noise levels at the locations of sensitive receptors are estimated.

Traffic Noise

Noise impacts were also evaluated by comparing traffic noise generation associated with the operation of the project to existing conditions in the project area. The Federal Highway Administration Highway Traffic Noise Prediction Model 2.5 was used to predict traffic noise levels under existing conditions and under the project operation scenarios.

Stationary Noise

Potential long-term (operational) noise impacts from stationary non-transportation sources and other area noise sources (such as cooling tower, emergency generator, pumps, heating and air conditioning units, landscape, parking lot, and onsite project operational activities) were assessed based on existing documentation (equipment noise levels) and site visit data.

15.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, a noise impact is considered significant if implementation of the project would 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;
- Generation of excessive groundborne vibration or groundborne noise levels; or

- 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, exposure for people residing or working in the project area to excessive noise levels.

15.5 Environmental Impacts

Impact NOI-1: Generation of a substantial temporary 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 — Less than Significant

The project would increase existing noise levels associated with the development of the property. As described in Chapter 2, Project Description, construction activities would involve site preparation, grading, clearing, and excavation, and building construction as well as paving and architectural coating. Typical construction equipment and vehicles would be used, such as air compressors, rubber-tired dozers, tractors/loaders/ backhoes, excavators, graders, cranes, forklifts, generator sets, welders, cement and mortar mixers, pavers, paving equipment, and rollers. Staging areas for materials and equipment would be located on the project site. Trucking for delivery and disposal of materials would take place throughout the construction period. The nearest noise sensitive receptor to the project is about 50 feet away from where the large retaining wall is proposed along the western boundary.

Construction Equipment

To assess potential short-term, temporary (construction-related) noise impacts, noise levels of specific construction equipment were determined and resultant noise levels at given distances from the source were calculated. Table 15.6 shows the estimated noise levels associated with construction equipment onsite.

Table 15.6 Construction Equipment Noise

Equipment	Maximum Noise Level (A-weighted decibels, dBA)
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

Source: Federal Transit Administration, 2006

The residential property (Receptor C) adjacent and west of the project is about 50 feet from the location of a proposed retaining wall. As described in Chapter 2, Project Description, this retaining wall will be approximately 930 feet long, paralleling the western property fence line of the project site. Other approximate dimensions of the retaining wall include: a maximum height of 20 feet, a minimum 10-foot set back from the property fence line, and a maximum slope of 2-to-1 between the property fence line and top of the retaining wall. A cable railing fence/barrier will be constructed on top of the retaining wall for fall protection purposes. If feasible, landscape planting will be placed between the property fence line and the top of the retaining wall.

Given the proximity of the wall to Receptor C, noise levels during construction of the retaining wall could reach 89 decibels at exterior areas. Construction of the retaining wall will create the highest noise levels at Receptor C. The closest proposed building is approximately 300 feet from Receptor C. Assuming sound levels decrease at a rate of 6 decibels for each doubling of distance from a point source, noise levels at Receptor C exterior areas related to construction of the buildings are not expected to exceed 75 decibels.

The Octagon barn (Receptor A) is about 500 feet at the closest point to the project; the closest residence of the Avila Ranch Development is about 700 feet at the closest point. Assuming a sound decrease with increased distance from a point source as described above, construction noise levels are expected to reach 69 decibels at the Octagon Barn and 67 decibels at the closest residential unit of the Avila Ranch Development. Construction traffic noise levels are expected to be comparable to the operational traffic noise levels. See the operational traffic impact noise discussion below for more information.

In summary, construction traffic noise levels at the three noise sensitive receptors are not expected to exceed 60 decibels.

Construction activities would result in a substantial temporary increase in ambient noise levels. The highest construction-related noise levels are expected to reach 89 decibels at Receptor C during construction of the adjacent retaining wall. Worst-case predicted construction noise levels for the three noise sensitive receptors are shown in Table 15.5. The standard Caltrans construction noise policy is that construction noise is not to exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. As a State project on state-owned land, the project is exempt from the local development regulations, including the noise ordinance. Nevertheless, the State maintains a “good neighbor” policy with regard to local regulations, where feasible.

County Policy/Threshold

The County Land Use Ordinance states that construction activities that occur between 7:00 a.m. and 9:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturday and Sunday are exempt from the standards in Table 15.8 included in the operational noise impact discussion below.

City Policy/Threshold

The City Noise Control ordinance limits construction and demolition activities that would result in a noise disturbance to nearby land uses to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Noise-generating construction and demolition activities are prohibited on Sundays and holidays. The ordinance further states that, where technically and economically feasible, construction activities shall not exceed specified standards. For areas consisting of single-family residential, maximum construction-generated noise levels from Mobile Equipment (nonscheduled, intermittent, short-term operation, less than 10 days) should be limited to 75 A-weighted decibel during the daytime hours (7:00 a.m. to 7:00 p.m.) and 60 decibels during the nighttime hours (7:00 p.m. to 7:00 a.m.). For areas consisting of single-family residential, maximum construction-generated noise levels from Stationary Equipment (scheduled and relatively long-term operation, periods of 10 days or more) should be limited to 75 decibels during the daytime hours (7:00 a.m. to 7:00 p.m.) and 60 decibels during the nighttime hours (7:00 p.m. to 7:00 a.m.).

Table 15.7 Construction-Generated Noise Levels

Receptor	A-weighted decibel (dBA)	Receptor in City or County?	Standard/Threshold
A – Octagon Barn	69 decibels at 500 feet (closest distance from construction)	County	No County Standard/ Threshold
B – Avila Ranch Development – houses along Vachell Lane	67 decibels at 700 feet (closest distance to construction)	City	75 decibels during daytime and 60 decibels during nighttime
C – Adjacent resident to the west and uphill	89 decibels at 50 feet (closest distance to construction)	County	No Standard/Threshold

Although construction activities would result in a substantial temporary increase in ambient noise levels, the expected activities and noise levels would not exceed Caltrans, City, or County standards or thresholds because there will be not nighttime construction for the project. Because there is not an applicable Caltrans or County noise standard/threshold for daytime construction and the expected daytime construction noise level at the nearest receptor within the City is 67 decibels and below the City threshold of 75 decibels; construction-related noise impacts are considered Less than Significant**.**

Impact NOI-2: Generation of a substantial 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* — Less than Significant with Mitigation Incorporated**

Operation of the project would have the potential to expose existing noise-sensitive uses to new noise sources, including traffic noise and fixed, non-transportation noise. Long-term changes in operational noise levels would be largely associated with the operation of mechanical building equipment and the use of vehicle parking areas. Other sources of noise from the project would include but not be limited to onsite activities like the proposed vehicle wash, use of impact wrenches and air tools in the equipment shop, movement of large equipment like drill rigs, trucks, and many other types of equipment leaving out and coming back to the facility. Table 15.9 identifies predicted noise generated from operational activities that will take place at the project site. As stated in Chapter 2, Project Description, the project would be staffed at a level similar to the existing facilities, with a typical Monday-through-Friday work schedule, operating during normal business hours, from 7:00 a.m. to 4:00 p.m.

County and City Policy/Threshold

The County and City Land Use Ordinances include maximum allowable noise exposure standards for non-transportation noise sources. The County standards are shown in Table 15.8.

Table 15.8 County and City Noise Standards for Non-Transportation Sources

Standard Type	Maximum Daytime Noise Level – 7:00 a.m. to 10:00 p.m.	Maximum Nighttime Noise Level – 10:00 p.m. to 7:00 a.m.
1 hour equivalent A-weighted decibel (dBA)	50	45
Maximum A-weighted decibel (dBA)	70	65
Maximum level, Impulsive Noise A-weighted decibel (dBA)	65	60

Notes: These noise levels are determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures. This applies only where the receiving land use operates or is occupied during nighttime hours.

Daily or hourly noise levels that will be generated from the project are predicted knowing that noise-generating equipment and activities will not take place at the same time and will be spread out across the project site. As shown in Table 15.9, the last column reflects normalized noise level from all

sources at a 50 feet distance from the point source. Assuming that levels attenuate (or decrease) at a rate of 6 decibels for each doubling of distance from a point source and that all onsite activities take place at the same time and location, maximum noise (worst-case scenario) generated will be 75 A-weighted decibel at 50 feet (adding all decibel values in the last column) from a theoretical point source. Table 15.10 below shows predicted operational noise levels at each noise sensitive receptor based on the location and type of noise generating activity/equipment compared the distance to the receptor. The highest noise level is generated from the vehicle wash activity and impact wrenches. However, it is assumed that no vehicle wash activity and impact wrench operation would take place between 10:00 p.m. and 7:00 a.m. Also, the car wash rack that was closest to the noise sensitive receptor was used to calculate noise impacts.

Table 15.9 Stationary Noise Levels (Normalized at 50 feet)

Activity/Equipment	A-weighted decibel level (dBA)	A-weighted decibel level at 50 feet distance
Heating and Air Conditioning Equipment	78 decibels at 3 feet	54
Car Wash	84 decibels at 10 feet	70
Impact Wrench	85 decibels at 50 feet	85
Onsite Vehicle Parking Areas	53 decibels at 50 feet	53
Air Compressors	81 decibels at 50 feet	81

Table 15.10 Stationary Noise Levels at Sensitive Receptors

Sensitive Receptor	Activity/Equipment	Distance from Receptor (in feet)	Worst-Case Noise Level (A-weighted decibel dBA)
A – Octagon Barn	Heating and Air Conditioning (3 units from region office)	625	37
A – Octagon Barn	Wash Rack	1,100	43
A – Octagon Barn	Impact Wrench (SHOPP)	1,400	56
A – Octagon Barn	Onsite Vehicle Parking Areas (78—number of parking spaces for both alternatives)	600	23
A – Octagon Barn	Air Compressors Equipment Shop Building	1,400	52

Sensitive Receptor	Activity/Equipment	Distance from Receptor (in feet)	Worst-Case Noise Level (A-weighted decibel dBA)
A – Octagon Barn	**Combined - All Equipment**	**Not Applicable**	**58**
B – Avila Ranch Development – houses along Vachell Lane	Heating and Air Conditioning (8 units from Special Crews building)	850	38
B – Avila Ranch Development – houses along Vachell Lane	Car Wash	1,350	42
B – Avila Ranch Development – houses along Vachell Lane	Impact Wrench	1,600	55
B – Avila Ranch Development – houses along Vachell Lane	On-site Vehicle Parking Areas (32 number of parking spaces for both alternatives)	700	32
B – Avila Ranch Development – houses along Vachell Lane	Air Compressors	1,600	57
B – Avila Ranch Development – houses along Vachell Lane	**Combined - All Equipment**	**Not Applicable**	**44**
C -Adjacent resident to the west and uphill	HVAC (3 units from Road Crews building)	565	37
C -Adjacent resident to the west and uphill	Car Wash	350	53
C -Adjacent resident to the west and uphill	Impact Wrench	500	65
C -Adjacent resident to the west and uphill	Onsite Vehicle Parking Areas (218 for Alternative 2)	60	48
C -Adjacent resident to the west and uphill	Air Compressors	500	61
C -Adjacent resident to the west and uphill	**Combined - All Equipment**	**Not Applicable**	**67**

The number of heating and air conditioning units was calculated considering the square footage information available for each proposed building. The assumption used is that a single 6-ton unit would be used for every 3,600 square feet of building space. The units near the noise sensitive receptors were taken into consideration for future noise calculation. For example, the closest proposed building from Receptor B is the Special Crews building, accounting for 28,245 square feet of area. The minimum number of units

(assuming 6-ton units) required to cover this area would be 8. Hence, noise from 8 heating and air conditioning units was calculated at Receptor B.

Noise levels commonly associated with parking lots are generated by the starting of vehicles, the opening and closing of vehicle doors, playing of amplified music, and the occasional sound of vehicle alarms and horns. Using equation 4-14 of the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (September 2018), the calculated decibel level generated by 420 automobile vehicles is 53 decibels at 50 feet as shown in Table 15.9 above. Parking spaces are spread throughout the project site. In Table 15.10 above, only those parking spaces closest to each receptor were considered. For example, while calculating noise level at Octagon Barn from onsite vehicle parking, a total of 44 parking spaces was used for the calculation.

As shown in Table 15.10, predicted operational noise levels at Receptor A, B and C, whether total or from individual activities like impact wrench, air compressor and car wash would exceed the daytime noise levels 50 A-weighted decibel Leq. It is anticipated that most of these activities will not take place during night (except for sporadic movement of vehicles out and coming back to the facility) and hence it is safe to assume that noise levels at Receptors A, B, and C would not exceed the nighttime noise standards of 45 decibels.

Th elevation difference between Receptor C and the impact wrench source point at the Equipment Shop building, which is the major nearby source of noise, is around 25 to 30 feet. Receptor C is at the higher elevation. The project proposes to build a retaining wall in front of Receptor C. The approximate length of the wall would be 927 feet and the height of the retaining wall would vary from 2 to 20 feet. The height of the wall closer to Receptor C is 20 feet that slowly starts declining to 17 feet going north. Proposed finished ground elevation at the bottom of the wall would be approximately 112 feet, and the approximate elevation of Receptor C is 125 feet. Hence, the retaining wall would create a barrier of approximately 7 feet between Receptor C, the car wash, and impact wrench activities.

According to Roadway Construction Noise Manual, if a noise barrier or other obstruction (like a dirt mound) just barely breaks the line-of-sight between the noise source and the receptor, it provides noise reduction of 3 decibels. As a result, approximate noise generated at Receptor C due to impact wrench, air compressor and car wash activity would be 50 A-weighted decibels, 62 A-weighted decibels and 58 A-weighted decibels, respectively, from each operation. Total noise generated at Receptor C would be 67 decibels.

Considering the barrier of 7 feet between the noise source and Receptor C, resulting total noise at Receptor C would be 64 A-weighted decibels, which is still below the County hourly average threshold, 50 A-weighted decibels. However, a noise level of 64 decibels is an unlikely and worst-case noise

scenario as it assumes that all activities are to take place consecutively for 1 hour. Therefore, the worst-case total noise level of 64 decibels at Receptor C would be intermittent and would not last for 1 hour. The loudest noise generator of the project is from impact wrench activity at the Equipment Shop and is predicted to be 62 decibels at Receptor C and exceeds the 60-decibel maximum daytime noise level. However, with the mitigation measure proposed below, the impact wrench noise level will be reduced.

Transportation Noise

The project would change the pattern of traffic volumes traveling on the Buckley Road Extension and South Higuera Street. Peak hour volume data was provided by Advanced Civil Technologies for both the morning and evening peak hours. The evening traffic volume was used as the worst-case scenario for the noise impact calculation.

Noise was calculated using the Traffic Noise Model (TNM 2.5) at all three noise sensitive receptors. Noise calculations include noise generated in the existing conditions, in the future with no project, and with the project. As shown in Table 15.11, Receptor A (Octagon Barn) land use could either be identified as “Public Assembly and Entertainment (except Meeting Halls)” or “Churches, Meeting Halls.”

Table 15.11 Operational Traffic Noise Levels

Receptor	Land Use	Existing Noise Level A-weighted decibels (dBA)	Future Noise Level without Project A-weighted decibels (dBA)	Future Noise Level with Project A-weighted decibels (dBA)	County and City Threshold
A – Octagon Barn	Public Assembly/ Meeting Hall	57	60	60	No County Threshold
B – Avila Ranch Development – first row houses on Vachell Lane and Buckley Road	Residential	45	51	51	City-60
C -Adjacent resident to the west and uphill	Residential	43	48	48	County-60

No exterior noise thresholds have been established for the Public Assembly/Meeting Hall land use from transportation noise sources in the County of San Luis Obispo General Plan. Also, the future traffic noise increase to 60 decibels at the Octagon Barn (Receptor A) is predicted with and without the

project, so no traffic noise impacts are identified at Receptor A. It should be noted that County and City of San Luis Obispo noise thresholds mentioned in Table 15.8 are noise levels representative of the average noise levels occurring over a 24-hour period, whereas noise calculated for the project uses noise levels representative of the average noise level during a 1-hour period. Per the Caltrans Noise Supplement to the Caltrans Traffic Noise Analysis Protocol, the 1-hour average noise levels were converted to 24-hour average noise levels for comparisons with County and City standards. For the conversion of noise level values, traffic data was obtained from the City of San Luis Obispo's website reflecting traffic data on South Higuera. Same assumption was applied to Buckley Road Extension due to its proximity to South Higuera. Since Receptors B and C are set far away from South Higuera, the calculated 24-hour average noise levels for Receptors B and C are 49 A-weighted decibels and 47 A-weighted decibels, respectively. These values are below the 60-decibel level established by the County and City for transportation noise sources. Therefore, noise impacts from transportation sources are minimal for any of the three receptors identified above.

At the project site, most activities will take place between the hours of 7:00 a.m. and 5:00 p.m. These daytime hours are most definite at the equipment shop. Operational noise levels related to stationary sources will increase daytime ambient noise levels at Receptor C, but measures are included to reduce noise levels below the County standards. Operational traffic noise levels are not expected to increase from the project. Therefore, operational noise impacts are considered Less Than Significant with Mitigation Incorporated.

Mitigation Measure NOI-1: Noise Enclosures. At the wash rack, the water pump is to be placed in a ventilated enclosed space. Impact wrench and air compressors activities must take place in an enclosed space within or behind the equipment shop building. According to the Roadway Construction Noise Manual, if a building stands between the noise source and receptor and completely shields the noise source, it provides attenuation of approximately 15 A-weighted decibels.

Mitigation Measure NOI-2: Vegetated Berm. If determined feasible, the project will include a vegetated berm. Minimum height of the berm should break the line of sight between the receptor and the source of noise. Also, length of the berm should follow the 4D rule, meaning minimum length of the berm should be 4 times the perpendicular distance from the receptor. The location and design calculations for a potential berm would be completed in the design phase of the project if Mitigation Measure NOI-1 is not achievable.

Impact NOI-3: Generation of excessive groundborne vibration or groundborne noise levels — Less than Significant

Construction

Construction activities at the project site have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used, the location of construction activities relative to sensitive receptors, and the specific activities involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The type and density of soil can also affect the transmission of energy. Table 15.12 provides vibration levels for typical construction equipment. Ground vibration levels are measured by the movement of molecular particles and, for this analysis, are quantified by peak particle velocity rate of inches per second.

Table 15.12 Vibration Levels from Construction Activities

Equipment	Reference Peak Particle Velocity at 25 feet (inches per second)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
Crack-and-seat operations	2.4

In general, literature on the subject shows that only blasting, pile driving, and pavement breaking have documented examples of potential damage to buildings (American Association of State Highway and Transportation Officials 1990). Due to their distance from the project construction activities, vibration levels generated would not impact Receptors A and B. Due to the proximity of the large proposed retaining wall, construction-generated vibration impacts to Receptor C are possible.

For Receptor C, assuming the residence is composed of older structures, a continuous vibration level of 0.3 inch per second could cause structure damage and a level pf 0.1 inch per second could cause strongly perceptible human annoyance based on Caltrans guidance. The greatest source of vibration is expected as 0.089 inch per second from use of a large bulldozer, which is below the 0.3-inch-per-second threshold for structure damage and below the 0.1-inch-per-second threshold for strongly perceptible human

annoyance at 25 feet. As a result, ground vibration levels associated with project construction is considered Less than Significant to nearby receptors.

Operation

Operation of the project would introduce a new source of vibration associated with the facility activities. These activities would include vehicle traffic to, from, and within the project site, which would be considered as a permanent source of vibration at the nearby vibration-sensitive uses. However, vibration from rubber-tired traffic is barely perceptible (Federal Transit Administration 2018). Therefore, this impact is considered Less than Significant**.**

Impact NOI-4: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? - **Less than Significant**

A portion of the project site at the eastern edge is within the 50-decibel airport noise contour from the Airport Land Use Plan. This means that the noise level from airplane traffic on the main runway (Runway 11-29) is expected to be 50 decibels. The rest of the project site is outside the 50-decibel noise contour line. The project site is in the path of the arrival/departure pattern for Runway 7-25, the runway used for smaller aircraft and with the lowest level of use. Because of the relatively low volume, frequency and aircraft equipment associated with Runway 7-25, there are no mapped noise contours, according to the Airport Master Plan Environmental Impact Report. Therefore, impacts would be Less than Significant.

CHAPTER 16 Population and Housing

16.1 REGULATORY SETTING

There are no federal, state, or local laws, regulations, and policies applicable to the project.

16.2 ENVIRONMENTAL SETTING

The project site is next to the City of San Luis Obispo southern city boundary. U.S. Census data shows that the City had a population of 45,119 in 2010. As of the 2010 Census, there were 20,553 total housing units in the community, with a 6.6 percent (1,360 units) vacancy rate, and an average household size of 2.29. According to the American Community Survey (ACS), which provides population estimates on a yearly cycle, the City had a population of 47,536 as of July 1, 2016. Comparatively, the entire County had a 2010 Census population of 269,637 and an American Community Survey 2016 population of 282,887. The County had 117,315 housing units in 2010 with a 13.0 percent housing vacancy rate, and an average household size of 2.48 (US Census 2017).

16.3 IMPACT ANALYSIS

16.3.1 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, a population and housing impact is considered significant if implementation of the project would result in:

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

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

16.4 Environmental Impacts

Impact PH-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and

***businesses) or indirectly (for example, through extension of roads or other infrastructure)* – Less than Significant**

The existing Caltrans District 5 Maintenance Station and Equipment Shop would relocate approximately 2 miles away to the new location with the project. The project is projected to have 184 employees (155 existing staff and 29 future new staff). An increase in 29 employees would be a very minor increase in the local population. Also, moving the existing facilities 2 miles would not require any existing employees to relocate.

The existing Maintenance Station and Equipment Shop facilities and activities would be decommissioned and potentially auctioned if there is no other State use for the property. This action would not result in substantial population growth.

The project would involve activities that could increase population indirectly. Alternative 2 would potentially cause growth inducement as it would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth.

It is expected that the regional labor force would be sufficient to meet the construction workforce demand associated with the project. While some workers may temporarily relocate from other areas, the resulting population increase would be minor and temporary. As a result, this impact would be Less than Significant**.**

***Impact PH-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.* – No Impact**

All aspects (temporary and permanent) of the project will take place within the state-owned property and within nearby public roadways. The closest resident just west of the project site on Octagon Lane will not be displaced. Therefore, there will be No Impact.

Chapter 17 Public Services

17.1 REGULATORY SETTING

There are no federal, state, or local laws, regulations, and policies applicable to the project.

17.2 ENVIRONMENTAL SETTING

17.2.1 Police Services

The San Luis Obispo County Sheriff's Office provides police protection and law enforcement services within the unincorporated portions of the county, including the project site. The Headquarters Station, at 1585 Kansas Avenue in the City of San Luis Obispo, provides dispatch, watch commander (shift oversight), administration, detectives, records and fire services.

17.2.2 Fire Services

The San Luis Obispo County Fire Department responds to emergencies and other requests for assistance, plans for and takes action to prevent emergencies and to reduce their impact, coordinates regional emergency response efforts, and educates the communities it serves. CAL FIRE functions as the County Fire Department under a contract with the County of San Luis Obispo and has done so since 1930.

The City of San Luis Obispo Fire Department provides fire and emergency services to the City of San Luis Obispo. In addition to providing fire and emergency services to the city, the City of San Luis Obispo Fire Department maintains an Emergency Services Contract with Cal Poly.

17.2.3 Schools

The San Luis Coastal Unified School District (SLCUSD) serves an area between the coast and the Los Padres National Forest, and from Morro Bay to the north and Arroyo Grande to the south. In total, the San Luis Coastal Unified School District operates 10 elementary schools, 2 middle schools, 2 high schools, 1 continuation high school, and an adult education facility. In addition to the K-12 educational program, the San Luis Coastal Unified School District offers a variety of additional educational programs, including cooperative preschool, preschool early education, and parent participation. Within the City of San Luis Obispo, the district operates 6 elementary schools, 11 middle school, 1 high school, and 1 continuation high school.

17.2.4 Parks

San Luis Obispo County has roughly 23 parks, 3 golf courses, and 8 Special Places currently operated by County Parks. Urban Regional Parks account for 644 acres, Rural Regional Parks for 11,398 acres, and mini, neighborhood and community parks for 214 acres (San Luis Obispo County 2014).

The City of San Luis Obispo has 26 parks, consisting of 8 community parks, 10 neighborhood parks, and 8 mini parks. There are also 6 joint-use facilities, and several recreation centers and special facilities (such as the Damon Garcia Sports Fields and the San Luis Obispo Swim Center). In addition to developed parks, the City owns or manages open space within and adjacent to San Luis Obispo, some of which provide trails that accommodate hiking and mountain biking (City of San Luis Obispo 2014).

Parks are also provided by state and federal agencies. State agencies such as the California Department of Parks and Recreation provide large, typically passive parks. These parks include features such as trails, camping, access to historic facilities, and/or nature appreciation throughout California as well as San Luis Obispo County. Examples of State Parks facilities within San Luis Obispo County include Hearst San Simeon State Historical Monument, Montaña de Oro State Park, Oceano Dunes State Vehicular Recreational Area, and Morro Bay State Park (San Luis Obispo County 2014).

The federal government also provides access to passive parkland. Agencies such as the Bureau of Land Management and the U.S. Forest Service often provide trail corridors, camping, nature appreciation and in some cases preservation of historic facilities. Examples of federal parks in this area include the Piedras Blancas Light House (near San Simeon), the Carrizo Plains, and the Los Padres National Forest (San Luis Obispo County 2014).

17.2.5 Other Public Facilities

Other public facilities in the area include local government facilities such as the San Luis Obispo City Hall and county facilities such as the San Luis Obispo County government complex, the County Court and County Library.

17.3 IMPACT ANALYSIS

17.3.1 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, an impact to Public Services is considered significant if implementation of the project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered

governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Parks, and Other public facilities.

17.4 Environmental Impacts

Impact PR 1 - Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: **Less than Significant**

Fire protection?

The project would not require additional fire protection within the City of San Luis Obispo or the surrounding unincorporated area. The project consists of the relocation and replacement of the existing Caltrans facility, moving the facility only 2 miles away. Construction of the project would not impact fire service for the City of San Lis Obispo or CAL FIRE services within the unincorporated county. Alternative 2 would potentially cause growth inducement as it would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth. Therefore, a Less than Significant Impact would occur.

Police protection?

The project would operate with Caltrans personnel onsite daily and would be designed with appropriate security access control and fencing. The project would have similar operational requirements as the existing facilities and would not increase the need for police services within the City's police service area or County's sheriff service area. Alternative 2 would potentially cause growth inducement as it would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth. Therefore, a Less than significant impact would occur.

Schools?

The project includes the relocation and replacement of the existing Caltrans facility, moving the facility only 2 miles away, and does not require an expansion of residential housing. The project would not induce population growth (an increase in only 29 employees) or require an additional need for school facilities. Alternative 2 would potentially cause growth inducement as it

would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth. Therefore, a Less than Significant Impact would occur.

Parks?

As described above, the project does not require an expansion of residential housing. Alternative 2 would potentially cause growth inducement as it would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth. The project would not displace an existing park and would not require the construction of additional park facilities. Therefore, a Less than Significant Impact would occur.

Other public facilities?

As described above, the project does not require an expansion of residential housing. Alternative 2 would potentially cause growth inducement as it would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth. The project would not increase use of existing public facilities in the area because it would not promote an increase in population. Therefore, a Less than Significant Impact would occur.

Chapter 18 Recreation

18.1 REGULATORY SETTING

There are no federal, state, or local laws, regulations, and policies applicable to the project.

18.2 ENVIRONMENTAL SETTING

As discussed previously in Chapter 17, there are City- and County-owned parks and recreation facilities in the general area, as well as recreational open space, regional, and state parks. These parks provide recreational opportunities for residents, including fishing, hiking, boating, and access to sports fields. Parks or recreational opportunities within approximately 1 mile of the project site include the existing and proposed Bob Jones Bike trail, the Johnson Ranch Open Space, and several parks included within the Avila Ranch Housing Development.

18.3 IMPACT ANALYSIS

18.3.1 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, an impact to Recreation is considered significant if implementation of the project contributes to the following:

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?

18.4 Environmental Impacts

***Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* – Less than Significant**

The project consists of the relocation and replacement of the existing Caltrans facility and does not include a significant increase in use of nearby recreational facilities. The project includes an increase of 29 employees, who will be working on the state highway system. Alternative 2 would potentially cause growth inducement as it would construct new water and sewer infrastructure. However, any development beyond the project would require annexation into the City and therefore would not be considered unplanned growth. Therefore, a Less than Significant Impact would occur.

***Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* – No Impact**

The project does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, No Impact is expected.

Chapter 19 Transportation

19.1 OVERVIEW

This chapter evaluates the project's potential transportation-related impacts. Specifically, the chapter evaluates whether the project would conflict or be inconsistent with CEQA Guidelines.

The chapter first describes the transportation regulatory setting, which identifies federal and state laws, regulations, and policies applicable to the impact being evaluated in the Draft EIR. The environmental setting describes the location of the project and relevant transportation-related improvements near the site. Finally, the project's potential transportation impacts are evaluated. The impact evaluation begins by describing the significance criteria and the methods used to evaluate significance, and then presents the impact evaluation. Mitigation measures are proposed, where necessary, to reduce impacts to a less-than-significant level.

19.2 REGULATORY SETTING

19.2.1 Federal Laws, Regulations, and Policies

No federal plans, policies, regulations, or laws related to transportation impacts evaluated in the Draft EIR are applicable to the project.

19.2.2 State Laws, Regulations, and Policies

Senate Bill 743 (SB-743), which was codified in Public Resources Code Section 21099, was signed by the Governor in 2013 and directed the Governor's Office of Planning and Research to identify alternative metrics for evaluating transportation impacts under CEQA. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." Recently adopted changes to the CEQA Guidelines in response to Section 21099 include a new section (15064.3) that specifies that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by the Office of Planning and Research provides additional technical details on calculating Vehicle Miles Traveled and assessing transportation impacts for various types of projects.

19.2.3 Local Laws, Regulations, and Policies

Although the project site occurs in the County of San Luis Obispo, it is adjacent to the City of San Luis boundary, and some proposed utility connections occur in the City. Thus, Vehicle Miles Traveled screening criteria for both the County and City was considered.

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

County of San Luis Obispo

The Transportation Impact Analysis Guidelines for the County of San Luis Obispo, June 2021 include screening thresholds based on the size and location of a project. Small projects that are consistent with the San Luis Obispo Council of Governments Sustainable Communities Strategy or San Luis Obispo County General Plan and generate fewer than 110 daily trips, consistent with trip generation associated with projects eligible for a Categorical Exemption under CEQA, are considered to have a less than significant Vehicle Miles Traveled impact. Examples of small projects include:

- 11 single-family units
- 15 multi-family units
- 1,600 square feet of retail development
- 11,300 square feet of office development
- 22,200 square feet of industrial development

City of San Luis Obispo

The City of San Luis Obispo has prepared the City of San Luis Obispo Multimodal Transportation Impact Study Guidelines (June 2020, Second Edition) (City Guidelines) to address changes to CEQA pursuant to SB-743 to include Vehicle Miles Traveled screening thresholds, analysis methodology and impact thresholds.

1. Small Development Projects: Projects anticipated to generate less than 110 daily vehicle trips (11 peak hour vehicle trips) may be assumed to cause a less-than-significant impact, unless substantial evidence indicates that a project would generate a potentially significant level of Vehicle Miles Traveled or create inconsistency with the San Luis Obispo Council of Governments Regional Transportation Plan Sustainable Communities Strategy (SCS).

2. Local Serving Retail and Public Facilities: Retail development projects with less than or equal to 50,000 square feet. Gross floor area with

reasonable justification that uses will be local-serving may be assumed to cause a less-than- significant impact. Similarly, local-serving public facilities, such as police and fire stations, libraries, neighborhood parks without sporting fields, etc., may be assumed to cause a less-than-significant impact.

19.3 ENVIRONMENTAL SETTING

The existing Caltrans District 5 Maintenance Station and Equipment Shop facilities are at 66 Madonna Road and 50 Higuera Street in the city. The project site for the replacement facility is at 4485 Vachell Lane in the county. The project site is approximately 2 miles south of the existing facilities.

District 5 includes Santa Barbara, San Luis Obispo, Monterey, San Benito and Santa Cruz counties. District 5 Maintenance Division is headquartered in San Luis Obispo but has four satellite stations in: the Monterey Peninsula, Salinas, Santa Barbara, and Santa Cruz. The proposed facility is to serve primarily the San Luis Obispo area. The Caltrans Maintenance Division is responsible for state highway maintenance and has the following objectives:

- Coordinate district equipment, the Integrated Maintenance Management System (IMMS), communications, maintenance agreements, service contracts, hazardous materials (self-generated waste and spills), storm water compliance, Level of Service, landscaping, and clerical support.
- Do storm damage restoration, Day Labor project coordination, field engineering support, design of Major Maintenance projects, coordination between Maintenance and other programs, and all other engineering functions as required.
- Manage field operations and all maintenance activities within the district.

19.3.1 Existing Vehicle Access

The project site sits between the Buckley Road intersections with South Higuera and Vachell Lane. Employees living in South County, North County, Cambria, Los Osos and Morro Bay would use the Los Osos Valley Road interchange at Highway 101, South Higuera and then Buckley Road. Some South County employees would use the South Higuera exit from Highway 101. Employees living in the City of San Luis Obispo would use Buckley Road from Highway 227, Vachell Lane, Los Osos Valley Road, and South Higuera.

Highway 101

Highway 101, 0.5 mile west of the project site, is a multi-lane divided interstate highway that extends through the City of San Luis Obispo, south to City of Los Angeles, and north to City of San Francisco and beyond. Within the project vicinity, Highway 101 is relatively level and contains four lanes.

Main access to the project vicinity is provided via full-access interchanges at South Higuera and Los Osos Valley Road, a partial interchange with northbound on- and off-ramps at Prado Road, and farther north at the Madonna Road interchange.

Los Osos Valley Road

Los Osos Valley Road, 0.25 mile northwest of the project site, is a two- to six-lane arterial roadway with a roughly east-west alignment extending between South Higuera Street in the City and the unincorporated coastal communities of Los Osos and Morro Bay. Los Osos Valley Road serves as both a state highway carrying through traffic to Los Osos and beyond and provides access to residential neighborhoods and commercial centers at the city's southern end, particularly the regional shopping center at Irish Hills Plaza. Los Osos Valley Road is four lanes west of Highway 101 and two lanes east of Highway 101 toward South Higuera Street. The most recent improvements to the Los Osos Valley Road/Highway 101 interchange expanded the facility to four lanes.

South Higuera Street

South Higuera Street, 0.05 mile west of the project site, is a four-lane north-south arterial to the north of Los Osos Valley Road, with a speed limit of 45 miles per hour, which narrows to two lanes to the south. South Higuera Street extends north from its interchange with Highway 101 to the city's downtown. South Higuera Street serves retail, commercial, and industrial use areas in the project vicinity.

Buckley Road

Buckley Road, which splits the state-owned property, is north of the proposed development and continues east toward State Route 227 as a two-lane east-west arterial, under the County's jurisdiction, with a speed limit of 55 miles per hour. Buckley Road serves residential, commercial, and agricultural areas, as well as the airport. Access to the site is currently available off Buckley Road via a dirt driveway.

Vachell Lane

Vachell Lane, west of the project site, is a two-lane north-south 0.5-mile-long local roadway with a speed limit of 40 miles per hour. Vachell Lane connects Buckley Road to South Higuera Street, serving residential and commercial areas. Recent improvements were made to Vachell Lane with the Avila Ranch Development, and left-hand turns were removed at the intersection of Vachell Lane and South Higuera.

State Route 227

State Route 227 (Broad Street), 2.5 miles east of the project site, is a north-south regional road connecting the cities of San Luis Obispo and Arroyo Grande. Within the city, State Route 227 (Broad Street) has been relinquished to City control; in the vicinity and south of the airport, State Route

227 is under the jurisdiction of Caltrans. State Route 227 is a two-lane highway that connects to Buckley Road as Broad Street, with a two-way left-turn lane where it connects to Higuera Street as South Broad Street. State Route 227 serves residential, commercial, and agricultural areas, as well as the airport. State Route 227 has varying grades and at-grade intersections.

19.3.2 Existing Bicycle and Pedestrian Facilities

In general, bicycle facilities can include Class I – physically separated bicycle paths; Class II – on-street striped bicycle lanes; and Class III – on-street routes. Currently, Buckley Road between of the project site and State Route 227 has no bicycle paths or lanes. The nearest Class I bicycle paths to the project site are the 1) Bob Jones Trail, which runs for approximately 1.0 mile from the Prado Road south to Los Osos Valley Road, roughly 0.5 mile northwest of the project site and 2) Avila Ranch bicycle path, which runs through the Avila Ranch Housing Development, across the Buckley Road Extension, ending at the intersection with South Higuera.

Class II bicycle lanes generally north of the project site are provided along all or part of Los Osos Valley Road, South Higuera Street, Madonna Road, Tank Farm Road, and State Route 227. South Higuera Street supports Class II bicycle lanes from Los Osos Valley Road to Nipomo Street in the downtown area and from Buckley Road to the intersection with Cloverridge Lane. Los Osos Valley Road supports Class II bicycle lanes from the western city limits to South Higuera Street. Madonna Road supports Class II bicycle lanes from Los Osos Valley Road to South Higuera Street, and Tank Farm Road from South Higuera Street to the eastern city limits. The entire reach of State Route 227 in the project vicinity supports Class II bicycle lanes.

The nearest Class III bicycle route is along Margarita Avenue, north of the project site.

Pedestrian facilities include sidewalks, crosswalks, multi-use paths, and pedestrian signals at signalized intersections that are intended to provide safe and convenient routes for pedestrians. Recently, sidewalks were constructed along the Buckley Road Extension and Vachell Lane as part of the Avila Ranch Housing Development. Therefore, sidewalk connections next to the project site exist: 1) across the Buckley Road Extension, 2) on Vachell Lane into the Avila Ranch Housing Development, and 3) along Vachell Lane to South Higuera. Other major roadways north of the project site vicinity have paved sidewalks on all or part of the roadway, as well as pedestrian signals and/or crosswalk facilities at signalized study intersections.

In general, the project area is relatively undeveloped. Most uses in the area consist of commercial, industrial, and agricultural buildings set back from the street and fronted by landscape buffers or parking areas with very limited

street side commercial uses. As a result, pedestrian volumes around the site are expected to be low.

19.3.3 Existing Transit Service

San Luis Obispo Regional Transit Authority (SLORTA) operates bus service within the city and throughout the county, with limited service to the project site via Route 10. Route 10 is the only regional transit route with service to the project vicinity. Route 10 travels north-south along Highway 101 from the City of San Luis Obispo to the City of Santa Maria in Santa Barbara County. The bus makes minimal stops each way, including the stop at South Higuera Street and Suburban, which is approximately 0.7 mile away from main entrance of the project. Two bus stops are included in the Avila Ranch Housing Development as part of the City Transit bus services; they sit about 0.6 and 0.7 mile away from the main entrance.

19.4 IMPACT ANALYSIS

19.4.1 Methodology

Information about existing and project trip generation was used to evaluate whether the project's Vehicle Miles Traveled would result in a significant transportation impact. It is important to note that the daily trip generation estimate reflects the net addition of 29 future employees compared to the existing number of employees at 50 Higuera Street and 66 Madonna Road.

Trip Generation

Trip generation for the net increase in employees was calculated using rates established for Land Use 110 (General Industrial) and included the Institute of Transportation Engineers' (ITE) Trip Generation, 11th Edition.

19.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, the project would result in a significant impact on transportation if it would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15604.3, subdivision (b);

- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Although the project site occurs in the County of San Luis Obispo, it is adjacent to the City of San Luis Obispo boundary, and some proposed utility connections occur in both the county and the city. Therefore, Vehicle Miles Traveled thresholds and screening criteria for both the county and city were considered.

19.5 Environmental Impacts

Impact TRANS-1 Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities – Less than Significant with Mitigation Incorporated

Project Construction

This section describes how the transportation network would be affected by construction activities. The evaluation of construction impacts to Level of Service is no longer required under CEQA and as such is not included in this section. Any effects to transportation will be temporary, with the duration of each impact dependent on the duration of specific construction activities.

During the project's construction period, traffic impacts on public streets would be related to the movement of construction equipment, construction worker trips, and lane closures on South Higuera, Buckley Road, and Vachell Lane required for utility work. Project construction would result in a temporary increase in vehicle traffic along nearby roadways. Project-related truck traffic and incoming/outgoing equipment during construction activities could increase conflicts between bicyclists, pedestrians, and cars. Slow-moving trucks requiring access to the project site on Buckley Road could increase conflicts with bicyclists, pedestrians, and cars. And, as mentioned, construction of the project's utilities within nearby roadways and corresponding temporary lane closures would potentially increase conflicts with other roadway users.

Implementation of Mitigation Measure TRANS-1, which requires the development and implementation of a traffic management plan, would decrease potential traffic safety hazards. Therefore, this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure TRANS-1: Construction Traffic Management Plan. The contractor shall prepare and implement a construction traffic management plan to reduce potential interference with an emergency response plan, as well as to reduce potential traffic safety hazards and ensure adequate access

for emergency responders. Development and implementation of this plan shall be coordinated with the County and City of San Luis Obispo. Caltrans shall ensure that the plan is implemented during construction. The plan shall include, but will not be limited to, the following items:

- Identify construction truck haul routes to limit truck and automobile traffic on nearby streets. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety. Identified haul routes will be recorded in the contract documents.
- Implement comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning, and detour signs (if required), lane closure procedures (if required), and cones for drivers.
- Evaluate the need to provide flaggers or temporary traffic control at key intersections along the haul route during all or some portion of the construction period.
- Notify adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.
- Develop a process for responding to and tracking complaints pertaining to construction activity, including identification of an onsite complaint manager. Post 24-hour contact information for the complaint manager on the site.
- Document road pavement conditions for all routes that would be used by construction vehicles before and after project construction. Make provisions to monitor the condition of surface streets used for haul routes so that any damage and debris attributable to the haul trucks could be identified and corrected. Roads damaged by construction vehicles shall be repaired to the level at which they existed before project construction.

Project Operation

The project would include two new vehicular access driveways to the project site from Buckley Road. A traffic warrant analysis was completed to determine the type of traffic control needed at each driveway. Based on the traffic warrant analysis, it was determined that one-way stop control on the driveways would be sufficient. However, based on the type of vehicles that will be entering and exiting the facility, a light-controlled intersection and/or roundabout at the main driveway are included as design options with the project. Regardless of the type of intersections designed and built at the driveways, they would be designed in accordance with Caltrans safety standards and would accommodate vehicle, pedestrian, and bicycle traffic. Also, all access roads, driveways, and parking areas would be accessible to emergency service vehicles. Therefore, this impact would be Less than Significant.

Impact TRANS-2: Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) – Less than Significant

As stated earlier, the project will result in a net addition of 29 employees to the city and surroundings roadways. Trips will be relocated from the existing facilities at 66 Madonna Road and 50 Higuera Street to the project site at 4485 Vachell Lane, 2 miles away. Trip generation for the net increase in employees has been calculated using rates included in the Institute of Transportation Engineers' (ITE) Trip Generation, Eleventh Edition. Trip generation for the additional employees is shown in Table 19.1; the project is anticipated to generate 15 trips during the morning peak hour, 14 trips during the evening peak hour, and 90 daily trips.

Table 19.1 Project Trip Generation

Trip Rates/Units	Peak Hour Trips Morning -In	Peak Hour Trips Morning -Out	Peak Hour Trips Morning-Total	Peak Hour Trips Evening -In	Peak Hour Trips Evening-Out	Peak Hour Trips Evening-Total	Daily Total Trips
Trip Generation Rates (per employee) [Rates based on Land Use 110 – "General Industrial" from Institute of Transportation Engineers Trip Generation (Eleventh Edition)]	0.440	0.090	0.530	0.108	0.382	0.490	3.100
Inbound/Outbound Split (per employee)	83%	17%	100%	22%	78%	100%	50%/50%
Total trips (29 employees)	13	2	15	3	11	14	90

Trip generation for the additional 29 employees is shown above, and the project generates a net increase of 90 daily trips, which is less than the 110 daily trips threshold established by the State Office of Planning and Research Technical Advisory and in the policies adopted by the County and City. Also, the project qualifies as a local-serving public facility as described in City guidelines because it would serve monthly the San Luis Obispo area. For these reasons, the project does not require a Vehicle Miles Traveled analysis, and the impact is considered Less than Significant.

Impact TRANS-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) – Less than Significant

The project would include changes to Buckley Road at two proposed driveways. For discussion of the potential safety hazards during construction

(resulting from the presence of slow-moving trucks and equipment, and temporary lane closures), refer to the discussion under Impact TRANS-1.

The project would include two new vehicular access driveways to the project site from Buckley Road. The two driveways if not properly designed and constructed, could potentially result in safety hazards. A traffic warrant analysis was completed to determine the type of traffic control needed at each driveway. Based on the traffic warrant analysis, it was determined that one-way stop control on the driveways would be sufficient. However, based on the type of vehicles that will be entering and exiting the facility, a light-controlled intersection and/or roundabout at the main driveway are included as design options with the project. Regardless of the type of intersections designed and built at the driveways, they would be designed in accordance with Caltrans safety standards and would accommodate vehicle, pedestrian, and bicycle traffic. Also, all access roads, driveways, and parking areas would be accessible to emergency service vehicles. Therefore, this impact would be Less than Significant**.**

***Impact TRANS-4: Result in inadequate emergency access* – Less than Significant with Mitigation Incorporated**

During project construction, emergency access could be temporarily restricted from the presence of slow-moving trucks on local roads and temporary lane closures on Buckley Road, South Higuera Street, and Vachell Lane to support utility connection installations. As discussed under Impact TRANS-1, implementation of Mitigation Measure TRANS-1 would require the construction contractor to identify construction haul routes that minimize traffic on nearby streets. Implementation of this mitigation measure would reduce construction-related impacts on emergency access to Less than Significant.

Operational traffic would not substantially reduce the effectiveness of nearby roadways or impair emergency access on these roads. For these reasons, the project would not be expected to result in inadequate emergency access and, even with increased activity, any impacts of project operation would be Less Than Significant.

In conclusion, impacts related to emergency access as a result of the project would be Less than Significant with Mitigation.

Mitigation Measure TRANS-1: Construction Traffic Management Plan applies

Chapter 20 Tribal Cultural Resources

20.1 OVERVIEW

The purpose of this section is to describe Tribal Cultural Resources and consultations performed in the project area and to evaluate potential impacts of the project on these features.

A Tribal Cultural Resource may be 1) a site, feature, place, cultural landscape, sacred place, or object included or determined to be eligible for the California Register or a local register or 2) any resource that meets California Register criteria as determined by the CEQA lead agency "in its discretion and supported by substantial evidence" considering the significance of the Tribal Cultural Resource to a California Native American tribe. If a tribe provides substantial evidence that a Tribal Cultural Resource may be affected by the project, this must be considered as part of the CEQA analysis.

20.2 REGULATORY SETTING

20.2.1 Federal Laws, Regulations, and Policies

Federal law does not address Tribal Cultural Resources, as these resources are defined in the California Public Resources Code.

20.2.2 State Laws, Regulations, and Policies

Assembly Bill 52 (AB 52) amended CEQA to identify a "Tribal Cultural Resource" (TCR) as a new, separate, and distinct resource to be analyzed under the California Environmental Quality Act (CEQA). The bill also amends Section 5097.94 (Native American Historical, Cultural, and Sacred Sites) of the California Public Resources Code and adds Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21084.2, and 21084.3 to the CEQA statutes. The additions to CEQA mandate clear timelines for consultation with California Native American tribes. The provisions of AB 52 apply if Caltrans circulates or files:

- An Initial Study (IS)
- A Notice of Intent to Adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND)
- A Notice of Preparation (NOP) for an Environmental Impact Report (EIR)

When state-owned cultural resources are involved, a project is subject also to Public Resources Code 5024 even when the project is exempt from CEQA. If

state-owned historic properties could be affected by a project, the state agency must consult the State Historic Preservation Officer in compliance with Public Resources Code Section 5024.5. This consultation should precede the preparation of environmental documents.

20.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

20.3 ENVIRONMENTAL SETTING

As described in the Caltrans Historical Resources Compliance Report for the project, the project site was studied multiple times and included a Phase I pedestrian survey, an Extended Phase I presence/absence investigation, and a Phase II significance and evaluation study. This series of study and evaluation provided the following information:

- Prehistoric: Results of an Extended Phase I presence/absence investigation for prehistoric resources were negative.
- Historic era: Based on an accumulation of information, it is recommended that a portion of the project site be considered eligible for the National Register and California Register under Criterion D/4 for its substantial research potential.

Native American tribal consultation was conducted as described below.

20.3.1 Native American Heritage Commission

The Caltrans archaeologist contacted the Native American Heritage Commission on April 26, 2022 with a letter of inquiry requesting a search of the Sacred Lands File, as well as contact information for tribal representatives who might have knowledge about resources in the project vicinity. On May 27, 2022, the Cultural Resources Analyst responded that the Sacred Lands File was positive for Native American cultural resources in the vicinity of the project area. The response included a list of tribal representatives who might have knowledge of the cultural resources in the proposed area.

20.3.2 Native American Tribes, Groups, and Individuals

Letters initiating consultation were sent via email on May 25, 2022. Letters included project information, mapping, and an invitation to consult. The initial consultation letters were sent before the Native American Heritage Commission provided a response. On June 1, 2022, a second round of consultation letters

was sent via email after the Native American Heritage Commission provided its response. The second round of letters was sent to those included on the list provided by the Native American Heritage Commission. On June 6, 2022, Caltrans sent out consultation letters via U.S. Postal Service to an individual and The San Luis Obispo County Chumash Council.

The draft report of the Phase II survey was provided to the consultation group (shown in Table 20.1) on May 31, 2023.

Table 20.1 Tribal Consulation Details

Tribe Affiliation	Position	Contact Person	Response
Barbareno/Ventureno Band of Mission Indians	Chairperson	Julie Tumamait-Stenslie	None to date
Chumash Council of Bakersfield	Chairperson	Julio Quair	None to date
Barbareno Band of Chumash Indians	Chairperson	Eleanor Fishburn	Deferred
Barbareno Band of Chumash Indians	Member	Barbara Lopez	None to date
Northern Chumash Tribal Council	Chairperson	Violet Sage Walker	Requested consultation and monitoring.
San Luis Obispo County Chumash Council	N/A	N/A	None to date
Tule River Indian Tribe	Chairperson	Neil Peyron	None to date
Xolon-Salinan Tribe	Tribal Headwoman	Donna Haro	None to date
Xolon-Salinan Tribe	Council Chairperson	Karen White	None to date
yak tityu tityu yak tilhini Northern Chumash Tribe	Chairperson	Mona Tucker	Requested consultation and monitoring.
Salinan Tribe of Monterey, San Luis Obispo Counties	Tribal Administrator	Patti Dunton	Requested consultation and monitoring.
Coastal Band of the Chumash Nation	Chairperson	Mariza Sullivan	None to date
Coastal Band of the Chumash Nation	Chair	Mia Lopez	None to date
Santa Ynez Band of Chumash Indians	Chairperson	Kenneth Kahn	None to date

As shown in Table 20.1, three tribes requested consultation and monitoring during the archaeological studies: Northern Chumash Tribal Council, yak tityu tityu yak tilhini Northern Chumash Tribe, and Salinan Tribe of Monterey, San Luis Obispo Counties. No prehistoric archaeological deposits were encountered during testing. The historic-era features were evaluated.

20.3.3 Local Historical Society/Historic Preservation Group

A letter was sent to the History Center of San Luis Obispo County on August 31, 2018 as part of the environmental review for the Buckley Road Extension, which bisects the state-owned property. A response was received on September 5, 2018 that the History Center did not have specific concerns or information on the property.

20.4 IMPACT ANALYSIS

20.4.1 Methodology

To assess potential impacts to tribal cultural resources, the procedures and results detailed in the Historical Resources Compliance Report, dated July 2023, were considered. The studies for this project were carried out in a manner consistent with Caltrans' regulatory responsibilities under the CEQA and Public Resources Code 5024 and pursuant to the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92, addended 2019 (5024 MOU) as applicable.

20.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, the project would result in a significant impact on Tribal Cultural Resources if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - Listed or eligible for listing in the California Register of Historical Resources (CRHR), 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 the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

20.5 Environmental Impacts

***Impact TCR-1: Potential for a substantial adverse change to tribal cultural resources listed, or eligible for listing in the California Register of Historical Resources or a local register of historical resources, or determined by the lead agency to be significant* - No Impact**

Surveys of the project site were negative for pre-historic resources, and therefore no impact is expected to Tribal Cultural Resources. No Tribal Cultural Resources that are listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources have been identified within the project area. Therefore, there would be No Impact.

CHAPTER 21 Utilities and Service Systems

21.1 OVERVIEW

This chapter describes the setting and potential impacts on utilities and service systems that could occur from the project. Impacts to utilities and service systems under CEQA are generally related to increased demand for, or use of utilities and service systems (such as water, wastewater, solid waste disposal), such as to require construction of new or expanded facilities. The CEQA Guidelines also have significance criteria for utilities and service systems related to noncompliance with existing solid waste laws and regulations.

21.2 REGULATORY SETTING

21.2.1 Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act is the main federal law that protects the quality of the nation's surface waters, including lakes, rivers, and wetlands.

Section 404 – Discharge of Dredged and Fill Materials into Waters of the United States

Section 404 of the Clean Water Act regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 Code of Federal Regulations Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 Code of Federal Regulations Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers under the provisions of Clean Water Act Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by the U.S. Army Corps of Engineers through permit requirements. No U.S. Army Corps of Engineers permit is effective in the absence of state water quality certification pursuant to Section 401 of Clean Water Act.

Section 401 – Water Quality Certification

Section 401 of the Clean Water Act requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. and affect water quality. In California, the U.S. Environmental Protection Agency has delegated its authority to the State Water Resources Control Board; the State Water Resources Control Board,

in turn, delegates implementation responsibility to the nine Regional Water Quality Control Boards that will issue water quality certifications. Each Regional Water Quality Control Board is responsible for implementing Section 401 in compliance with the Clean Water Act and its water quality control plan (also known as a Basin Plan, as described in "Porter-Cologne Water Quality Act" in Section 12.2.2). Applicants for a federal license or permit under Clean Water Act Section 404 to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the Clean Water Act.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (amended 1986) is a federal act regulating the potential health and environmental problems associated with solid waste hazards and non-hazardous wastes. Specific regulations addressing solid waste issues are contained in Title 40, Code of Federal Regulations.

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. This act included establishing energy-related tax incentives for energy efficiency and conservation; renewable energy; oil and gas production; and electricity generation and transmission. The act also established increased amounts of renewable fuel (such as ethanol or biodiesel) to be used in gasoline sold in the U.S., provisions to increase oil and natural gas production on federally owned lands, and federal reliability standards regulating the electrical grid.

21.2.2 State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code Division 30), enacted through Assembly Bill 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (Public Resources Code Section 41780). A jurisdiction's diversion rate is the percentage of its total waste that a jurisdiction diverts from disposal through reduction, reuse, and recycling programs. The state, acting through the California Integrated Waste Management Board, determines compliance with this mandate. Per capita disposal rates are used to determine if a jurisdiction's efforts are meeting the intent of the act.

In 2011, the Legislature implemented a new approach to the management of solid waste. California's Commercial Recycling Bill (Assembly Bill 341) went into effect on July 1, 2012 and set a recycling goal of 75 percent diversion by

2020. The bill is intended to 1) reduce greenhouse gas emissions by diverting recyclable materials, and 2) expand the opportunity for increased economic activity and green industry job creation. Assembly Bill 341 is a statewide policy goal rather than a city or county jurisdictional mandate.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900 to 42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report (IEPR) for the Governor and legislature every 2 years. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2019a). Volume II of the 2018 Integrated Energy Policy Report Update describes opportunities to improve energy efficiency; integrate more renewable energy into the grid; improve energy forecasting capabilities; enhance resiliency to climate change and ensure that reliability and the benefits of clean energy reach all Californians (California Energy Commission 2019b).

Urban Water Management Planning Act

California Water Code Section10610 et seq. requires that all public water systems providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet per year, prepare an urban water management plan.

California Code of Regulations, Title 8, Section 1541: Excavations

Section 1541 of the California Code of Regulations requires excavators to determine the approximate locations of subsurface installations, such as sewer, telephone, fuel, electric, and water lines, before opening an excavation, and avoid impacts to subsurface installations.

21.2.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

21.3 ENVIRONMENTAL SETTING

21.3.1 Water

The City of San Luis Obispo is the main provider of water services in the area. The project site is not within a County Service Area for water. All surrounding land uses outside the city service area use private groundwater wells. The project site is in unincorporated San Luis Obispo County and is currently not within the City service area; however, as described in Chapter 2, Project Description, Caltrans is pursuing City water and recycled water for the project site with an Outside User Agreement and annexation.

The nearest City water connection point is on Vachell Lane approximately1,300 linear feet (along Buckley Road and Vachell Lane) away from the proposed entry point. Currently, the City has a water supply portfolio that allows for the safe and continuous use of up to 10,000 acre-feet of water each year, which well exceeds its annual need of about 4,700 acre-feet per year.

21.3.2 Sewer

The City of San Luis Obispo is the main provider of sanitary sewer service to the project area. All surrounding land uses outside the city service area generating wastewater use private septic tank and leach field systems. The project site is not within a County Service Area for wastewater. The closest County Service Area is the wastewater service area for the San Luis Obispo Country Club at Los Ranchos Road and Highway 227.

The project site is in unincorporated San Luis Obispo County and is currently not within the City service area; however, as described in Chapter 2, Project Description, Caltrans is pursuing City sewer services for the project site with an Outside User Agreement and annexation. The nearest City sewer connection point is at the intersection of Vachell Lane and Earthwood Lane, approximately 1,100 linear feet (along Buckley Road and Vachell Lane) away from the proposed entry point. The sewer line would be supported by the lift station constructed with the Avila Ranch Development. The project site is not adjacent to and would not connect new sewer capacity into a capacity-constrained area as identified in the City Wastewater Flow Offset Program.

The City of San Luis Obispo's Water Resource Recovery Facility is responsible for treating all of the wastewater within the City, Cal Poly and the County airport; it is located approximately 1.5 miles north of the project site, adjacent and west of Highway 101 and south of Prado Road. A comprehensive upgrade to the facility—called SLO Water Plus, is currently under construction and will support improved resource recovery.

21.3.3 Recycled Water

The City of San Luis Obispo has a recycled water program and infrastructure to supply recycled water from the City of San Luis Obispo's Water Resource Recovery Facility to locations within the City. Currently, no properties outside the City service and nearby the project site receive City recycled water. As described in Chapter 2, Project Description, Caltrans is pursuing City recycled water services for the project site with an Outside User Agreement and annexation. However, recycled water may still be accessible to the site even if Alternative 1 is constructed without annexation. The nearest City recycled water connection point is at the intersection of Vachell Lane and Earthwood Lane, approximately 1,100 linear feet (along Buckley Road and Vachell Lane) away from the proposed entry point. Currently, the City of San Luis Obispo has surplus recycled water available between fall and spring each year. To fully use surplus recycled water and benefit the region, the City is exploring temporary sales of recycled water to agricultural users inside and outside of City limits. Ultimately, the recycled water will be used for expansion of in-City recycled water uses or receive additional treatment and become a future potable water supply for the City.

21.3.4 Stormwater

The new Buckley Road Extension north of the project site's development includes drainage systems to control stormwater associated with the roadway facility. This include bioswales on both sides of the road and underground drainage that ties into the surrounding county drainage system. One 30-inch culvert transports stormwater from Buckley Road, approximately 240 feet south, to an outfall structure on the project site. Other than the drainage system that supports the Buckley Road Extension, there is no municipal storm drain system connected directly to the site. City stormwater infrastructure exists in the Avila Ranch Housing Development, and the nearest feature is a stormwater detention basin across the corner at Vachell Lane and Buckley Road from the project site.

21.3.5 Solid Waste

Solid waste is collected by San Luis Garbage in the City of San Luis Obispo and surrounding area, including the project site. In San Luis Obispo County, solid waste is monitored by the San Luis Obispo County Integrated Waste Management Authority, which covers San Luis Obispo County and the cities of Arroyo Grande, Atascadero, Grover Beach, Morro Bay, Paso Robles, Pismo Beach, San Luis Obispo and the Community Service Districts in the county. In the project area, all municipal solid waste collection and disposal service, along with recycling and organic waste collection, is taken to the Cold Canyon Landfill at 2268 Carpenter Canyon Road in San Luis Obispo County.

21.3.6 Electricity and Natural Gas

Pacific Gas and Electric provides electrical service to the region. Existing electrical lines are northeast of the project site on Vachell Road at Earthwood Lane, and about 1,000 linear feet (along Vachell Lane and Buckley Road) from a potential tie-in location.

Natural gas in the region is provided by Southern California Gas. Although the project is designed to operated solely on electricity, a natural gas connection and stub-out are included with the project. A natural gas stub-out will ensure that the new facilities are not precluded from any unforeseeable future natural gas needs. A natural gas connection on Buckley Road exists west of the project site and at most 500 linear feet from a potential tie-in point.

21.3.7 Communications

Communications services within the area are provided by AT&T. An existing connection exists on Buckley Road to the west and adjacent to the project boundary.

21.4 IMPACT ANALYSIS

21.4.1 Methodology

Potential impacts on utilities and service systems were evaluated qualitatively by considering aspects of the project. This evaluation considers the extent to which the project would require entirely new or altered existing facilities to address immediate or foreseeable needs associated with project operations. Effects are evaluated qualitatively based on available information on existing facilities and current demand in the project area.

As discussed in Chapter 2, Project Description, Caltrans is currently pursuing water, recycled water, and sewer from the City. If successful, the project would connect to the municipal water, recycled water, and sewer system and receive service from the City. If City services are not successful, then the project would install a well and septic system for obtaining water and treating wastewater. Therefore, the operational effects of the project are evaluated below for both Build Alternatives: Alternative 1—onsite water well and sewer, and Alternative 2—connect to City services.

21.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, the project would result in a significant impact on utilities and service systems if it would:

- 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;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- 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; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

21.5 Environmental Impacts

***Impact UTL-1: 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?* – Less than Significant with Mitigation Incorporated**

Both Alternatives 1 and 2 would install new underground infrastructure and connections both onsite and offsite to provide associated utility services to the project site. Onsite construction for utility installation is expected to take place within the grading footprint and therefore would not cause any additional construction impacts not already identified. Offsite utility construction and trenching would occur along Buckley Road, South Higuera, and Vachell Lane and would likely require temporary lane closures on these roads. Alternative 1 would not include the offsite water and sewer pipeline infrastructure required for Alternative 2 but could include a recycled water line connection to the City. Construction of underground utilities, including gas and electrical utilities, would also include excavation and trenching outside the project site to install subterranean pipelines, gas lines, and electrical conduits. Offsite construction of gas, electrical utilities, and communications would occur in conformance with county or city standards and would be subject to review and approval of proposed utility plans the local departments. There is no offsite stormwater infrastructure proposed with the project.

Offsite construction of proposed new utilities could require temporary lane closures. Therefore, a mitigation measure to reduce lane closure impacts is included from Chapter 19, Transportation, and the impact is considered less than Significant with Mitigation Incorporated**.**

Mitigation Measure TRANS-1 applies.

***Impact UTL-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?* – Less than Significant**

Project Construction

Construction activities would require water mostly for dust mitigation. The amount of water needed on a daily basis would vary by construction phase and activity and is considered temporary. Water during construction may be obtained from the City recycled water, onsite groundwater, or another source. This water is not anticipated to come from the City's existing drinking water supply and is not considered as part of the project's impact on the City's potable water supply. Therefore, the impacts on water supply during construction would be Less than Significant.

Project Operation

Alternative 1: Onsite Water Well

Alternative 1 would include an onsite water system to support drinking water, fire water, and potentially irrigation. If City connections with Alternative 2 are not successful, recycled water from the City may still be allowed and constructed under Alternative 1. City recycled water would be used for landscape irrigation. No entitlements are required to pump groundwater in California, but the San Luis Obispo Valley Groundwater Basin is subject to a groundwater sustainability plan, and a permit from the County Environmental Health Services Department would be required. Impacts on groundwater resources from operational water demands are not expected to be significant (see Chapter 12," Hydrology and Water Quality," for additional discussion). The use of the onsite system would remove the existing facilities and employees from dependence on the current City water supply and any associated entitlements. Overall, this impact would be Less than Significant.

Alternative 2: Connect to City Water

Alternative 2 would include a domestic water distribution system connecting to the City to serve the project's uses. Operation of the project would require approximately 8.7 acre-feet of water annually. The amount of water needed on a daily basis would vary by operational activities taking place, but it is estimated that operation of the facility would require approximately 7,773 gallons per day on average.

Operational water demand of the project would be well within the existing capacities of water treatment and conveyance facilities in the area. Currently, the City has a water supply portfolio that allows for the safe and continuous use of up to 10,000 acre-feet of water each year, which well exceeds its annual need of about 4,700 acre-feet per year. The 8.7 acre-feet needed annually for project operation would represent just 0.16 percent of the City's projected remaining annual water supply (approximately 5,300 acre-feet), or a smaller percentage of the City's water production capabilities. As a result, operation of the project would not require the construction of any new or expanded water facilities.

The City has agreed that sufficient water supply is available to serve the project, and the proposed water pipeline infrastructure would not negatively impact the function of the City water distribution system. Therefore, the project would not require or result in the construction of new water facilities, or the expansion of existing facilities, which could cause a significant environmental impact, and the impact would be Less than Significant.

***Impact UTL-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?* - Less than Significant**

Project Construction

The project would not generate municipal wastewater during construction because sanitary portable restrooms would be used. Therefore, No Impact would occur.

Project Operation

Alternative 1: Onsite Septic System

The project would not send wastewater to a treatment provider during long-term operation because an onsite septic system would be used. Therefore, No Impact would occur.

Alternative 2: Connect to City Sewer

The total estimated amount of wastewater that would be generated by the project is approximately 7,773 gallons per day on average. Wastewater generated by project operations would be transmitted to the San Luis Obispo Water Resource Recovery Facility. The treatment plant has a capacity of 5.2 million gallons per day and currently treats approximately 4.5 million gallons per day. Therefore, the City has agreed that there is sufficient remaining capacity to serve buildout of the project. The project would entail approximately 1.1 percent of the 700,000 gallons per day available capacity. This amount would be offset by the elimination of wastewater generation at the existing facilities. Therefore, the project would not result in a

determination by the wastewater treatment provider that it has inadequate capacity to serve the project. This impact would be Less than Significant.

***Impact UTL-4: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals/Comply with all applicable management and reduction regulations related to solid waste* – Less than Significant**

During construction, the project would generate some construction debris associated with site preparation, including clearing and grubbing, grading, excavation, importing and placing fill, and removal of all onsite vegetation.

During operation, the project would generate typical domestic solid waste (such as employees' trash) as well as hazardous wastes (such as solvents, cleaners, other evaporative compounds, and used oil). Hazardous waste disposal would be transported weekly to a hazardous waste facility for disposal or recycling. The project would be Leadership in Energy and Environmental Design Silver-certified and would have recycling bins onsite. In accordance with the Integrated Waste Management Act, the project would seek to divert at least 50 percent of its solid waste. The same landfill that serves the existing facilities would serve the project, and no increase in solid waste types or amounts are expected to change. Therefore, the project would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or impair the attainment of any solid waste goals. The project would comply with applicable management and reduction regulations related to solid waste. Therefore, this impact would be Less than Significant.

CHAPTER 22 Wildfire

22.1 REGULATORY SETTING

22.1.1 Federal Laws, Regulations, and Policies

No federal regulations are applicable to wildfire in relation to the project.

22.1.2 State Laws, Regulations, and Policies

California Fire Code

The California Fire Code lists specific requirements for emergency water supply, access roads and turnarounds, roofing, construction techniques, hazard abatement, and event inspection and safety. The California Fire Code provides uniform fire prevention, hazardous material, and building construction regulations. To minimize risks to public health and the environment, a Fire Prevention Inspector is required to review a list of hazardous materials stored above-ground on a property to assess potential individual and/or cumulative impacts to the property and surrounding areas. The inspector would ensure that hazardous materials stored onsite comply with Chapter 6.95 of the California Health and Safety Code.

Public Resources Code Section 4291 Mountainous, Forest-, Brush- and Grass-Covered Lands

(a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass covered lands, or land that is covered with flammable material, shall at all times do all the following:

(1) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion. For the purposes of

this paragraph, “fuel” means any combustible material, including petroleum-based products and wildland fuels.

(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

22.1.3 Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local land use and zoning laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (such as connections to infrastructure within the public right-of-way).

22.2 ENVIRONMENTAL SETTING

The project is not in State Responsibility Areas identified by the California Department of Forestry and Fire Protection (CAL FIRE) as very high fire hazard severity zones (CAL FIRE 2022). The project is within a moderate fire severity zone. The site is within a quarter mile of a very high severity fire zone to the west and within 100 yards of a high severity fire zone to the northwest. Active agriculture on surrounding private properties helps reduce the amount of ignitable vegetation.

The project would be in an area previously used as agricultural lands and rural residences. The surrounding lands are rural, agricultural, and urban developed. The buildings will be made within compliance of the California Building Code. The project would include two access driveways and a fire access aisle within the development that would allow access by emergency vehicles.

22.3 IMPACT ANALYSIS

22.3.1 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, the project would result in a significant impact on wildfire if it would:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

22.4 Environmental Impacts

Impact FIRE-1: Substantially impair an adopted emergency response plan or emergency evacuation plan – Less than Significant with Mitigation Incorporated

Project Construction

During the project construction, traffic impacts on public streets would be related to the movement of construction equipment, construction worker trips, and lane closures on South Higuera, Buckley Road, and Vachell Lane required for utility work. Project construction would result in a temporary increase in vehicle traffic along nearby roadways. Project-related truck traffic and incoming/outgoing equipment during construction activities could increase conflicts between bicyclists, pedestrians, and cars. Slow-moving trucks requiring access to the project site on Buckley Road could increase conflicts with bicyclists, pedestrians, and cars. Also, construction of the project's utilities within nearby roadways and corresponding temporary lane closures would potentially impair emergency response or evacuation. Implementation of Mitigation Measure TRANS-1, which requires the development and implementation of a traffic management plan, would reduce impairment to emergency response and evacuation during construction. Therefore, this impact is considered Less than Significant with Mitigation Incorporated.

Mitigation Measure TRANS-1 applies.

Project Operation

The project is near Highway 101 and would be adequately served by both the police and fire departments. The project would not create a permanent increase in population that would lead to an overwhelming number of calls for service. In addition, fire access to and within the site would be designed in compliance with fire codes. Therefore, operational impacts to the emergency response and evacuation would be Less than Significant.

Impact FIRE-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire **– Less than Significant**

The project includes a final grade with minor slope to facilitate drainage. The project will include use of California Building Code best management practices for building materials, use of erosion control and fire-resistant landscaping, and provide adequate water supply for emergencies. As described in Chapter 11, Hazards and Hazardous Materials, storage of hazardous and flammable materials will follow design and protection requirements to reduce risks related to fire or wildfire. Therefore, this impact is considered Less than Significant.

Impact FIRE-3: 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 **– Less Than Significant**

Installation of any proposed utilities would occur underground and would not exacerbate fire risks. Any fire-related infrastructure proposed or required onsite will not add any additional impacts to the environment. Therefore, this impact is considered Less than Significant.

Impact FIRE-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes **– Less than Significant**

The project includes a final grade with minor slope to facilitate drainage. As described in Chapter 12, Hydrology and Water Quality, the facility will avoid the 100-year floodplain elevation, and the elevation of activities or structures will occur at an elevation even greater. Therefore, this impact is considered Less than Significant.

Chapter 23 Other Statutory Considerations

23.1 Introduction

This chapter presents discussions of significant and unavoidable impacts, growth-inducing impacts, and cumulative impacts, as required by the CEQA Guidelines.

23.2 Significant and Unavoidable Impacts

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe any significant impacts that cannot be mitigated to a less-than-significant level. All of the impacts associated with the project would be reduced to a less-than-significant level through the implementation of identified mitigation measures, with the exception of the impacts discussed below, which have been identified as significant and unavoidable.

The following impacts have been identified as being significant and unavoidable for the reasons described below:

Impact AES-1: Have a substantial adverse effect on a scenic vista –

Significant and Unavoidable

The Cuesta Ridge borders the region to the north and east, the Irish Hills border the Los Osos Valley to the west, and the San Miguelito Hills are to the south. These hills are generally the distant visual limits of the area and are considered the scenic backdrop for much of the area. The proposed project building rooflines will be below the horizon lines of the distant hills. However, depending on the viewer height, views from Buckley Road looking south may have the hillside horizon lines interrupted by the proposed buildings. Therefore, the existing views would undergo a moderate reduction in the remaining availability of visual access to open space and hillside views. Because of the moderately high quality of the visual resources, combined with the community's high value placed on these visual resources, even this moderate reduction in views would be considered a substantial visual impact. Mitigation Measures AES-1 through AES-16 will reduce the impact to the scenic vistas by minimizing the site elevation, requiring treatment to walls and hardscape, providing layered landscaping, and requiring appropriate architectural style for structures. However, because a moderate reduction in the remaining availability of visual access to open space and hillside views is still expected, this impact is considered Significant and Unavoidable.

***Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings* – Significant and Unavoidable**

The existing visual character of the project area is based mostly on its rural, undeveloped landscapes and varying topography. The project would increase the urban character caused by a change of land use type, additional hardscape and structures, lighting, fencing, grading, and landform alteration.

Mitigation Measures AES-1 through AES-16 will reduce the impacts to the existing public viewpoints by minimizing the site elevation, requiring treatment to walls and hardscape, providing layered landscaping, and requiring appropriate architectural style for structures. However, given the moderately high viewer sensitivity, the inherent visual change associated with an increase in visual scale and additional hardscape would result in a noticeable and substantial degradation of visual character, therefore this impact is considered Significant and Unavoidable.

***Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use?* – Significant and Unavoidable**

Alternative 2 would expand water and sewer infrastructure outside the City limits and adjacent to and nearby surrounding agricultural land. This water and sewer infrastructure would likely induce development and conversion of agriculture at these locations. Although any development beyond the project would require annexation into the City and therefore require mitigation to offset the loss of agricultural land, recent local efforts to mitigate the loss of agricultural land around the City have been difficult. Therefore, Alternative 2 would indirectly result in agricultural land conversion that could not be fully mitigated. Therefore, this impact would be Significant and Unavoidable.

23.3 Significant Irreversible Changes

The environmental effects of the proposed project are summarized in the Executive Summary and are analyzed in detail in Chapters 4 through 23 of this Draft EIR. As mandated by the CEQA Guidelines, the EIR must address any significant irreversible environmental change that would result from implementation of the proposed project. Specifically, pursuant to CEQA Guidelines Section 15126.2(d), such an impact would occur if:

- The proposed project would involve a large commitment of nonrenewable resources;
- Primary and secondary impacts would generally commit future generations to similar uses;

- The proposed project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

The project consists of a relocating existing facilities, operations, and employees to a new location with increased space and accommodating 29 additional employees. Implementation of the project would require the long-term commitment of natural resources and land, as noted in the following paragraphs.

Approval and implementation of actions related to the proposed project would result in an irretrievable commitment of nonrenewable resources such as energy supplies and other construction-related materials. The energy resource demands would be used for construction, heating and cooling of buildings; transportation of people and goods; heating and refrigeration; lighting; and other associated energy needs.

Environmental changes with implementation of the project would occur as the physical environment is altered through commitments of land and construction materials to the project. There would be an irretrievable commitment of materials used in construction. Nonrenewable resources would be committed primarily in the form of fossil fuels and would include fuel, oil, and gasoline used by vehicles and equipment associated with construction and operation of the project.

The consumption of other nonrenewable or slowly renewable resources would result from the development of the project. These resources would include but not be limited to lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, and water.

The project is not anticipated to result in significant irreversible environmental damage because, pursuant to CEQA Guidelines Section 15126.2(d), the project does not meet any of the scenarios listed above. Irreversible damage is not anticipated from environmental accidents associated with the project, because the project would comply with all applicable local and state regulations regarding handling and storage of hazardous materials. While a large commitment to nonrenewable resources would be required, the project would use the energy efficiently and would not result in the wasteful use of energy.

23.4 Growth Inducement

Section 15126.2(d) of the CEQA Guidelines requires an EIR to include a detailed statement of a proposed project's anticipated growth-inducing impacts. The analysis of growth-inducing impacts must discuss the ways in which a proposed project could foster economic or population growth or the

construction of additional housing in the surrounding environment. The analysis must also address project-related actions that would remove existing obstacles to population growth, tax existing community service facilities and require construction of new facilities that cause significant environmental effects, or encourage or facilitate other activities that could, individually or cumulatively, significantly affect the environment. A project would be considered growth inducing if it induces growth directly (through the construction of new housing or increasing population) or indirectly (increasing employment opportunities or eliminating existing constraints on development). Under CEQA, growth is not assumed to be either beneficial or detrimental.

Alternative 1 would not involve new development or infrastructure installation that could directly induce significant population growth in the project area. Construction-related jobs would be of short-term duration and would be anticipated to draw from the existing work force. The project would not displace any existing housing units or persons or create any housing units. The small amount of job growth (an increase in 29 employees) associated with the project's operation is not anticipated to generate sufficient economic activity so that it would result in substantial population growth. Therefore, Alternative 1 would not be growth inducing.

Alternative 2 would involve the installation of new water and sewer infrastructure outside the city boundaries and along Vachell Lane, Buckley Road Extension, and South Higuera. The availability of new water and sewer infrastructure to nearby properties would be growth inducing. Although the project site is within the City Sphere of Influence, it is not accounted for in a current County of City General Plan or a Specific Plan; therefore, new water and sewer infrastructure to the area would likely spur unplanned population growth.

23.5 Cumulative Impacts

A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Cumulative impacts reflect "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355[b]).

CEQA Guidelines Section 15130(a) requires that an EIR address the cumulative impacts of a proposed project when:

- The cumulative impacts are expected to be significant; and

- The project's incremental effect is expected to be cumulatively considerable, or significant, when viewed in combination with the effects of past, current, and probable future projects.

An EIR does not need to discuss cumulative impacts that do not result in part from the project evaluated in the EIR.

CEQA Guidelines Section 15130 requires an analysis of cumulative impacts to contain the following elements:

- Either a list of past, present, and probable future projects producing related cumulative impacts, or a summary of projections contained in an adopted local, regional or statewide plan that describes or evaluates conditions contributing to the cumulative effect.
- A definition of the geographic scope of the area affected by the cumulative effect, and a reasonable explanation for the geographic limitation used.
- A summary of the environmental effects expected to result from those projects with specific reference to additional information stating where that information is available.
- A reasonable analysis of the combined (cumulative) impacts of the relevant projects.

The analysis must also evaluate a proposed project's potential to contribute to the significant cumulative impacts identified and discuss feasible options for mitigating or avoiding any contributions assessed as cumulatively considerable.

The discussion of cumulative impacts is not required to provide as much detail as the discussion of the effects attributable to the project alone. Rather, the level of detail should be guided by what is practical and reasonable.

23.5.1 Methods Used in this Analysis

As mentioned above, CEQA Guidelines Section 15130 provides two recommended approaches for analyzing and preparing an adequate discussion of significant cumulative impacts. The approaches as defined in CEQA Guidelines Section 15130 are either:

- The list approach, which would involve listing past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency; or
- The projection approach, which uses a summary of projections contained in an adopted general plan, a related planning document, or an adopted environmental document that evaluated regional or area-wide conditions contributing to the cumulative impact.

This discussion uses the list approach for the cumulative impact analysis. The level of detail of a cumulative impact analysis should consider a proposed project's geographic scope and other factors (such as a project's construction or operation activities, the nature of the environmental resource being examined) to ensure that the level of detail is practical and reasonable. The discussion focuses on the potential cumulative impacts of the project for environmental issues that could be expected to be cumulatively impacted by the project in conjunction with other past, present, and reasonably foreseeable future projects.

Resource Topics Considered and Dismissed

The project has been determined to have the potential to make a contribution to cumulative impacts related to the following resource topics: aesthetic resources and agricultural resources. Greenhouse gas emissions are intrinsically a cumulative issue and are already addressed in Chapter 10, Greenhouse Gas Emissions and Energy; therefore, this topic is not discussed further in this section. For all other resource topics, as shown in Table 24.1, either significant cumulative impacts do not exist, or the project would not have the potential to make a considerable contribution to any significant cumulative impacts. These resource topics have been dismissed from consideration in the analysis of cumulative impacts and are not discussed further.

Table 24.1 Resource Topics Dismissed from Further Consideration in the Analysis of Cumulative Impacts

Resource Topic	Rationale
Air Quality	The project would not result in air pollutant emissions that would exceed significance thresholds for project-level or cumulative impacts established by San Luis Obispo Air Pollution Control District. These significance thresholds were developed considering all sources of air pollutants and growth of emissions in the air basin. A project below these significance thresholds is unlikely to substantially contribute to a cumulative air quality impact. Neither construction nor operation of the project would result in peak daily emissions that exceed the applicable San Luis Obispo Air Pollution Control District thresholds. Regionally, the project will be moving existing emissions from one location to another and any net increase in emissions will be minimal. Also, the new facilities are to be all electric, more energy efficient, and the fleet is expected to transition toward electric vehicles. A human health risk assessment will be prepared for the project, and an evaluation of naturally occurring asbestos will mitigate any potential air quality health risk Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, the project's contribution to cumulative impacts related to air quality would not be considerable.
Biological Resources	The project would include mitigation resulting in less-than-significant impacts on special biological resources. Mitigation includes but is not limited to replacing bird and bat roosting structures and avoiding physical and pollutant impacts to the nearby creek and riparian habitat. Any wildlife connectivity opportunity the nearby creek provides will not be significantly impacted. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to biological resources would not be considerable.
Cultural Resources and Tribal Cultural Resources	A cultural resource in the form of an eligible historic site exists on the site and will be potentially impacted by the project. Mitigation in the form of data recovery, public outreach, and public education is included, and the impact to the site is considered less than significant. There were no pre-historic or tribal cultural resources found during surveys or known to be present in the project area. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. Therefore, the project's contribution to cumulative impacts related to cultural and tribal cultural resources would not be considerable.

Resource Topic	Rationale
Geology, Soils, and Seismicity	The project soils and geology will be further studied and designed to avoid impacts related to potentially unstable soils. Groundwater pumping limitations will be assessed and implemented during drought periods to prevent soil subsidence. A Storm Water Pollution Prevention Plan pursuant to the National Pollutant Discharge Elimination System General Construction Permit would be required and would include erosion and sediment control Best Management Practices, such as silt fences, straw hay bales, gravel or rock-lined ditches, water check bars, broadcasted straw, hydroseeding, or other suitable measures. If needed, soils would be amended, and a septic tank and leach field system would be designed to accommodate incompatible impervious soils. Mitigation is included to lessen impacts to any potential paleontological resources. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to geology, soils, and seismicity would not be considerable.
Greenhouse Gas Emissions and Energy	Greenhouse gas emissions are, by their nature, cumulative impacts. Consequently, the cumulative analysis is the same as the discussion concerning project impacts. Like Air Quality, the project will be moving existing greenhouse gas emissions from one location to another, and any net increase in greenhouse gas emissions will be minimal. Also, the new facilities are to be all electric, more energy efficient, and the fleet is expected to transition toward electric vehicles. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to greenhouse gas emissions and energy would not be considerable.
Hazards and Hazardous Materials	The project includes the potential for construction activities to encounter known and/or undocumented releases or unknown sources of hazardous materials. In addition, proposed utility connection activities and construction-related employee vehicle trips and truck trips for the project would potentially cause temporary lane closures and increase traffic. These changes could impede access for fire and emergency response vehicles as construction vehicles enter and exit the project site over the duration of the 36-month construction period. Implementation of mitigation measures would reduce these impacts to a less-than-significant level. Therefore, the project's contribution to cumulative impacts related to hazards and hazardous materials would not be considerable.

Resource Topic	Rationale
Hydrology and Water Quality	The project includes development of new impervious surfaces and associated water quality impacts, as well as alteration of the existing hydrologic environment, thereby altering the abundance and natural flow of water resources of the area. However, cumulative impacts would be reduced to a less than significant level with the implementation of and adherence to the policies, practices, and requirements discussed in Chapter 12. Polluted runoff, which may be generated during construction activities, would be regulated by the State Water Resources Control Board under General Construction, National Pollutant Discharge Elimination System permits, and would be minimized using Caltrans standard construction Best Management Practices. Regarding flooding, the project includes a design to retain the necessary volume of rainfall to limit runoff rates and also avoid any rise to the 100-year floodplain elevation. Avoiding a rise to the floodplain will be accomplished primarily by avoiding the floodplain and balancing the minimal amount of grading proposed within it. Therefore, cumulative impacts to hydrology and water quality would not be considerable.
Land Use and Planning	The project would include new urban development on County zoned and active agricultural land. However, local zoning, land use restrictions, and policies do not apply to state-owned land. The project site does not include significant farmland as defined by CEQA, the County, City, or Local Agency Formation Commission but could introduce new infrastructure such as water and sewer pipelines to surrounding undeveloped properties. However, all pending and future projects that might use the new water and sewer infrastructure would most likely require annexation into the City General Plan and all other applicable regulatory land use actions prior to approval. Further, the project is not inconsistent with Airport Land Use Plan development standards for Safety Areas and is outside the airport-related safety hazard areas, so it is not expected to cumulatively contribute to potential airport noise and/or safety issues. Mitigation would be incorporated to pending and future projects to ensure they provide acceptable levels of accessible open space, and that they comply with all applicable zoning development standards. Consequently, implementation of the project is not expected to cumulatively impact land use. Therefore, cumulative impacts to land use caused by the project would not be considerable.
Mineral Resources	The project will create no impact to mineral resources, and therefore cumulative impact is not considerable.

Resource Topic	Rationale
Noise and Vibration	The project would contribute to the increase in vehicle trips and associated traffic noise, as well as operational noise at and near the site. However, the project would contribute a marginal increase in noise levels that is less than the applicable County and City thresholds for the surrounding sensitive receptors. Therefore, this cumulative impact would be considered less than significant, and the project's contribution to cumulative noise impacts would not be considerable.
Population and Housing	The project would not significantly increase both the supply of jobs and housing in the region as it includes only an increase in 29 employees. The project could introduce new infrastructure such as water and sewer pipelines to surrounding undeveloped properties. However, all pending and future projects that might use the new water and sewer infrastructure would most likely require annexation into the City General Plan and all other applicable regulatory land use actions prior to approval. Annexation and other land use approvals would be required to mitigate any considerable contributions to population and housing and will be part of a future General Plan or Specific Plan. Therefore, this cumulative impact would be considered less than significant, and the project's contribution to population and housing impacts would not be considerable.
Public Services	The project would not significantly increase population in the region as it includes an increase in only 29 employees. The project site and nearby area is already served by police and fire protection, schools, parks, and other public facilities. As such, the addition of the project to the area would not substantially increase demand for public services. Therefore, this cumulative impact would be considered less than significant, and the project's contribution to public services impacts would not be considerable.
Recreation	The project would not significantly increase population in the region because it includes an increase of only 29 employees. Therefore, the project would not generate significant recreational demand or affect existing recreational facilities because it would not greatly increase the population in the project area. Therefore, this cumulative impact would be considered less than significant, and the project's contribution to recreation impacts would not be considerable.

Resource Topic	Rationale
Transportation	Operation of the project is anticipated to have a minimal effect on Vehicle Miles Traveled in the region given that the project introduces a net increase in 90 trips per day to the area. Intersection control at the main driveway will be designed to accommodate all modes of transportation, including pedestrian access across Buckley Road to the existing bike and pedestrian path. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to transportation would not be considerable.
Tribal Cultural Resources	Surveys of the project site were negative for pre-historic resources and therefore no impact is expected to Tribal Cultural Resources. No Tribal Cultural Resources that are listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources have been identified within the project area. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to tribal cultural resources would not be considerable.
Utilities and Service Systems	The project would require new or expanded entitlements or utility infrastructure to serve the facility. Water and wastewater may be provided onsite or from the City. Electricity and other service systems have availability to serve the project. Storm drainage would be retained onsite. The City has tentatively agreed that the water and sewer demands and the infrastructure proposed can be accommodated. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to utilities and service systems would not be considerable.
Wildfire	The project site is within a quarter mile of a very high severity fire zone to the west and within 100 yards of a high severity fire zone to the northwest. The project will include onsite designated fire access routes for emergency personnel, a Project Specific Evacuation Plan, use of California Building Code best management practices for building materials, use of erosion control and fire-resistant landscaping, and provide adequate water supply for emergencies. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact. So, the project's contribution to cumulative impacts related to wildfire would not be considerable.

Table 24.2 defines the geographic scope that will be used in the impact analysis for each of the resource areas for which the project could contribute to cumulative impacts.

Tables 24.2 Geographic Scope for Resources with Cumulative Impacts Relevant to the Project

Resource	Geographic Scope	Explanation for the Geographic Scope
Aesthetic Resources	City of San Luis Obispo and surrounding Open Space and Agricultural land	This area covers the project area, the City, and surrounding unincorporated land used as open space and agriculture.
Agricultural Resources	City of San Luis Obispo and surrounding Open Space and Agricultural land	This area covers the project area, the City, and surrounding unincorporated land used as open space and agriculture.

Note: “Project area” encompasses areas where physical actions that are part of the project would take place and areas where those physical actions may affect the environment.

Existing information on current and historical conditions was used to evaluate the combined effects of past actions on each resource topic that was evaluated. For present and probable future projects and activities, a list of related actions was compiled. The effects of these past, present, and probable future actions were then evaluated in combination with those of the project. The combined effects of past actions and the list of related present and probable future projects are described further below. The list focuses on development along the fringes of the city and not infill development projects. According to the California Office of Planning and Research, the term “infill development” refers to building within unused and underused lands within existing development patterns, typically but not exclusively, in urban areas.

23.5.2 Cumulative Impact Analysis

Cumulative Setting

Table 24.3 lists projects planned in the area that could affect resources that would also be affected by the project. The list was developed by reviewing the City and County of San Luis Obispo project development websites for active and recently approved project. While not every potential cumulative project is listed, the list of cumulative projects is considered sufficiently comprehensive and representative of the types of impacts that would be generated by other projects similar to or related to the project. The evaluation of cumulative impacts assumes that the impacts of past and present projects are represented by baseline conditions, and that cumulative impacts are considered in the context of baseline conditions alongside reasonably foreseeable future projects.

Table 24.3 List of Past, Current, and Reasonably Foreseeable Future Projects and Activities that May Cumulatively Affect Resources of Concern for the Project

Project Title	Summary of Project Activity	Aesthetic Resources (Yes or No)	Agricultural Resources (Yes or No)
Caltrans District 5 Office Relocation	Development of new District 5 Office north of the Buckley Road Extension on state-owned property at 4485 Vachell Lane. The project would relocate existing offices and employees within the City and accommodate approximately 450 employees north or Buckley Road.	Yes	Yes
Orcutt Area Specific Plan (OASP)	Bullock Ranch: Residential- Multi-family and Mixed Use -192 units and 585 square feet commercial Pratt Property: Mixed Use - 35 units and 3,400 square feet commercial Taylor Ranch – South Morros -Vinifera: Residential-Single-and Multi-family - 93 units Righetti Ranch: Residential-Single-and Multi-family -304 units Jones Subdivision: Mixed Use-64 units and 10,400 square feet commercial West Creek - Noveno – Vintage: Residential-Single-and Multi-family-172 units	Yes	Yes
Margarita Area Specific Plan (MASP)	Prado Business Park: Office/Medical and Industrial and 159,663 square feet commercial Toscano Moresco: Single- and Multi-family-206 units	Yes	Yes
Airport Area Specific Plan	San Luis Obispo Airport Hotel: Hotel-204 hotel rooms Avila Ranch: Mixed Use-720 units and 20,000 square feet commercial Tank Farm Commerce Park: Commercial- 29,280 square feet commercial NWC Broad: Mixed Use -111-unit Assisted Living and 61,745 square feet commercial 650 Tank Farm: Mixed-Use - 249 units and 18,600 square feet commercial 862 Aerovista: Office/Medical and Industrial - 35,908 square feet commercial	Yes	Yes
San Luis Ranch Specific Plan	San Luis Ranch Specific Plan: Mixed Use - 654 units, 200 hotel rooms, and 350,000 square feet commercial	Yes	Yes
Froom Ranch Specific Plan	Froom Ranch Specific Plan: Mixed Use - 404-unit Life Plan Community 174 units, 120 hotel rooms, and 30,000 square feet commercial	Yes	Yes
Chevron Remediation	Chevron Remediation: Remediation, Open Space, and Commercial - 250 acres	Yes	Yes

23.5.3 Cumulative impacts

***Impact CUM-1: Cumulative Impacts on Aesthetic Resources* - Significant and Unavoidable**

The combination of structures, paving, fencing, lighting, stationary and moving vehicles and equipment will result in the visual conversion of the property from rural to a public or industrial property. These onsite cumulative changes are most evident from close distances along Buckley Road and Vachell Lane, where the facility structures are most visible. Within the viewshed of the project, other developments are visible. The impacts of the project in association with other development are most noticeable from Highway 101 and more distant locations on Buckley Road, where more of the project setting can be seen at one time. As seen from some viewpoints, the project will appear somewhat consistent with the Recreational Vehicle storage yard to the north and inconsistent with the newly constructed Avila Ranch residential development. The project property is part of one of the more scenic landscapes along the eastern side of the Highway 101 corridor between Pismo Beach and San Luis Obispo. Development of this property, even if visually consistent with adjacent developments, will have a negative effect on the perception of the region as being mostly rural. For many viewers familiar with the area, the visibility of development on these fields and agricultural areas will be representative of the increasing urbanization of the region in general. Along the Highway 101 corridor, commercial development is increasing, and the foreground and mid-ground views from the highway are decreasing in visual quality. It is expected that as other commercial and residential development increases along the southern San Luis Obispo/Highway 101 corridor, viewer expectations regarding rural character will likely diminish.

Mitigation measures described in Chapter 4 will reduce the potential impacts to aesthetic resources, but due to the contribution this project will have to the alteration of the rural character of the area, when combined with the expected sensitivity of viewers from major public roadways, potentially substantial cumulative visual impacts will result. Therefore, the project's conversion of rural land to development public/industrial land would make a considerable contribution to the significant cumulative impact.

***Impact CUM-2: Cumulative Impacts on Agricultural Resources* – Significant and Unavoidable**

Many of the cumulative projects identified in Table 24.3 involve conversion of farmland, including several large projects near the project site. The loss of farmland, especially Prime Farmland in the County and City of San Luis Obispo is a significant cumulative impact.

As described in Chapter 5, Agricultural and Forest Resources, the project would not convert Prime Farmland, Unique Farmland, or Farmland of

Statewide Importance. Instead, the project would convert Prime Farmland if Irrigated and soils considered Class 3 (irrigated or non-irrigated) to a non-agricultural use. Also, completion of the Land Evaluation and Site Assessment Model resulted in a score considered less than significant. Therefore, the project considers the conversion or loss of onsite farmland, including both sides of the Buckley Road Extension and totaling 26 acres of active dryland farming, to be less than significant without mitigation.

Alternative 2 would expand water and sewer infrastructure outside the city limits and adjacent to and nearby surrounding agricultural land. This infrastructure could induce development and spur the conversion of prime soils and significant agricultural resources at these locations. Although such development would likely require annexation into the City and therefore require mitigation to offset the loss of prime or significant agricultural land, recent local efforts to mitigate the loss of prime or significant agricultural land around the City have not been successful because the availability or creation of new farmland to offset the loss of farmland is not feasible. Mitigation of recent development projects to reduce the impacts to farmland have been in the form of funding a conservation easement, which is not capable of reducing impacts to a less than significant level. Therefore, the project's indirect impacts related to new and expanded water and sewer infrastructure would add to the additional loss of prime or significant farmland and would make a considerable contribution to the significant cumulative impact.

Chapter 24 List of Preparers

This document was prepared by the following Caltrans District 5 staff, Division of Engineering Services staff, and consultants:

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of environmental engineering experience. Contribution: Air Quality Report, Noise Study.

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Laura Riccardelli, Environmental Scientist, Environmental Generalist/Environmental Scientist. B.S., Environmental Science, University of California, Los Angeles; 2 years of experience in environmental resource management. Contribution: Preparation of the Draft Environmental Impact Report.

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Matthew Willis, Environmental Scientist. B.S., Ecology and Systematic Biology, Minor in Geography, California Polytechnic State University, San Luis Obispo; 20 years of experience in environmental impact assessment, environmental compliance, and biological resources. Contribution: Prepared biological studies.

Chapter 25 Distribution List

Federal Agencies

U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
U.S. Bureau of Land Management
U.S. Department of Interior, Office of Environmental Policy and Compliance
Federal Emergency Management Agency
Natural Resources Conservation Service

State Agencies

San Luis Obispo Air Pollution Control Board
Department of Toxic Substances Control
California Department of Conservation
California Department of Fish and Wildlife
California Department of Water Resources
California Highway Patrol - Templeton
California Native American Heritage Commission
California Natural Resources Agency
California State Clearinghouse
California Transportation Commission
Central Coast Regional Water Quality Control Board
San Luis Obispo Local Agency Formation Commission
California State Historic Preservation Office
Department of General Services
Department of Motor Vehicles
California State Fire Marshall

County

San Luis Obispo County Board of Supervisors
San Luis Obispo County Air Pollution Control District
San Luis Obispo County Planning and Building Department
San Luis Obispo County Public Works

San Luis Obispo County Clerk-Recorder's Office
San Luis Obispo County Board of Supervisors
San Luis Obispo County Council of Governments
San Luis Obispo County Department of Agriculture/Weights and Measures
County of San Luis Obispo Environmental Health Services Division

City

City of San Luis Obispo Community Development Department
City of San Luis Obispo Public Works Department
City of San Luis Obispo Mayor and City Council

Native American Contact List

Barbareno/Ventureno Band of Mission Indians
Chumash Council of Bakersfield
Barbareno Band of Chumash Indians
Northern Chumash Tribal Council
San Luis Obispo County Chumash Council
Tule River Indian Tribe
Xolon-Salinan Tribe
Xolon-Salinan Tribe Council
yak tityu tityu yak tilhini Northern Chumash Tribe
Salinan Tribe of Monterey, San Luis Obispo Counties
Coastal Band of the Chumash Nation
Santa Ynez Band of Chumash Indians

Other

Bike SLO County
Kevin Johnston
Property owners and occupants surrounding the project

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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September 2022

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To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Appendix B Scoping Summary

Scoping refers to the public outreach process used under the California Environmental Quality Act (CEQA) to determine the coverage and content of an environmental impact report (EIR). The scoping comment period offers an important opportunity for the public and agencies to review and comment during the early phases of the environmental compliance process. Scoping contributes to the selection of a range of alternatives to be considered in the EIR and can also help establish methods of analysis, identify the environmental effects that will be considered in detail, and develop mitigation measures to avoid or compensate for adverse effects. In some cases, it may also identify issues that the public feels do not warrant analysis.

This summary describes the scoping process undertaken by Caltrans for the District 5 Maintenance Station and Equipment Shop Relocation project. It also summarizes comments received. Comments are reproduced in their entirety in the attachments to this report.

Overview of Project Scoping Process

Scoping is initiated when the lead agency issues a Notice of Preparation (NOP) announcing the beginning of the EIR process. As required by CEQA and the CEQA Guidelines, a Notice of Preparation was developed to provide information on the background, goals, and objectives of the project; announce preparation of and request public and agency comment on the EIR; and provide information on the public scoping meeting to be held in support of the EIR.

The Notice of Preparation for the project was prepared in accordance with CEQA Guidelines Section 15082 and received by the State Office of Planning and Research, State Clearinghouse on March 23, 2022, initiating the public scoping period. The Notice of Preparation was distributed for review and comment to numerous federal and state agencies; departmental and public services agencies within San Luis Obispo County and the City of San Luis Obispo; and private property owners adjacent to and surrounding the project. The public review continued for 33 days and ended on April 25, 2022.

On April 11, 2022, Caltrans conducted a virtual (online) public scoping meeting for the project via Webex technology. The meeting was held from 5:30 p.m. to 7:30 p.m. The meeting was held virtually because of the Governor's mandated restrictions on group gatherings related to COVID-19. Notices of the meeting were mailed to interested parties. In addition, scoping meeting information was published on social media and on the project website (https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects) before the event to encourage attendance. The public meeting date, time, and location information were also included in the Notice of Preparation and mailed to numerous households, offices, and agencies. In addition to

Caltrans staff, approximately 6 individuals attended the scoping meeting and included City staff and staff from the Department of Motor Vehicles. The meeting began with a brief video presentation to provide an overview of the project and the CEQA process. Afterward, attendees were given an opportunity to provide spoken and written comments. Only one attendee provided comment, wanting to confirm that a Department of Motor Vehicles driver's testing pad was included in the scope of the project.

All of the meeting materials from the scoping meeting, including the PowerPoint of the video presentation, are posted on the Caltrans project webpage. Caltrans accepted written comments at the meeting, as well as during the 33-day scoping period. The City requested additional time to comment and provided comment on the Notice of Preparation after April 25, 2022. During the scoping period, six written comments were received. These comments have been summarized below.

Public Comments Received

April 11, 2022 Meeting Summary

In addition to Caltrans staff, approximately 6 individuals attended the scoping meeting and included City staff and staff from the Department of Motor Vehicles. Only one attendee provided comment, wanting to confirm that a Department of Motor Vehicles driver's testing pad was included in the scope of the project.

Comment Letters

Comments received during the scoping period covered two categories:1) the EIR, and 2) Permits and Regulations. Comments addressing the scope of the EIR relate to aesthetics, agriculture, biological resources, cultural and tribal cultural resources, greenhouse gas emissions, growth inducement, hydrology and water quality, noise, transportation, and utilities. Comments on permits, entitlements, and regulations relate to suggested recommendations on permits that may need to be obtained for the project and compliance with regulations. These comments have been considered in the EIR evaluation.

EIR

Agricultural Resources

- The County, City, and private landowners are concerned with conversion of existing agricultural operations, agricultural land, and prime farm farmland soils.

Aesthetics

- The City is concerned with impacts to viewsheds, nighttime glare, and view from Highway 101, which is considered with high scenic value.

Biological Resources

- The City is concerned with impacts to wildlife within the project site and impacts to wildlife migration corridors.

Cultural and Tribal Cultural Resources

- The Native American Historical Commission provided information about the tribal consultation process and recommendations for cultural resource assessments.

Greenhouse Gas Emissions

- The City is concerned about the project being consistent with the City's Climate Action Plan.

Growth Inducement

- The City is concerned with growth-inducing impacts of expanding water and sewer and moving the Urban Reserve Line.

Hydrology and Water Quality

- The County and City are concerned with groundwater use and potential groundwater contaminants.
- The County is concerned with flood hazards.

Noise

- A private landowner is concerned with increased noise.

Transportation

- The County, City, and private landowners are concerned with increased traffic in the area.
- The City is concerned with Vehicle Miles Traveled impacts.
- A private landowner is concerned with the impact of increased heavy equipment on the condition of surrounding roads.

Utilities

- The City is concerned with impacts related to the water and sewer demands, including volumes and infrastructure needed.

Permits and Regulations

- The City and Local Agency Formation Commission will need to approve annexation of the state-owned property to provide sewer and water services. In addition, the City will need to approve a change to the Urban Reserve Line.
- The County will review the Conditional Letter of Map Revision/Letter of Map Revision as the Floodplain Administrator.

Appendix C Agricultural Resources

Land Evaluation and Site Assessment (LESA) Model

The following tables and figure have been created using the instruction manual and worksheets of the Land Evaluation and Site Assessment Model made available on the California Department of Conservation website (https://www.conservation.ca.gov/dlrp/Pages/qh_lesa.aspx)

Land Evaluation Worksheet: Land Capability Classification and Storie Index Scores

A Soil Map Unit	B Acres	C Proportion of Project Area	D Land Capability Classification	E Land Capability Classification Rating	F Land Capability Classification Score	G Storie Index	H Storie Index Score
120	1.7	0.035	3e	70	2.4	40	1.4
129	31.6	0.642	3s	60	38.5	60	38.5
130	9.9	0.201	3e	70	14.1	60	12.1
143	2.9	0.059	6e	20	1.2	60	3.5
169	2.7	0.055	3w	60	3.3	80	4.4
216	0.4	0.008	3e	70	0.6	80	0.7
Totals	49.2	1.000	No value	**Land Capability Classification Total Score**	**60.1**	**Storie Index Total Score**	**60.6**

The Land Capability Classification Total Score is 60.1, and the Storie Index Total Score is 60.6.

Site Assessment Worksheet 1: Project Size Score

I Land Capability Classification Class I-II	J Land Capability Classification Class III	K Land Capability Classification Class IV-VIII
No value	1.7	No value
No value	31.6	No value
No value	9.9	No value
No value	No value	2.9
No value	2.7	No value
No value	0.4	No value
0 Total Acres Class I-II	46.3 Total Acres Class III	2.9 Total Acres Class IV-VIII
No value	60 Points for Project Size Score	No value

I Land Capability Classification Class I-II	J Land Capability Classification Class III	K Land Capability Classification Class IV-VIII
No value	**60 Points for Highest Project Size Score**	No value

The Highest Project Size Score is 60.

Site Assessment Worksheet 2: Water Resources Availability

A Project Portion	B Water Source	C Proportion of Project Area	D Water Availability Score	E Weighted Availability Score (C x D)
1	Groundwater only	1	25	**25**

The Total Water Resource Score is 25.

Site Assessment Worksheet 3: Surrounding Agricultural Land and Surrounding Protected Resource Land

A Total Acres	B Acres in Agriculture	C Acres of Protected Resource Land	D Percent in Agriculture	E Percent Protected Resource Land	F Surrounding Agricultural Land Score	G Surrounding Protected Resource Land Score
1352	720	250	50 to 54%	Greater than 40%	30	0

Final Land Evaluation Site Assessment Score Sheet

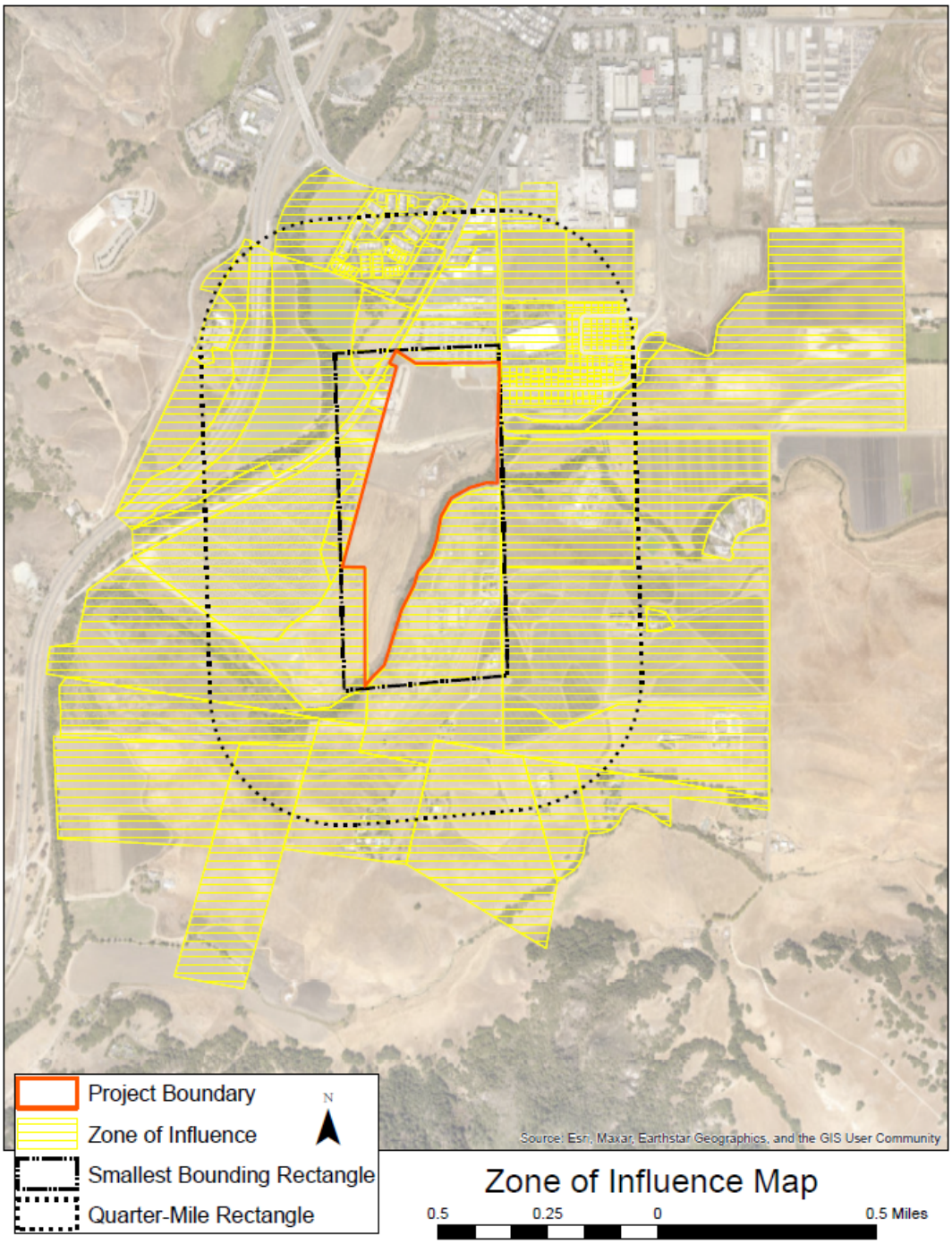
Scoring Factor	Factor Rating (0 to 100 points)	Factor Weighting (Total = 1.00)	Weighted Factor Score
Land Evaluation – 1 Land Capability Classification	60.1	0.25	15.025
Land Evaluation – 2 Storie Index Rating	60.6	0.25	15.15
Land Evaluation - Subtotal	Not applicable	Not applicable	**30.175**
Site Assessment -1 Project Size	60	0.15	9
Site Assessment -2 Water Resource Availability	25	0.15	3.75
Site Assessment -3 Surrounding Agricultural Lands	30	0.15	4.5
Site Assessment – 4 Protected Resource Lands	0	0.05	0
Site Assessment Subtotal	Not applicable	Not applicable	**17.25**
Total Land Evaluation and Site Assessment Score	Not applicable	Not applicable	**47.425**

The Land Evaluation subtotal score is 30.175, the Site Assessment subtotal score is 17.25, and the Final Land Evaluation and Site Assessment Score total is 47.425.

California Land Evaluation Site Assessment Model Scoring Thresholds

Total Land Evaluation Site Assessment Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if Land Evaluation or Site Assessment subscores are each greater than or equal to 20 points
60 to 79 points	Considered significant unless either Land Evaluation or Site Assessment subscore is less than 20 points
80 to 100 points	Considered significant

Zone of Influence Map



Appendix D Water and Wastewater Demand Estimates

Water demand and wastewater generation are estimated below using water duty factors from the 2020 City Engineering Standards.

Building/	*Office Square Feet*	*Office Wastewater Generation and Water Use (gallons per day) 54 gallons per day factor*	*Office Wastewater Generation and Water Use (gallons per day) 60 gallons per day factor*	*Equipment Storage Square Feet*	*Equipment Wastewater Generation and Water Use (gallons per day) 54 gallons per day factor*	*Equipment Wastewater Generation and Water Use (gallons per day) 60 gallons per day factor*	*Total (gallons per day) 54 gallons per day factor*	*Total (gallons per day) 60 gallons per day factor*	*Total (Acre Feet per year) 54 gallons per day factor*	*Total (Acre Feet per year) 60 gallons per day factor*
Regional Office Building	10500.0	567.0	630.0	N/A	N/A	N/A	567.0	630.0	0.6	0.7
Special Crews Building	8650.0	467.1	519.0	12750.0	688.5	765.0	1155.6	1284.0	1.3	1.4
Structure Crews Building	3250.0	175.5	195.0	3650.0	197.1	219.0	372.6	414.0	0.4	0.5
Road/Clean CA Crews Building	7250.0	391.5	435.0	4600.0	248.4	276.0	639.9	711.0	0.7	0.8
Warehouse Building	1800.0	97.2	108.0	12100.0	653.4	726.0	750.6	834.0	0.8	0.9
D5 Equipment Repair Shop	30000.0	1620.0	1800.0	35000.0	1890.0	2100.0	3510.0	3900.0	3.9	4.4
No value	No value	No value	No value	No value	No value	No value	**6995**	**7773**	**7.8**	**8.7**

Wastewater generation and water demand estimates range from 6,995 to 7,773 gallons per day or 7.8 to 8.7 acre-feet per year.

Irrigation Water Demand was estimated by Caltrans Landscape Architecture and is included below.

Landscape Area (square feet)	Landscape Area (acres)	Estimated Total Water Usage (gallons per year)	Estimated Total Water Usage (acre-feet per year
56,150	1.3	386,200	1.2

Irrigation water demand estimate is 386,200 gallons per year or 1.2 acre-feet per year.

Appendix E Biological Species Observed

Plant Species Observed During Surveys

Scientific Name	Common Name	Status
Acmispon strigosus	Strigose lotus	Native
Ambrosia psilostachya	Western ragweed	Native
Apium graveolens	Garden celery	Nonnative
Artemisia californica	California sage	Native
Artemisia douglasiana	California mugwort	Native
Avena barbata	Slim oat	Cal-IPC: Moderate
Avena fatua	Wild oat	Cal-IPC: Moderate
Baccharis pilularis	Coyote bush	Native
Brassica nigra	Black mustard	Cal-IPC: Moderate
Brassica rapa	Field mustard	Cal-IPC: Limited
Bromus diandrus	Ripgut brome	Cal-IPC: Moderate
Bromus hordeaceus	Soft chess	Cal-IPC: Limited
Bromus madritensis ssp. rubens	Red brome	Cal-IPC: High
Carduus pycnocephalus	Italian thistle	Cal-IPC: Moderate
Centaurea calcitrapa	Purple starthistle	Cal-IPC: Moderate
Centaurea melitensis	Tocalote	Cal-IPC: Moderate
Centaurea solstitialis	Yellow starthistle	Cal-IPC: High
Cichorium intybus	Chicory	Nonnative
Conium maculatum	Poison hemlock	Cal-IPC: Moderate
Convolvulus arvensis	Field bindweed	Nonnative
Cynara cardunculus	Artichoke thistle	Cal-IPC: Moderate
Cynodon dactylon	Bermuda grass	Cal-IPC: Moderate
Dipsacus fullonum	Wild teasel	Cal-IPC: Moderate
Epilobium brachycarpum	Annual willowherb	Native
Erigeron canadensis	Canada horseweed	Native
Erodium botrys	Big heron bill	Nonnative
Erodium cicutarium	Coastal heron's bill	Cal-IPC: Limited
Eschscholzia californica	California poppy	Native
Euphorbia peplus	Petty spurge	Nonnative
Festuca bromoides	Brome fescue	Nonnative
Festuca perennis	Italian ryegrass	Cal-IPC: Moderate

Scientific Name	Common Name	Status
Foeniculum vulgare	Sweet fennel	Cal-IPC: Moderate
Helminthotheca echioides	Bristly ox-tongue	Cal-IPC: Limited
Hesperocyparis macrocarpa	Monterey cypress	Native-Ornamental
Hirschfeldia incana	Short pod mustard	Cal-IPC: Moderate
Hordeum murinum	Foxtail barley	Cal-IPC: Moderate
Hypochaeris radicata	Hairy cat's ears	Cal-IPC: Moderate
Kickxia elatine	Sharp leaved fluellin	Nonnative
Lactuca saligna	Narrow leaved wild lettuce	Nonnative
Lactuca serriola	Prickly lettuce	Nonnative
Lysimachia arvensis	Scarlet pimpernel	Nonnative
Malva parviflora	Cheeseweed mallow	Nonnative
Marrubium vulgare	White horehound	Cal-IPC: Limited
Matricaria discoidea	Pineapple weed	Nonnative
Medicago polymorpha	California burclover	Cal-IPC: Limited
Melilotus albus	White sweetclover	Nonnative
Oxalis pes-caprae	Bermuda buttercup	Cal-IPC: Moderate
Phalaris paradoxa	Hood canarygrass	Nonnative
Plantago coronopus	Cutleaf plantain	Nonnative
Plantago lanceolata	English plantain	Cal-IPC: Limited
Polygonum aviculare ssp. depressum	Prostrate knotweed	Nonnative
Pseudognaphalium luteoalbum	Jersey cudweed	Nonnative
Raphanus sativus	Wild radish	Cal-IPC: Limited
Rumex crispus	Curly dock	Cal-IPC: Limited
Salix lasiandra	Pacific willow	Native
Salix lasiolepis	Arroyo willow	Native
Schoenoplectus acutus var. occidentalis	Hardstem bulrush	Native
Silybum marianum	Milk thistle	Cal-IPC: Limited
Sonchus asper	Spiny sowthistle	Nonnative
Stipa miliacea var. miliacea	Smilo grass	Cal-IPC: Limited
unknown grasses	N/A	N/A
Trifolium resupinatum	Persian clover	Nonnative
Urtica urens	Annual stinging nettle	Native
Washingtonia filifera	California fan palm	Native-Ornamental

Animal Species Observed During Surveys

Scientific Name	Common Name	Status
Agelaius phoeniceus	Red-winged blackbird	Resident
Aphelocoma californica	California scrub-jay	Resident
Branta canadensis	Canada goose	Migrant
Bubo virginianus	Great horned owl	Resident
Buteo lineatus	Red-shouldered hawk	Resident
Buteo jamaicensis	Red-tailed hawk	Resident
Cathartes aura	Turkey vulture	Resident
Corvus brachyrhynchos	American crow	Resident
Corynorhinus townsendii	Townsend's big-eared bat	Resident - SCC
Elanus leucurus	White-tailed kite	Seasonal - CFP
Elgaria multicarinata webbii	Woodland alligator lizard	Resident
Gambusia sp.	Mosquito fish	Nonnative
Haemorphous mexicanus	House finch	Resident
Hirundo rustica	Barn swallow	Resident
Lepus californicus	Black-tailed jackrabbit	Resident
Lithobates catesbeianus	American bullfrog	Nonnative
Melozone crissalis	California towhee	Resident
Neotoma sp.	Woodrat	Resident
Odocoileus virginianus	Black-tailed mule deer	Resident
Otospermophilus beecheyi	California ground squirrel	Resident
Pacifastacus leniusculus	Crayfish	Nonnative
Petrochelidon pyrrhonota	Cliff swallow	Migrant
Pseudacris cadaverina	California tree frog	Resident
Sayornis nigricans	Black phoebe	Resident
Sceloporus occidentalis	Western fence lizard	Resident
Streptopelia decaocto	Eurasian collared-dove	Nonnative
Sturnus vulgaris	European starling	Nonnative
Sylvilagus audubonii	Nuttall's cottontail	Resident
Thomomys bottae	Botta's pocket gopher	Resident
Tyto alba	Barn owl	Resident
Unknown	Rat/Mouse sp.	Resident
Zenaida macroura	Mourning dove	Resident

List of Technical Studies/Reports Bound Separately

Air Quality Analysis Report, August 2023

Noise Study Report, June 2023

Paleontological Identification Report/Paleontological Evaluation Report, August 2023

Preliminary Geotechnical Design Report, August 2023

Visual Impact Assessment, August 2023

Natural Environment Study, November 2023

Initial Site Assessment, January 2023

Supplementary Initial Site Assessment, September 2023

Water Quality Technical Memorandum, August 2023

Drainage Report, June 2023

Traffic Signal Warrant Memo, June 2023

VMT Screening Memo, June 2023

The following were also prepared for the project to document cultural resources; however, this information is confidential and not available to the public:

Historical Property Survey Report, July 2023

Supplemental Historical Property Survey Report, September 2023

Archaeological Survey Report and Extended Phase I Cultural Resource Inventory, May 2023

To obtain a copy of one or more of these technical studies/reports or the Draft EIR, please send your request to:

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