Draft Environmental Impact Report for the Proposed Froom Ranch Specific Plan Project

SCH No. 2017071033

November 2019

Prepared for:
City of San Luis Obispo
Community Services Department
919 Palm Street
San Luis Obispo, California 93401

Prepared by:
Wood Environment & Infrastructure Solutions, Inc.
104 West Anapamu Street, Suite 204A
San Luis Obispo, California 93101

STATE CLEARINGHOUSE NO. 2017071033

FROOM RANCH SPECIFIC PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

PREPARED FOR:

City of San Luis Obispo
Community Development Department
919 Palm Street
San Luis Obispo, California 93401

PREPARED BY:

Wood Environment & Infrastructure Solutions, Inc.
104 West Anapamu Street, Suite 204-A
Santa Barbara, CA 93101
Contact: Dan Gira
805.962.0992

November 2019

Wood Environment & Infrastructure Solutions, Inc.
Froom Ranch Specific Plan
Draft Environmental Impact Report. November 2019.
Prepared for the City of San Luis Obispo, San Luis Obispo, CA.

EXECUTIVE SUMMARY

ES-1 INTRODUCTION

JM Development Group, Inc. (Applicant) proposes the implementation of the Draft Froom Ranch Specific Plan (FSRP), including an amendment to the City's General Plan, pre-zoning, annexation to the City, and related actions to allow for the development of a 116.8 acre Project site with several offsite infrastructure improvements, which collectively comprise the Froom Ranch Specific Plan Project (Project). The Project is intended to implement the City of San Luis Obispo's (City's) vision for the Project site as guided by the City's 2014 Land Use Element (LUE) of the General Plan. The City's LUE specifically identifies the Project site as a Special Focus Area and requires preparation of a specific plan for this area to address key planning and environmental issues including: the designation of an appropriate land use mix, the need for a variety of housing types and levels of affordability, provision of both commercial and open space, an internal network of public and private roads, and the implementation of a complex stormwater management system. The Applicant proposes the adoption of the FSRP and related actions to permit a mix of residential uses (39.1 acres), open space and a public park (61.9 acres), and retail commercial uses (3.1 acres) within the approximately 109.7-acre Specific Plan area.

The proposed Project would allow for construction of up to 174 residential units and 404 senior independent living units as follows:

- 31.6 acres of R-3 SP medium-high density senior-living uses, with 366 independent-living units (700 to 2,000 sf lots), 38 assisted-living units (310 to 620 sf lots), and 51 beds for skilled nursing and memory care;
- 5.7 acres of R-3 SP medium-high density uses with 130 multi-family units on a minimum lots size of 1,000 sf;
- 1.8 acres of R-4 SP high density uses with 44 multi-family units on a minimum lot size of 1,000 sf;

The Project would also allow for up to 100,000 sf of commercial retail space, including approximately 70,000 sf of hotel use with up to 120 rooms and 30,000 sf of retail and restaurant uses. The Project would retain approximately 55 percent of the Project site as open space and include a 2.9-acre public park that connects to the existing trail network within the adjacent Irish Hills National Reserve. The Project would include an internal network of public and private roads with some bicycle and pedestrian access. The Project would also implement a complex stormwater management system, including realignment of Froom Ranch through the Specific Plan area, relocation and expansion of an existing

onsite stormwater detention basin immediately south of the Specific Plan area, and onsite water quality retention and treatment areas.

ES-2 PROJECT OVERVIEW

This Environmental Impact Report (EIR) evaluates the potential environmental impacts of the proposed Project in the City of San Luis Obispo (City), California. The City prepared this EIR with assistance from its environmental planning consultant, Wood Environment and Infrastructure Solutions, Inc (Wood). This EIR discloses the findings of the City regarding potential environmental impacts of adoption and implementation of the proposed Project. The Project site consists of two parcels (APNs 067-241-030 and 067-241-031) and 7.1 acres outside the Specific Plan area, totaling 116.8 acres. The site is currently unincorporated in San Luis Obispo County (County), but is located within the City's adopted Sphere of Influence immediately southwest of the City limits and adjacent to Los Osos Valley Road (LOVR) between Calle Joaquin and Irish Hills Plaza. The City's 2014 LUE designates the Specific Plan area (109.7 acres within the Project site) as a Special Focus Area (SP-3) for provision of residential and small-scale commercial uses, along with open space and/or agricultural uses. The SP-3 designation requires a specific plan to guide development and operation within the Specific Plan area following annexation to the City, per Section 8.1.6 of the LUE.

The Project site is primarily undeveloped and used for agriculture (horse grazing) and stormwater management but contains historic farming structures, a construction office, and a permitted, but inactive red rock quarry in the northwestern portion used for construction materials storage. Froom Creek traverses the Project site in a mostly north to south direction and joins San Luis Obispo Creek south of the Project site before flowing towards the Pacific Ocean.

ES-3 ENVIRONMENTAL IMPACT ANALYSIS

This EIR examines potential short- and long-term impacts of the Project. These impacts were determined through a rigorous process mandated by CEQA in which existing conditions are compared and contrasted with conditions that would exist once the project is implemented. For each impact topic, thresholds for determining impact significance are identified based on City and State CEQA Guidelines, along with descriptions of methodologies used for conducting the impact analysis. For some topics, such as air quality, traffic, and noise, the analyses of impacts are more quantitative in nature and involve the comparison of effects against a numerical threshold. For other topics, such as

land use/planning, the analyses of impacts are inherently more qualitative, involving the consideration of a variety of factors, such as adopted City policies.

The EIR impact discussions classify impact significance levels as:

1. **Significant and Unavoidable (Class I)** - a significant impact to the environment that remains significant even after mitigation measures are applied;
2. **Significant but Mitigable (Class II)** - a significant impact that can be avoided or reduced to a less than significant level with mitigation;
3. **Less Than Significant (Class III)-** a potential impact that would not meet or exceed the identified thresholds of significance for the resource area;
4. **No Impact (Class IV)** – no impact would occur for the resource area; and
5. **Beneficial (Class IV)** – a positive effect on the natural or human environment would occur.

Determinations of significance levels in the EIR are made based on impact significance criteria and applicable CEQA Guidelines for each resource area.

ES-4 NOTICE OF PREPARATION/SCOPING

The City prepared an Initial Study (IS) for the Project in July 2017, made publicly available through the Notice of Preparation (NOP) distribution process in July 2017. The IS found that the Project may have potentially significant impacts to the following resources: aesthetics, agriculture, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities (Appendix A). Pursuant to Section 21080(d) of the Public Resources Code and Section 15064(f)(1) of the CEQA Guidelines, if there is a fair argument supported by substantial evidence that a project may have a significant effect on the environment, the Lead Agency shall prepare an EIR, even when other substantial evidence has been presented that a project will not have a significant effect. Consequently, the City has determined that the preparation of an EIR would be required to analyze potential environmental impacts of the Project.

In compliance with the procedural requirements of CEQA, the City performed a public scoping process consistent with Section 15083 of the CEQA Guidelines. The public was provided an opportunity to comment on the scope of the EIR through a NOP released on

July 10, 2017, which was distributed to federal, state, regional, and City agencies, and neighborhood groups. The NOP comment period ran from July 10, 2017 through August 14, 2017, and a public hearing was held on July 26, 2017. During the NOP comment period, City received 12 comment letters. Comments received during the NOP comment period were considered during EIR preparation and are included in Appendix B.

ES-5 SUMMARY OF PROJECT IMPACTS

The significance of each impact resulting from implementation of the Project has been determined based on impact significance criteria and applicable CEQA Guidelines for each impact topic. Table ES-1 presents a summary of the impacts, mitigation measures, and residual impacts from implementation of the Project. In summary, the proposed Project would result in significant and unavoidable construction-related and long-term impacts to aesthetics, air quality, historic resources, biological resources, wildfire risks, and long-term transportation and traffic. The Project would also result in potential inconsistency with several City General Plan policies.

Aesthetics and Visual Resources

Project implementation would change views of scenic resources, including hillsides, rock outcrops, open space, and historic buildings as viewed from a State Scenic Highway and local scenic roadway. In addition, the Project would have significant and unavoidable impacts on the existing visual character of the site, which would be changed from a rural to a commercial and residential setting, especially as viewed from the Irish Hills Natural Reserve. Although the impacts to views from the Irish Hills cannot be fully attenuated, mitigation will include following the Landscape Screening Guidelines to provide effective screening of proposed structures as experienced from public views along LOVR and LOVR overpass.

Air Quality and Greenhouse Gas Emissions

In the long-term, the projected emissions for the Project were found to be above the established daily thresholds for operational emissions of ROG and NO_x, and projected increases in greenhouse gas emissions would result in inconsistencies with the local Clean Air Plan planning policies due to exceedance of projected population growth, vehicle trips, and vehicle miles traveled. Implementation of the Project and associate net increases in greenhouse gas emissions would also result in inconsistencies with adopted local and statewide policies for reducing greenhouse gas emissions. Implementation of mitigation measures would reduce impacts to the maximum degree possible for operational-related

air quality impacts; however, this impact would remain significant and unavoidable, even after mitigation.

Biological Resources

The Project would have significant and unavoidable impacts on sensitive habitats (riparian, wetland, and native grassland) identified under state and City policy. Substantial direct and indirect adverse impacts would occur to sensitive species, federally protected wetlands, and the movement of species along wildlife corridors. To mitigate these impacts, the Applicant shall prepare and implement a City-approved Biological Mitigation Plan (BMP) that identifies both construction and operational related mitigation measures for impacts to sensitive communities and species. The BMP shall also include a Habitat Mitigation and Monitoring Plan (HMMP) and address the movement of special-status species. Sensitive natural communities outside of approved development footprints shall be avoided. Chorro Creek Bog Thistle Management and the preparation of a Community Fire Protection Plan shall also occur. However, the Project would result in the direct and indirect loss or disturbance of sensitive species for which the avoidance, replacement, and/or mitigation is not considered feasible.

Land Use

Implementation of the Project that would allow development above the 150-foot elevation, and more specifically development within the environmentally sensitive Upper Terrace, would result in potentially significant and unavoidable impacts to aesthetic and visual resources, biological resources, and emergency access and fire hazards. After a review for consistency with City General Plan policies, this aspect of the Project would be potentially inconsistent with City LUCE and General Plan COSE policies that protect sensitive biological, open space, and visual resources include protections reflected in Policy 6.4.7, *Hillside Planning Areas*, which prohibits development above the 150-foot elevation within the Irish Hills area. Impacts are therefore significant and unavoidable.

Transportation and Traffic

Impacts to traffic and transportation upon implementation of the Project would consist of delays and/or exceedance of intersection capacities, resulting in poor levels of service for automobiles, pedestrians and bicycle modes of transportation. More specifically, Project generated traffic would cause exceedance of intersection capacities at various intersections not subject to the City's authority or requiring completion of the Prado Road Overpass/Interchange project. Although the Project would implement mitigation measures

and the Applicant would pay a fair share fee to offset Project contributions to this impact, as no County or Caltrans program for improvements is currently adopted, impacts would be significant and unavoidable.

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
3.1 Aesthetics and Visual Resources		
VIS-1. Project implementation would change views of scenic resources, including hillsides, rock outcroppings, open space, and historic buildings, from a State Scenic Highway or local scenic roadway.	***MM VIS-1*** *The Draft Froom Ranch Specific Plan shall be revised to include the following Landscape Screening Guidelines to provide effective screening of proposed structural massing as experienced from public views along LOVR and the LOVR Overpass. The Project landscape plan shall be prepared by a qualified landscape architect and include the following:* 1. *Maximize protection of existing vegetation along the Project site boundary to provide visual screening during Project construction and operation.* 2. *Specify a plant palette and landscape plan that ensure a vegetated site boundary of sufficient height and density to provide visual screening of the proposed development from public views.* 3. *Native tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures shall be planted along Project site boundaries visible from public views.* 4. *Screening planting specimen selection and location shall emphasize the ability to interrupt the contiguous massing of structures as experienced from area roadways and scenic vistas. Spacing shall be sufficient to minimize views of structures within the Project site.* 5. *Screening planting specimen selection shall emphasize the ability of planting species to effectively establish and thrive over the life of the Project, such that smaller sizes shall be considered rather than exclusively larger box sizes. Planting establishment rates shall be considered but shall not preclude the use of slower-growing species, such as coast valley oak and willows.* 6. *Native tree specimens capable of reaching or exceeding the heights of adjacent structures shall be planted adjacent to multi-family and commercial structures located within the interior of the Specific Plan area consistent with the specifications above.* 7. *A bond for screening landscaping and irrigation shall be provided to ensure establishment of plantings. The bond shall be revoked upon satisfactory establishment of screen planting vegetation according to the plan.* **Requirements and Timing.** The Specific Plan Landscape Screening Guidelines and landscape bond shall be reviewed and approved by the City Community Development Department prior to vesting tract map recordation. Landscape plantings, including irrigation, shall be in place prior to issuance	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	of building permits for each phase of the Project. A landscape architect approved by the City shall provide verification of landscaping establishment pursuant to the Screening Plan to the City's Community Development Department for review and approval prior to relinquishment of the bond. **Monitoring.** The City Community Development Department shall review and approve the Specific Plan Landscape Screening Guidelines. The Applicant shall ensure that all landscape planting and irrigation are in place and shall prepare a memo verifying condition compliance. The City Community Development Department shall review and approve the landscaping establishment bond letter.	
VIS-2. The Project would significantly impact the existing visual character of the site by changing a rural setting to a commercial and residential setting, particularly as viewed from the Irish Hills Natural Reserve trail system.	***MM VIS-1*** *The Draft Froom Ranch Specific Plan shall be revised to include the following Landscape Screening Guidelines to provide effective screening of proposed structural massing as experienced from public views along LOVR and the LOVR Overpass. The Project landscape plan shall be prepared by a qualified landscape architect and include the following:* *8. Maximize protection of existing vegetation along the Project site boundary to provide visual screening during Project construction and operation.* *9. Specify a plant palette and landscape plan that ensure a vegetated site boundary of sufficient height and density to provide visual screening of the proposed development from public views.* *10. Native tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures shall be planted along Project site boundaries visible from public views.* *11. Screening planting specimen selection and location shall emphasize the ability to interrupt the contiguous massing of structures as experienced from area roadways and scenic vistas. Spacing shall be sufficient to minimize views of structures within the Project site.* *12. Screening planting specimen selection shall emphasize the ability of planting species to effectively establish and thrive over the life of the Project, such that smaller sizes shall be considered rather than exclusively larger box sizes. Planting establishment rates shall be considered but shall not preclude the use of slower-growing species, such as coast valley oak and willows.* *13. Native tree specimens capable of reaching or exceeding the heights of adjacent structures shall be planted adjacent to multi-family and*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	commercial structures located within the interior of the Specific Plan area consistent with the specifications above. 14. *A bond for screening landscaping and irrigation shall be provided to ensure establishment of plantings. The bond shall be revoked upon satisfactory establishment of screen planting vegetation according to the plan.* **Requirements and Timing.** The Specific Plan Landscape Screening Guidelines and landscape bond shall be reviewed and approved by the City Community Development Department prior to vesting tract map recordation. Landscape plantings, including irrigation, shall be in place prior to issuance of building permits for each phase of the Project. A landscape architect approved by the City shall provide verification of landscaping establishment pursuant to the Screening Plan to the City's Community Development Department for review and approval prior to relinquishment of the bond. **Monitoring.** The City Community Development Department shall review and approve the Specific Plan Landscape Screening Guidelines. The Applicant shall ensure that all landscape planting and irrigation are in place and shall prepare a memo verifying condition compliance. The City Community Development Department shall review and approve the landscaping establishment bond letter.	
VIS-3. The Project would introduce a new source of nighttime light, impacting the quality of the nighttime sky and increasing ambient light.	None required.	Less than Significant
3.2 Agricultural Resources		
AG-1. The Project would convert onsite Farmland of Local Potential and prime soils if irrigated to non-agricultural uses.	None required.	Less than Significant
AG-2. Implementation of the Project would create potential conflicts with existing agricultural zoning.	None required.	Less than Significant
AG-3. The Project would adjust the boundary of an existing open space and agricultural conservation easement to a location that would reduce the viability of agricultural operations within the recorded easement.	None required.	Less than Significant

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
3.3 Air Quality and Greenhouse Gas Emissions		
AQ-1. The Project would result in potentially significant construction-related emissions, including dust and air pollutant emissions.	***MM AQ-1*** *A Construction Activity Management Plan (CAMP) shall be included as part of Project grading and building plans and shall be submitted to SLO County APCD and to the City for review and approval prior to the start of construction. The plan shall include but not be limited to the following elements:* *1. A Dust Control Management Plan that encompasses the following dust control measures:* • *Reduce the amount of disturbed area where possible;* • *Water trucks or sprinkler trucks shall be used during construction to keep all areas of vehicle movement damp enough to prevent dust from leaving the site and from exceeding the APCD's limit of 20 percent opacity for greater than 3 minutes in any 60-minute period. At a minimum, this would require twice-daily applications. Increased watering frequency would be required when wind speeds exceed 15 miles per hour (mph). Reclaimed water or the onsite water well (non-potable) shall be used when possible. The contractor or builder shall consider the use of a SLO County APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control;* • *All dirt stock-pile areas shall be sprayed daily as needed;* • *Permanent dust control measures identified in the approved Project revegetation and landscape plans of any development within the Specific Plan area should be implemented as soon as possible following completion of any soil disturbing activities;* • *Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;* • *All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by SLO County APCD;* • *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;*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;* • *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least 2 feet of freeboard in accordance with California Vehicle Code Section 23114;* • *Designate access points and require all employees, subconsultants, and others to use them. Install and operate a "track-out prevention device" where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can be any device or combination of devices that are effective at preventing track-out, located at the point of intersection of any unpaved area and a paved road. If utilized, rumble strips or steel plate devices shall be cleaned periodically. If paved roadways accumulate tracked-out soils, the track-out prevention device shall be modified or replaced to prevent track-out;* • *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;* • *All of these fugitive dust mitigation measures shall be shown on grading and building plans; and* • *The contractor or builder shall designate a person or persons to monitor the fugitive dust control 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 holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to SLO County APCD Compliance Division prior to the start of any grading, earthwork or demolition.* 2. *Implementation of the following BACT for diesel-fueled construction equipment. The BACT measures shall include:* • *Use of at least Tier 3 off-road equipment and 2010 on-road compliant engines;* • *Repowering equipment with the cleanest engines available; and* • *Installing California Verified Diesel Emission Control Strategies.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	3. *Implementation of the following standard air quality measures to minimize diesel emissions:* • *Maintain all construction equipment in proper tune according to manufacturer's specifications;* • *Fuel all off-road and portable diesel-powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).* • *Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines and comply with the State On-Road Regulation;* • *Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;* • *On- and off-road diesel equipment shall not be allowed to idle for more than five minutes. Signs shall be posted in the designated queuing areas to remind drivers and operators of the five-minute idling limit;* • *Diesel idling within 1,000 feet of sensitive receptors is not permitted;* • *Staging and queing areas shall not be loated within 1,000 feet of sensitive receptors;* • *Electrify equipment when feasible;* • *Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,* • *Use alternatively fueled construction equipment onsite where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.* 4. *Tabulation of on- and off-road construction equipment (age, horse-power, and miles and/or hours of operation);* 5. *Schedule construction truck trips during non-peak hours (as determined by the Public Works Director) to reduce peak hour emissions; and* 6. *Limit the length of the construction work-day period to 8 hours max.* **Plan Requirements and Timing.** The CAMP shall be submitted to SLO County APCD and to the City for review and approval prior to issuance of	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	grading and construction permits and recordation of the final VTM. All required fugitive dust and emissions control measures shall be noted on all grading and building plans and all construction activities shall adhere to measures throughout all grading, hauling, and construction activities. The contractor or builder shall provide the City Community Development Director and SLO County APCD with the name and contact information for an assigned onsite dust and emissions control monitor(s) who has the responsibility to: a) assure all dust control requirements are complied with including those covering weekends and holidays, b) order increased watering as necessary to prevent transport of dust offsite, and c) attend the pre-construction meeting. The dust monitor shall be designated prior to grading permit issuance for each Project phase. The dust control components apply from the beginning of any grading or construction throughout all development activities until occupancy is issued and landscaping is successfully installed. **Monitoring.** City staff shall ensure measures are depicted on the CAMP and all submitted grading and construction plans for each Project phase. The Applicant shall be responsible for compliance during construction activities, including holidays or weekends when work may not be in progress. City grading and building inspectors shall spot check and ensure compliance onsite. ***MM AQ-2*** *To reduce ROG and NO_x levels during the architectural coating phase, low or no Volatile Organic Compound (VOC)-emission paint shall be used with levels of 50 grams per liter (g/L) or less (Odorless, Zero VOC Paint). The schedule for architectural coatings application shall be extended, limiting the daily coating activity to a level determined acceptable by SLO County APCD.* **Plan Requirements and Timing.** The Applicant shall verify the measures through written documentation submitted to the City and SLO County APCD for review and approval. Measures shall be indicated on all building and construction plans and submitted to SLO County APCD and to the City for review and approval prior to issuance of building permits and recordation of the final VTM. **Monitoring.** City shall verify measures with the Applicant and SLO County APCD. City staff shall ensure measures are depicted on all building and construction plans. City building inspectors shall perform site inspections to ensure compliance.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	MM AQ-3 *An offsite mitigation strategy shall be developed and agreed upon by the Applicant, City, and SLO County APCD at least three months prior to the issuance of grading permits. Offsite mitigation strategies may be in the form of cash payment, circulation improvements above the Project's fair share, or funding for ongoing transit improvements. The Applicant shall provide appropriate funding necessary to offset the Project's residual construction-related ROG+NO_x emissions beyond SLO County APCD's daily threshold at least two months prior to the start of construction to help facilitate emission offsets that are as real-time as possible. Cash payment of offsite mitigation fees shall be calculated based on the most current ARB-approved Carl Moyer Guidelines at the time of commencement of each Project phase. Offsite mitigation strategies shall include one or more of the following:* • *Develop or improve park-and-ride lots;* • *Fund a program to buy and scrap older, higher emission passenger and heavy-duty vehicles;* • *Retrofit or repower heavy-duty construction equipment, or on-road vehicles;* • *Subsidize vanpool programs;* • *Contribute to funding of new bike lanes;* • *Replace/repower San Luis Obispo Regional Transit Authority (SLORTA) transit buses;* • *Purchase Verified Diesel Emission Control Strategies (VDECS) for transit buses or construction fleets; and* • *Fund expansion of existing SLORTA transit services.* **Plan Requirements and Timing.** The Applicant shall prepare and submit the offsite mitigation strategy to SLO County APCD for review and to the City for approval at least three months prior to the issuance of grading permits for Phase 1 construction. The Applicant shall provide any necessary funding to SLO County APCD at least two months prior to the start of construction. **Monitoring.** SLO County APCD and City staff shall ensure offsite mitigation measures are appropriate. If the Applicant elects to pay mitigation fees, SLO County APCD shall verify the receipt of funding to the City. If the Applicant elects to provide improvements, proposed improvements shall be approved by the City and SLO County APCD prior to implementation. City and SLO	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	County APCD staff shall monitor proposed improvements to ensure compliance.	
AQ-2. The Project would result in potentially significant long-term operational emissions.	***MM AQ-4*** *Consistent with standard mitigation measures set forth by SLO County APCD, Projects generating more than 50 lbs/day of combined ROG + NOx shall implement all feasible measures within Table 3-5 of the Air Quality Handbook. The following mitigation measures shall apply to the Project (Table 3.3-9).* **Requirements and Timing.** The Applicant shall include the mitigation measures in Table 3-5 of the 2012 SLO County APCD CEQA Air Quality Handbook (as amended by the 2017 Clarification Memorandum), as indicated in the column "How the Project Will Include This Measure" in Table 3.3-9, above. All feasible standard mitigation measures shall be included in the FRSP prior to approval of the final FRSP and these measures shall also be included on the final VTM prior to recordation. City staff shall ensure the above measures are incorporated into the FRSP, final VTM, and building plans prior to permit issuance. **Monitoring.** City staff shall ensure measures are listed on final plans submitted for review and approval by the City. City staff shall work with the Applicant to ensure that these strategies are implemented. The City shall conduct periodic site visits to ensure compliance, in consultation with the SLO County APCD.	Significant and Unavoidable
AQ-3. Release of toxic diesel emissions or naturally occurring asbestos during construction of the Project could expose sensitive receptors to emissions-related health risks.	None Required.	Less than Significant
AQ-4. The Project would be consistent with the City's Climate Action Plan, but would result in potentially significant GHG emissions during construction and operation which would be inconsistent with other state and local goals for reducing GHG emissions.	***MM AQ-5*** *The Applicant shall revise the Draft FRSP to include measures necessary to reduce Project operational stationary-source GHG emissions to achieve net zero emissions, consistent with the City's 2035 net-zero GHG emissions target. These measures shall include Best Available Mitigation strategies for reducing operational emissions, including but not limited to the following:* • *Electrical power for the entirety of Project operations including but not limited to illumination, heating, cooling, and ventilation shall be provided by alternative or carbon-free energy sources according to the following priority: 1) on-grid power with 100-percent renewable or carbon-free source (a planned product of Monterey Bay Community*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Power available to the City in 2020), or 2) a combination of grid power and on site renewable generation to achieve annual zero net electrical energy usage, or 3) purchase of carbon offsets of any portion of power not from renewable or carbon-free sources. As a first priority, carbon-free sourced energy shall be purchased from Monterey Bay Community Power. • *For new buildings, onsite solar photovoltaic systems shall be required, and retrofitted buildings shall be encouraged to install onsite solar photovoltaic systems to offset energy demand, regardless of building size.* • *All proposed commercial and health care facilities shall exceed the minimum standards of Title 24, Part 11 (Cal Green) by adopting all or some elements of Cal Green Tier 1 and 2 voluntary elective measures to increase energy efficiency in new buildings, remodels and additions. These measures shall prioritize upgrading lighting (e.g., using light-emitting diode [LED] lights), heating and cooling systems, appliances, equipment and control systems to be more energy efficient.* **Requirements and Timing.** The Applicant shall include the above measure in the Final FRSP prior to approval and shall include the above measure on the final VTM prior to recordation. Plans submitted for building permits shall incorporate Best Management Strategies, and for the selected Best Management Strategies, the Applicant shall work with City and SLO County APCD staff to calculate estimated stationary-source emissions to ensure achievement of net-zero stationary source operational emissions for the Project. City and SLO County APCD staff shall ensure the above measures are incorporated into the FRSP, final VTM, and building plans prior to permit issuance. **Monitoring.** City staff shall ensure measures are listed on final plans submitted for review and approval by the City. City and SLO County APCD staff shall work with the Applicant to ensure that these strategies are implemented. The City shall verify compliance in consultation with the SLO County APCD. ***MM AQ-6*** *The Applicant shall revise the FRSP to include measures necessary to reduce the Project's operational, mobile-source emissions, and VMT to the maximum extent feasible, including, but not limited to the following:* • *Rideshare and Employee Ridership Programs: The FRSP shall be amended to include measures for encouraging and incentivizing*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	residents and employees of the proposed development participate in the San Luis Obispo Regional Rideshare program. • *Senior Shuttle Service: Villaggio shall provide clean fuel shuttle services or coordinate with existing shuttle services such as Dial-A-Ride and the Senior Go! Shuttle to provide curb-to-curb shuttle service for residents of the Villaggio Life Community Plan.* • *All Electric Small Vehicles: The FRSP shall require all personal small vehicles (e.g., golf carts) be 100 percent electric powered.* • *Car Share: Provide car-sharing opportunities within the Villaggio Life Community Plan and Madonna Froom Ranch areas.* • *Promote Carpools, Vanpools, and Electric Vehicle (EV) Vehicles: Provide dedicated parking for carpools, vanpools, and high-efficiency vehicles in exceedance of Cal Green Tier 2 standards.* • *Offsite EV Improvements: Work with SLO County APCD to expand or fund the expansion of EV charging stations throughout the City.* **Requirements and Timing.** The Applicant shall include all feasible Best Management Strategies as part of the final FRSP and final VTM. For the selected Best Management Strategies, the Applicant shall work with City and SLO County APCD staff to calculate estimated mobile-source emissions to ensure emissions are reduced to the maximum extent feasible. City and SLO County APCD staff shall ensure the above measures are incorporated into the FRSP and final VTM prior to recordation. **Monitoring.** City staff shall ensure measures are listed on the final VTM submitted for review and approval by the City. City and SLO County APCD staff shall work with the Applicant to ensure that these strategies are implemented. The City shall verify compliance in consultation with the SLO County APCD.	
AQ-5. The Project is potentially inconsistent with the SLO County APCD's Clean Air Plan.	***MM AQ-2*** *To reduce ROG and NO_x levels during the architectural coating phase, low or no Volatile Organic Compound (VOC)-emission paint shall be used with levels of 50 grams per liter (g/L) or less (Odorless, Zero VOC Paint). The schedule for architectural coatings application shall be extended, limiting the daily coating activity to a level determined acceptable by SLO County APCD.* **Plan Requirements and Timing.** The Applicant shall verify the measures through written documentation submitted to the City and SLO County APCD for review and approval. Measures shall be indicated on all building and construction plans and submitted to SLO County APCD and to the City for	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	review and approval prior to issuance of building permits and recordation of the final VTM. **Monitoring.** City shall verify measures with the Applicant and SLO County APCD. City staff shall ensure measures are depicted on all building and construction plans. City building inspectors shall perform site inspections to ensure compliance. ***MM TRANS-5*** *The Project Applicant shall extend the westbound bike lane on Tank Farm Road approaching the South Higuera Street/Tank Farm Road intersection to the intersection and install a bike box to facilitate bicycle left-turn movements. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. If improvements are completed sooner by others, the Applicant may be responsible for a fair share contribution prior to issuance of building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-8*** *The Project Applicant shall design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes. Improvement extents shall occur in the northbound direction between Laguna Lane and Diablo Drive, and in the southbound direction between Diablo Drive and Madonna Road. Project is responsible for fair share contribution towards improvement costs.* **Plan Requirements and Timing**. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-9*** *The Project Applicant shall design and install ADA-compliant curb, gutter and sidewalk along the west side of LOVR to complete the sidewalk connection between the Irish Hills Plaza and Calle Joaquin. The Project Applicant shall also design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes in the northbound and southbound directions between Madonna Road and South Higuera Street. The Project is responsible for all costs related to construction of sidewalks, curb and gutter, and a fair share contribution towards Class IV bikeway improvements. This mitigation measure requires Caltrans approval and coordination for improvements near LOVR/U.S. 101 interchange.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Bikeway improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-10*** *The Project Applicant shall design and install a Class I Multi-Use Path parallel to Madonna Road between Oceanaire Drive and the U.S. 101 southbound ramps intersection. The Project is responsible for a fair share contribution towards improvements through payment of City Traffic Impact Fees.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If improvements are completed sooner by others, the Applicant shall make a fair share contribution through participation	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	in the Citywide Transportation Impact Fee program prior to issuance of building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.	
3.4 Biological Resources		
BIO-1. Project implementation would impact sensitive riparian, wetland, and native grassland habitats identified as sensitive natural communities under state and City policy.	***MM HAZ-2*** *In accordance with PRC Section 4291, the Applicant shall hire a City-qualified team that consists of appropriate specialists (i.e., fire management professionals, biologists) to prepare a Community Fire Protection Plan to design the creation and maintenance of required fire buffers and fuel management zones around developable areas and detail methods for achieving fire safety around new buildings while preserving the integrity and function of affected native plant communities to the maximum extent feasible, and that ensures that consistent fire fuel management practices are applied throughout the City. The Plan shall incorporate management strategies in coordination with adjacent property owners, including Mountainbrook Church and the Irish Hills Natural Reserve. The Plan shall outline the removal and control of invasive, non-native vegetation, and conservation of sensitive habitats and rare species, while developing fire fuel management practices that will discourage or prevent non-native grasses and other non-native invasive species from dominating surrounding areas. Landscaping shall be maintained by the Applicant and periodically inspected by the SLOFD during fire inspections in each of the fuel management zones to avoid the buildup of deadwood and leaf litter, which, if left to accumulate, would reduce the mitigating effect of the Plan. Specifically, the Plan shall include, but not be limited to, the following elements:* • *Vegetation coverage and type;* • *Setbacks between structures, sensitive wildlife species, and access routes;* • *Development plan landscaping and planting standards within the setback areas;* • *Native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place;* • *All allowable weed abatement techniques, qualifications, and requirements for weed abatement contractors, as well as measures and techniques that ensure the required fuel management and vegetation*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	clearance, shall be designed and implemented to provide adequate structure protection and avoid degradation of sensitive biological habitat; and • *Invasive species shall be removed and controlled.* **Plan Requirements and Timing.** Prior to approval of the final development plan, the Community Fire Protection Plan shall be prepared and submitted to the City Natural Resources Manager and SLOFD for review and approval, with coordination from the San Luis Obispo County Fire Department. The Plan shall be implemented consistent with the approved maintenance schedule. **Monitoring.** The City-qualified biologist shall submit a monitoring report to the City Natural Resources Manager and SLOFD at the end of the first year following Project occupancy documenting the fuel management activities that took place. Conformance with the Community Fire Protection Plan shall be demonstrated through the submittal of annual photo documentation by the Applicant or site visits as necessary at the discretion of the Compliance monitoring staff. ***MM BIO-1*** *The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:* *1) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:* *a) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.* *b) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	construction period for each phase of development. Fencing and signage shall be removed following completion of construction. *c) During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources.* *d) All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.* *e) All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.* *f) The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.* *g) Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.* *h) All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches shall be inspected at the beginning of each work day to ensure that no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work. *i) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation.* **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	MM BIO-2 *The Applicant shall retain a qualified Environmental Coordinator/qualified biologist, subject to review and approval by the City to oversee compliance with the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall monitor all construction activities, conduct a biological resources education program for all construction workers prior to the initiation of any clearing or construction activities, and provide quarterly reports to the City regarding construction activities, enforcement issues, and remedial measures. The Applicant's Environmental Coordinator shall be responsible for conducting inspections of the work area each work day to ensure that excavation areas and sensitive or restored habitats do not exhibit construction-related impacts or hazards to wildlife. If any exposure risk is identified, the Environmental Coordinator shall implement measures that could include, but not be limited to, hazing, fencing, and wildlife removals to eliminate the exposure risk.* *In addition, the Applicant's Environmental Coordinator shall monitor and regulate all construction occurring within 50 feet of the existing and proposed Froom Creek channel, other existing or proposed drainage features, riparian habitat, Drainages 1, 2, 3, and 4, and seasonal or permanent wetlands. During appropriate flowering, nesting, breeding, migration, and dispersal seasons, the Environmental Coordinator shall also conduct sensitive species surveys immediately prior to construction activities and shall monitor construction activities in the vicinity of habitats to be avoided.* *The work area boundaries and other off-limit areas shall be identified by the biologist and/or Environmental Coordinator on a daily basis. The biologist and/or Environmental Coordinator shall inspect construction and sediment control fencing each work day during construction activities. Any vegetation clearing activities shall be monitored by the biologist and/or Environmental Coordinator.* **Plan Requirements and Timing.** The City shall approve the Applicant's qualified Environmental Coordinator/qualified biologist prior to issuance of grading and building permits for each phase of construction. The Environmental Coordinator shall be present onsite to monitor construction activities pursuant to the approved Biological Mitigation and Monitoring Plan. **Monitoring.** The Environmental Coordinator shall monitor all grading and construction activities occurring within the vicinity of sensitive habitats or known location of sensitive species, shall conduct regular site inspections	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	throughout the entire site, and shall be responsible for compliance of the construction activities and the above BMPs within MM BIO-1 and MM BIO-3 through MM BIO-8. During construction, the Environmental Coordinator shall submit quarterly monitoring reports to the City to ensure compliance with the Biological Mitigation and Monitoring Plan and applicable laws, regulations, and policies. The Environmental Coordinator/qualified biologist shall be onsite during all construction activities which take place within 50 feet of sensitive creek, wetland, and riparian habitat areas. ***MM BIO-3*** *The Biological Mitigation and Monitoring Plan shall include a Habitat Mitigation and Monitoring Plan (HMMP) with details on timing and implementation of required habitat restoration, enhancement, or creation measures. The Biological Mitigation and Monitoring Plan and HMMP shall be prepared under the direction of, and approved by, the City's Natural Resources Manager in conjunction with regulatory agencies with permitting authority over the Project. The HMMP shall contain, at a minimum, the following components (or as otherwise modified by regulatory agency permitting conditions):* *a) Pre-construction surveys and delineation of vegetation communities, habitat, and wetland features, including clear maps and a summary of onsite habitats to be protected and acreage, design, and locations of required habitat mitigation sites.* *b) A description of the location and boundaries of the mitigation site and description of existing site conditions.* *c) A description of measures to be undertaken to enhance the mitigation site for the target species and to protect sensitive resources.* *d) Record necessary replacement of disturbed, altered, and/or lost area of habitat.* *e) A binding long-term agreement with the Applicant to implement and maintain protected and restored sensitive habitats, including native bunch grassland, wetlands, springs, seeps, tributary drainages, and other sensitive or restored native habitats. These measures shall identify typical performance and success criteria deemed acceptable by the City and CDFW based on measurable goals and objectives. Said criteria for restored habitats shall be, at a minimum, at least 70-percent survival of container plants and 70-percent relative cover by vegetation type.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	f) A description of habitat and species restoration and monitoring measures, including specific and objective performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. (At a minimum, success criteria shall be at least 70-percent survival of container plants and 70-percent relative cover by vegetation type and will include a replacement ratio of 2:1 and determination by a City-approved biologist that the mitigation site provides ecological functions and values for the focal species equal to or exceeding the impacted habitat.) *g) Plan requirements that ensure mitigation elements that do not meet performance or final success criteria within 5 years are completed through an extension of the plan for an additional 2 years or at the discretion of the City Natural Resources Manager with the goal of completing all mitigation requirements prior to the HMMP end date.* *h) Monitoring of the mitigation and maintenance areas shall occur for the period established in the HMMP, or until success criteria are met; an endowment may be required in some cases as determined by the City. If success criteria cannot be met through the HMMP, the City Natural Resources Manager shall specify appropriate commensurate measures (e.g., onsite or offsite restoration, endowment, or bond to the City for completion of necessary mitigation).* *i) A binding long-term agreement with the Villaggio Life Plan Community to fund and retain a qualified biologist to train all landscaping crew staff hired over the life of the development on sensitive plant species and habitat within the vicinity of the development, including the identification and avoidance of sensitive plants and habitat. The qualified biologist shall conduct annual monitoring of vegetation surrounding the development and prepare a report summarizing the avoidance or disturbance of sensitive resources from operational activities of the Villaggio development, and identifying necessary replacement or restoration of affected resources. Necessary mitigation shall be subject to the same standards for performance, monitoring, and success identified in subitems b through h, above. The report shall be submitted to the City annually for review and approval.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	j) A plan for fencing and/or signage around the Upper Terrace of the Villaggio development, prohibiting residents, guests, and employees from accessing and disturbing the surrounding sensitive resources. *k) Requirements for payment of annual fees to the City to fund City review and inspection of the site and Biological Mitigation and Monitoring Plan and HMMP requirements.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection. The Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring and inspection of restoration activities. ***MM BIO-4*** *The Biological Mitigation and Monitoring Plan shall require avoidance of sensitive natural communities outside approved development footprints such as the Nassella pulchra Herbaceous Alliance, Central Coast Arroyo Willow Scrub Community, Coastal and Central Valley Freshwater Marsh, and wetland areas to the maximum extent feasible. Mitigation for impacted sensitive natural communities that cannot be avoided shall be achieved through one or more of the following options, subject to City approval:* *a) Onsite restoration, enhancement, or creation of suitable replacement habitat, if feasible onsite restoration opportunities exist and at ratios consistent with those identified in MM BIO-5;* *b) Offsite restoration or creation of suitable habitat for the impacted species at the minimum replacement ratio of 2:1 for sensitive natural communities, native grasslands, and riparian habitat;* *c) Financial contribution to an in-lieu fee program that results in restoration or creation of suitable habitat for the impacted natural communities and/or species; and/or* *d) Purchase of mitigation credits at a USFWS- and/or CDFW-approved mitigation bank.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. All requirements shall be included in the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the BMMP and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Applicant's Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities pursuant to the approved Biological Mitigation and Monitoring Plan and HMMP. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt and review of monitoring reports, and site inspections. ***MM BIO-5*** *The Biological Mitigation and Monitoring Plan shall require all temporary and permanent impacts to wetlands, grasslands, and riparian habitat be mitigated, as follows:* *a) Temporary wetland, native grassland, and riparian habitat impacts shall be mitigated at a minimum 1:1 mitigation ratio (area of restored habitat to impacted habitat).* *b) Permanent impacts to sensitive natural communities, native grasslands, and riparian habitat shall be mitigated at a 2:1 ratio (area of restored and enhanced habitat to impacted habitat).* *c) Permanent direct impacts to wetlands shall be mitigated at a minimum 3:1 ratio unless otherwise directed by state and federal agencies, including but not limited to the CDFW, RWQCB, NMFS, and USFWS.* *d) Potential indirect impacts to the Calle Joaquin wetlands affected by the Froom Creek realignment and changes to site hydrology shall be mitigated at a minimum 2:1 ratio and require mitigation of at least 10.24 acres. For the purpose of this mitigation, the area of the Calle Joaquin wetlands potentially affected by the Project include those wetlands northwest of Calle Joaquin within the Specific Plan area and southeast of the proposed Froom Creek low-flow channel.* *e) Habitat revegetation or creation shall occur in the fall or winter no more than 1 year following habitat disturbance. Revegetation shall be monitored monthly for 7 years with a goal of at least 70-percent survival of container plants and 70-percent relative cover by vegetation type at the end of the 7-year period. Irrigation shall be provided during*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	this period or until otherwise determined necessary by the Applicant's Environmental Coordinator. *f) Riparian vegetation along Froom Creek shall be maintained in perpetuity to the satisfaction of the City by the Applicant or a City-approved designee. Froom Creek conditions shall be monitored annually following winter storm seasons to assess damage to riparian vegetation and need for maintenance restoration. Monitoring and maintenance of riparian vegetation conditions shall be conducted consistent with the requirements of the Habitat Mitigation and Monitoring Plan outlined in MM BIO-3.* **Plan Requirements and Timing.** All requirements shall be included in the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through receipt of monitoring reports and site inspections. ***MM BIO-6*** *The Biological Mitigation and Monitoring Plan shall detail timing and implementation of required habitat restoration and shall be submitted to the City's Natural Resources Manager for review and approval, including requirements for consultation with CDFW, NMFS, and USACE as needed. A copy of the final plan shall be submitted to the City for review and approval. The plan shall be implemented by the Project Applicant, under supervision by the City and the Applicant's Environmental Coordinator, and shall:* *a) Describe replacement of sensitive natural community habitats removed, lost, or adversely impacted by the Project, including a list of the soil, plants, and other materials that will be necessary for successful habitat restoration/ replacement, and a description of planting methods, location, spacing, erosion protection, and irrigation measures that will be needed. Restoration and habitat enhancement shall be limited to use of appropriate native species. Habitat*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	restoration or enhancement areas shall be designed to facilitate establishment of appropriate native plants such as willows, cottonwoods, bunchgrass, and rushes. *b) Habitat restoration or enhancement areas shall be established within the Project boundaries, adjacent to and contiguous with existing habitats to the maximum extent possible.* *c) Habitat restoration or enhancement sites shall be placed within existing or additional necessary deed-restricted area(s) and shall be maintained and monitored for a minimum of 7 years. If sufficient onsite mitigation area is not practicable, an offsite mitigation plan shall be prepared as part of the Biological Mitigation and Monitoring Plan and approved by permitting agencies.* *d) The Biological Mitigation and Monitoring Plan shall identify appropriate restoration and enhancement activities to compensate for impacts to creek, wetland, native bunch grass and riparian habitat, including a detailed planting plan and maintenance plans using locally obtained native species, and shall include habitat enhancement to support native wildlife and plant species.* *e) A weed management plan and weed identification list shall be included in the Biological Mitigation and Monitoring Plan.* *f) Habitat restoration or enhancement areas shall be maintained weekly for the first three years after Project completion and quarterly thereafter. Maintenance shall include replacement of unsuccessful planted specimens and eradication of noxious weeds found on California Department of Food and Agriculture (CDFA) Lists A and B. Noxious weeds on CDFA List C may be eradicated or otherwise managed.* *g) Quarterly and annual reports documenting site inspections and site recovery status shall be prepared and sent to the City and appropriate agencies.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	shall ensure compliance during habitat compensation and/or restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt of monitoring reports and site inspections. ***MM BIO-7*** *All utility lines proposed to be installed across the realigned Froom Creek from LOVR to the Project site shall be installed via horizontal directional drilling (HDD) to avoid impacts to sensitive habitats. Prior to installation of utility lines, a site-specific geotechnical investigation and frac-out clean-up plan shall be completed in areas proposed for HDD. The geotechnical investigation shall provide recommendations for avoidance of frac-outs and/or other HDD related impacts and to determine appropriate HDD methods (i.e., appropriate drilling mud mixtures for specific types of sediments). The investigation shall include results from at least three borings, a geologic cross-section, a discussion of drilling conditions, and frac-out clean-up plan. The frac-out clean-up plan shall identify methods for minimizing potential for frac-outs and addressing any necessary clean-up or remediation in case of a frac-out. The boring operation would be stopped immediately if a frac-out occurs and steps would be taken to contain and minimize the effects of any spill of drilling mud. The Applicant shall comply with all recommendations of the geotechnical investigation.* **Plan Requirements and Timing.** Geotechnical investigations shall be conducted, and a report of findings submitted to the City for approval. The findings shall be incorporated into the final Utilities Plan prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review the findings of the geotechnical investigations and final Utilities Plan and confirm compliance through review of grading and improvement plans. ***MM BIO-8*** *The Applicant shall submit a Froom Creek restoration plan that identifies measures for securing the proposed low-flow channel berm along the stretch of Froom Creek proposed adjacent to the Calle Joaquin wetlands to protect the bank from erosion and prevent migration of the Froom Creek channel into these wetlands. Measures for securing the bank may include a mix of natural and biotechnical measures capable of prevention erosion based on the anticipated erosive velocity of the creek under 100-year storm conditions.* **Plan Requirements and Timing.** The Applicant shall submit a Froom Creek restoration plan for review and approval by the City, which incorporates these	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	requirements in addition to all requirements identified by state and federal resource agencies. The proposed bank stabilization measures shall be depicted on final plans prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review the final plans, and shall inspect the Project site during construction to confirm installation of proposed stabilization measures.	
BIO-2. Project implementation would have substantial direct and indirect adverse impacts on candidate, sensitive, or special-status species that are known to or may occur on the Project site.	***MM HAZ-2*** *In accordance with PRC Section 4291, the Applicant shall hire a City-qualified team that consists of appropriate specialists (i.e., fire management professionals, biologists) to prepare a Community Fire Protection Plan to design the creation and maintenance of required fire buffers and fuel management zones around developable areas and detail methods for achieving fire safety around new buildings while preserving the integrity and function of affected native plant communities to the maximum extent feasible, and that ensures that consistent fire fuel management practices are applied throughout the City. The Plan shall incorporate management strategies in coordination with adjacent property owners, including Mountainbrook Church and the Irish Hills Natural Reserve. The Plan shall outline the removal and control of invasive, non-native vegetation, and conservation of sensitive habitats and rare species, while developing fire fuel management practices that will discourage or prevent non-native grasses and other non-native invasive species from dominating surrounding areas. Landscaping shall be maintained by the Applicant and periodically inspected by the SLOFD during fire inspections in each of the fuel management zones to avoid the buildup of deadwood and leaf litter, which, if left to accumulate, would reduce the mitigating effect of the Plan. Specifically, the Plan shall include, but not be limited to, the following elements:* • *Vegetation coverage and type;* • *Setbacks between structures, sensitive wildlife species, and access routes;* • *Development plan landscaping and planting standards within the setback areas;* • *Native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place;* • *All allowable weed abatement techniques, qualifications, and requirements for weed abatement contractors, as well as measures and techniques that ensure the required fuel management and vegetation*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	clearance, shall be designed and implemented to provide adequate structure protection and avoid degradation of sensitive biological habitat; and • *Invasive species shall be removed and controlled.* **Plan Requirements and Timing.** Prior to approval of the final development plan, the Community Fire Protection Plan shall be prepared and submitted to the City Natural Resources Manager and SLOFD for review and approval, with coordination from the San Luis Obispo County Fire Department. The Plan shall be implemented consistent with the approved maintenance schedule. **Monitoring.** The City-qualified biologist shall submit a monitoring report to the City Natural Resources Manager and SLOFD at the end of the first year following Project occupancy documenting the fuel management activities that took place. Conformance with the Community Fire Protection Plan shall be demonstrated through the submittal of annual photo documentation by the Applicant or site visits as necessary at the discretion of the Compliance monitoring staff. ***MM BIO-1*** *The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:* *1) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:* *a) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.* *b) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	construction period for each phase of development. Fencing and signage shall be removed following completion of construction. *c) During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources.* *d) All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.* *e) All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.* *f) The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.* *g) Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.* *h) All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches shall be inspected at the beginning of each work day to ensure that no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work. *i) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation.* **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	MM BIO-9 *Construction and grading of the realigned portion of Froom Creek, including planting of riparian vegetation, watering, and bank stabilization, shall be conducted prior to removal of the existing creek segment to ensure a habitat for special-status species within the creek is maintained through the Project site with no interruption during construction. Project phasing shall be adjusted as needed to accommodate this sequence of construction activities.* **Plan Requirements and Timing.** The Applicant shall demonstrate phasing and creek restoration within the final VTM, and the Biological Mitigation and Monitoring Plan. The Applicant shall submit the plan to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review the Biological Mitigation and Monitoring Plan, and final VTM for compliance. The Applicant's Environmental Coordinator shall monitor creek realignment activities to ensure compliance with this mitigation measure. ***MM BIO-10*** *Chorro Creek Bog Thistle Management. Prior to issuance of grading and building permits, the Applicant shall submit or fund a site survey for Chorro Creek bog thistle, and:* 1. *All individual locations of Chorro Creek bog thistle shall be mapped using GPS coordinates. No construction activities or disturbance shall occur within 50 feet of mapped Chorro Creek bog thistle. This setback shall be delineated and maintained with construction fencing and clear signage for the duration of grading and construction. If the site survey results identify Chorro Creek bog thistle that may be disturbed or lost from Project construction, the Project shall be redesigned to ensure a minimum 50 foot buffer from mapped Chorro Creek bog thistle occurrences.* 2. *Development adjacent to Drainages 1, 2, and 3 shall be set back a minimum of 50 feet from the top of the bank of these drainages and the edge of delineated associated wetlands.* 3. *Drainages 1, 2, and 3 and associated wetlands shall be fenced a minimum of 50 feet from the top of the bank or edge of delineated wetland. The Applicant shall ensure and demonstrate to the City through frequent reporting requirements approved by the City that these areas are managed and maintained in perpetuity to maintain wetland and Chorro Creek bog thistle habitat values.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities. ***MM BIO-11*** *The Biological Mitigation and Monitoring Plan shall address special-status wildlife species management. Grading and construction activities shall avoid the rainy season (typically October 15 to April 15) to the extent practicable, particularly within 50 feet of the existing and proposed Froom Creek channel, and other existing or proposed drainage features, riparian or wetland habitat, and any suitable nesting sites as determined by the City-approved biologist. Injury, mortality to, or significant disturbance of onsite sensitive species, including the California red-legged frog, south-central California coast steelhead, and white-tailed kite, shall be avoided. The plan shall include the following measures: pre-construction surveys; worker awareness; cessation of work in occupied areas if individuals are identified; relocation (if necessary) of frogs and steelhead from the work area by a professional biologist authorized by the USFWS and/or CDFW; and monitoring of construction activities within the vicinity of sensitive habitats by a qualified biologist during construction, consistent with MM BIO-2. Necessary permits shall be obtained from the state (CDFW) and federal (USACE and USFWS) regulatory agencies with jurisdiction and/or permitting authority over a portion of the Project. Any other sensitive species observed during the pre-construction surveys shall be relocated by the qualified biologist into the nearest suitable habitat outside the disturbance area as determined in consultation with the appropriate jurisdictional resource agency.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements in the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities. ***MM BIO-12*** *The Biological Mitigation and Monitoring Plan shall address the movement of special-status species, as follows:* *1. Migratory and Nesting Bird Management. Grading and construction activities shall avoid the breeding season (typically from February 15 to August 15) to the extent practicable, particularly within 50 feet of riparian or wetland habitat and mature trees. If Project activities must be conducted during this period and within the vicinity of riparian or wetland habitat and/or mature trees, pre-construction nesting bird surveys shall take place no more than one week prior to habitat disturbance associated with each phase; if active nests are located during these surveys, the following measures shall be implemented:* *a. Construction activities within 50 feet of active nests shall be restricted until chicks have fledged, unless the nest belongs to a raptor, in which case a 500-foot activity restriction buffer shall be observed.* *b. Construction shall be limited to daylight hours (7:00 AM to 7:00 PM or sunset, whichever is sooner).* *c. A pre-construction survey report shall be submitted to the City immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. If any sensitive species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedure for handling or avoidance of the specimen.* *d. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and the species involved. A report of findings and recommendations for bird protection shall be submitted to the City prior to vegetation removal. If sensitive*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedures for handling or avoidance of the specimen. 2. *Bat Colony Management. Prior to removal of any trees over 20 inches diameter-at-breast-height (DBH) or demolition/relocation of existing onsite structures, a survey shall be conducted by a City and CDFW-approved biologist to determine if any tree or structure proposed for removal, trimming, demolition, or relocation harbors sensitive bat species or maternal bat colonies. Maternal bat colonies shall not be disturbed, and grading and construction activities shall avoid the bat breeding season to the extent feasible. If disturbance of structures must occur during the bat breeding season, buildings must be inspected and deemed clear of bat colonies/roosts within 7 days of demolition and an appropriately trained and approved biologist must conduct a daily site-clearance during demolition. If bats are roosting in a structure or tree in the Project site during the daytime but are not part of an active maternity colony, then exclusion measures shall be utilized and must include one-way valves that allow bats to leave but are designed so that the bats may not re-enter the structure. For each occupied roost removed, one bat box shall be installed in similar habitat as determined by the Project biologist and shall have similar cavities or crevices to those which are removed, including access, ventilation, dimensions, height above ground, and thermal conditions. If a bat colony would be eliminated from the Project site, appropriate alternate bat habitat shall be installed within the Project site. To the extent practicable, alternate bat house installation shall occur near onsite drainages.* **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall include a management plan for migrating and nesting birds and bat colonies and shall be submitted for review and approval by the City prior to issuance of grading and construction permits and recordation of the final VTM. Construction shall be conducted between August 16 and February 14 unless pre-construction surveys are completed. Reports summarizing pre-construction species surveys (i.e., nesting, bat surveys, etc.) shall be submitted to the City within 10 days of survey completion. Construction work shall not commence until after the completion of surveys and City review of corresponding reports. Any required permits shall be obtained from	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	appropriate state and federal agencies prior to issuance of grading and construction permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that appropriate requirements have been included to address potential impacts to bird and bat species. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities.	
BIO-3. Project implementation would have a substantial adverse impact on state and federally protected wetlands.	***MM BIO-1*** *The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:* *1) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:* *a) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.* *b) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the construction period for each phase of development. Fencing and signage shall be removed following completion of construction.* *c) During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources.*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	d) All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB. *e) All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.* *f) The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.* *g) Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.* *h) All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches shall be inspected at the beginning of each work day to ensure that no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work.* *i) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. ***MM BIO-2*** *The Applicant shall retain a qualified Environmental Coordinator/qualified biologist, subject to review and approval by the City to oversee compliance with the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall monitor all construction activities, conduct a biological resources education program for all construction workers prior to the initiation of any clearing or construction activities, and provide quarterly reports to the City regarding construction activities, enforcement issues, and remedial measures. The Applicant's Environmental Coordinator shall be responsible for conducting inspections*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	of the work area each work day to ensure that excavation areas and sensitive or restored habitats do not exhibit construction-related impacts or hazards to wildlife. If any exposure risk is identified, the Environmental Coordinator shall implement measures that could include, but not be limited to, hazing, fencing, and wildlife removals to eliminate the exposure risk. *In addition, the Applicant's Environmental Coordinator shall monitor and regulate all construction occurring within 50 feet of the existing and proposed Froom Creek channel, other existing or proposed drainage features, riparian habitat, Drainages 1, 2, 3, and 4, and seasonal or permanent wetlands. During appropriate flowering, nesting, breeding, migration, and dispersal seasons, the Environmental Coordinator shall also conduct sensitive species surveys immediately prior to construction activities and shall monitor construction activities in the vicinity of habitats to be avoided.* *The work area boundaries and other off-limit areas shall be identified by the biologist and/or Environmental Coordinator on a daily basis. The biologist and/or Environmental Coordinator shall inspect construction and sediment control fencing each work day during construction activities. Any vegetation clearing activities shall be monitored by the biologist and/or Environmental Coordinator.* **Plan Requirements and Timing.** The City shall approve the Applicant's qualified Environmental Coordinator/qualified biologist prior to issuance of grading and building permits for each phase of construction. The Environmental Coordinator shall be present onsite to monitor construction activities pursuant to the approved Biological Mitigation and Monitoring Plan. **Monitoring.** The Environmental Coordinator shall monitor all grading and construction activities occurring within the vicinity of sensitive habitats or known location of sensitive species, shall conduct regular site inspections throughout the entire site, and shall be responsible for compliance of the construction activities and the above BMPs within MM BIO-1 and MM BIO-3 through MM BIO-8. During construction, the Environmental Coordinator shall submit quarterly monitoring reports to the City to ensure compliance with the Biological Mitigation and Monitoring Plan and applicable laws, regulations, and policies. The Environmental Coordinator/qualified biologist shall be onsite during all construction activities which take place within 50 feet of sensitive creek, wetland, and riparian habitat areas.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	MM BIO-4 *The Biological Mitigation and Monitoring Plan shall require avoidance of sensitive natural communities outside approved development footprints such as the Nassella pulchra Herbaceous Alliance, Central Coast Arroyo Willow Scrub Community, Coastal and Central Valley Freshwater Marsh, and wetland areas to the maximum extent feasible. Mitigation for impacted sensitive natural communities that cannot be avoided shall be achieved through one or more of the following options, subject to City approval:* *e) Onsite restoration, enhancement, or creation of suitable replacement habitat, if feasible onsite restoration opportunities exist and at ratios consistent with those identified in MM BIO-5;* *f) Offsite restoration or creation of suitable habitat for the impacted species at the minimum replacement ratio of 2:1 for sensitive natural communities, native grasslands, and riparian habitat;* *g) Financial contribution to an in-lieu fee program that results in restoration or creation of suitable habitat for the impacted natural communities and/or species; and/or* *h) Purchase of mitigation credits at a USFWS- and/or CDFW-approved mitigation bank.* **Plan Requirements and Timing.** All requirements shall be included in the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the BMMP and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Applicant's Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities pursuant to the approved Biological Mitigation and Monitoring Plan and HMMP. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt and review of monitoring reports, and site inspections. ***MM BIO-5*** *The Biological Mitigation and Monitoring Plan shall require all temporary and permanent impacts to wetlands, grasslands, and riparian habitat be mitigated, as follows:*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	g) Temporary wetland, native grassland, and riparian habitat impacts shall be mitigated at a minimum 1:1 mitigation ratio (area of restored habitat to impacted habitat). *h) Permanent impacts to sensitive natural communities, native grasslands, and riparian habitat shall be mitigated at a 2:1 ratio (area of restored and enhanced habitat to impacted habitat).* *i) Permanent direct impacts to wetlands shall be mitigated at a minimum 3:1 ratio unless otherwise directed by state and federal agencies, including but not limited to the CDFW, RWQCB, NMFS, and USFWS.* *j) Potential indirect impacts to the Calle Joaquin wetlands affected by the Froom Creek realignment and changes to site hydrology shall be mitigated at a minimum 2:1 ratio and require mitigation of at least 10.24 acres. For the purpose of this mitigation, the area of the Calle Joaquin wetlands potentially affected by the Project include those wetlands northwest of Calle Joaquin within the Specific Plan area and southeast of the proposed Froom Creek low-flow channel.* *k) Habitat revegetation or creation shall occur in the fall or winter no more than 1 year following habitat disturbance. Revegetation shall be monitored monthly for 7 years with a goal of at least 70-percent survival of container plants and 70-percent relative cover by vegetation type at the end of the 7-year period. Irrigation shall be provided during this period or until otherwise determined necessary by the Applicant's Environmental Coordinator.* *l) Riparian vegetation along Froom Creek shall be maintained in perpetuity to the satisfaction of the City by the Applicant or a City-approved designee. Froom Creek conditions shall be monitored annually following winter storm seasons to assess damage to riparian vegetation and need for maintenance restoration. Monitoring and maintenance of riparian vegetation conditions shall be conducted consistent with the requirements of the Habitat Mitigation and Monitoring Plan outlined in MM BIO-3.* **Plan Requirements and Timing.** All requirements shall be included in the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through receipt of monitoring reports and site inspections. ***MM BIO-6*** *The Biological Mitigation and Monitoring Plan shall detail timing and implementation of required habitat restoration and shall be submitted to the City's Natural Resources Manager for review and approval, including requirements for consultation with CDFW, NMFS, and USACE as needed. A copy of the final plan shall be submitted to the City for review and approval. The plan shall be implemented by the Project Applicant, under supervision by the City and the Applicant's Environmental Coordinator, and shall:* *a) Describe replacement of sensitive natural community habitats removed, lost, or adversely impacted by the Project, including a list of the soil, plants, and other materials that will be necessary for successful habitat restoration/ replacement, and a description of planting methods, location, spacing, erosion protection, and irrigation measures that will be needed. Restoration and habitat enhancement shall be limited to use of appropriate native species. Habitat restoration or enhancement areas shall be designed to facilitate establishment of appropriate native plants such as willows, cottonwoods, bunchgrass, and rushes.* *b) Habitat restoration or enhancement areas shall be established within the Project boundaries, adjacent to and contiguous with existing habitats to the maximum extent possible.* *c) Habitat restoration or enhancement sites shall be placed within existing or additional necessary deed-restricted area(s) and shall be maintained and monitored for a minimum of 7 years. If sufficient onsite mitigation area is not practicable, an offsite mitigation plan shall be prepared as part of the Biological Mitigation and Monitoring Plan and approved by permitting agencies.* *d) The Biological Mitigation and Monitoring Plan shall identify appropriate restoration and enhancement activities to compensate for impacts to creek, wetland, native bunch grass and riparian habitat, including a detailed planting plan and maintenance plans using locally*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	obtained native species, and shall include habitat enhancement to support native wildlife and plant species. *e) A weed management plan and weed identification list shall be included in the Biological Mitigation and Monitoring Plan.* *f) Habitat restoration or enhancement areas shall be maintained weekly for the first three years after Project completion and quarterly thereafter. Maintenance shall include replacement of unsuccessful planted specimens and eradication of noxious weeds found on California Department of Food and Agriculture (CDFA) Lists A and B. Noxious weeds on CDFA List C may be eradicated or otherwise managed.* *g) Quarterly and annual reports documenting site inspections and site recovery status shall be prepared and sent to the City and appropriate agencies.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt of monitoring reports and site inspections. ***MM BIO-7*** *All utility lines proposed to be installed across the realigned Froom Creek from LOVR to the Project site shall be installed via horizontal directional drilling (HDD) to avoid impacts to sensitive habitats. Prior to installation of utility lines, a site-specific geotechnical investigation and frac-out clean-up plan shall be completed in areas proposed for HDD. The geotechnical investigation shall provide recommendations for avoidance of frac-outs and/or other HDD related impacts and to determine appropriate HDD methods (i.e., appropriate drilling mud mixtures for specific types of sediments). The investigation shall include results from at least three borings, a geologic cross-section, a discussion of drilling conditions, and frac-out clean-up plan. The frac-out clean-up plan shall identify methods for minimizing potential for frac-outs and addressing any necessary clean-up or*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	remediation in case of a frac-out. The boring operation would be stopped immediately if a frac-out occurs and steps would be taken to contain and minimize the effects of any spill of drilling mud. The Applicant shall comply with all recommendations of the geotechnical investigation. **Plan Requirements and Timing.** Geotechnical investigations shall be conducted, and a report of findings submitted to the City for approval. The findings shall be incorporated into the final Utilities Plan prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review the findings of the geotechnical investigations and final Utilities Plan and confirm compliance through review of grading and improvement plans.	
BIO-4. Project construction and operation would have a substantial adverse impact on the movement of resident or migratory fish or wildlife species or resident and migratory wildlife corridors along Froom Creek, Drainages 1, 2, and 3 and across open grasslands on the Upper Terrace of the Project site.	***MM BIO-1*** *The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:* *1) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:* *a) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.* *b) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the construction period for each phase of development. Fencing and signage shall be removed following completion of construction.* *c) During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources. *d) All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.* *e) All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.* *f) The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.* *g) Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.* *h) All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches shall be inspected at the beginning of each work day to ensure that no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work.* *i) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation. **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. ***MM BIO-2*** *The Applicant shall retain a qualified Environmental Coordinator/qualified biologist, subject to review and approval by the City to oversee compliance with the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall monitor all construction activities, conduct a biological resources education program for all construction workers prior to the initiation of any clearing or construction*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	activities, and provide quarterly reports to the City regarding construction activities, enforcement issues, and remedial measures. The Applicant's Environmental Coordinator shall be responsible for conducting inspections of the work area each work day to ensure that excavation areas and sensitive or restored habitats do not exhibit construction-related impacts or hazards to wildlife. If any exposure risk is identified, the Environmental Coordinator shall implement measures that could include, but not be limited to, hazing, fencing, and wildlife removals to eliminate the exposure risk. *In addition, the Applicant's Environmental Coordinator shall monitor and regulate all construction occurring within 50 feet of the existing and proposed Froom Creek channel, other existing or proposed drainage features, riparian habitat, Drainages 1, 2, 3, and 4, and seasonal or permanent wetlands. During appropriate flowering, nesting, breeding, migration, and dispersal seasons, the Environmental Coordinator shall also conduct sensitive species surveys immediately prior to construction activities and shall monitor construction activities in the vicinity of habitats to be avoided.* *The work area boundaries and other off-limit areas shall be identified by the biologist and/or Environmental Coordinator on a daily basis. The biologist and/or Environmental Coordinator shall inspect construction and sediment control fencing each work day during construction activities. Any vegetation clearing activities shall be monitored by the biologist and/or Environmental Coordinator.* **Plan Requirements and Timing.** The City shall approve the Applicant's qualified Environmental Coordinator/qualified biologist prior to issuance of grading and building permits for each phase of construction. The Environmental Coordinator shall be present onsite to monitor construction activities pursuant to the approved Biological Mitigation and Monitoring Plan. **Monitoring.** The Environmental Coordinator shall monitor all grading and construction activities occurring within the vicinity of sensitive habitats or known location of sensitive species, shall conduct regular site inspections throughout the entire site, and shall be responsible for compliance of the construction activities and the above BMPs within MM BIO-1 and MM BIO-3 through MM BIO-8. During construction, the Environmental Coordinator shall submit quarterly monitoring reports to the City to ensure compliance with the Biological Mitigation and Monitoring Plan and applicable laws, regulations, and policies. The Environmental Coordinator/qualified biologist	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	shall be onsite during all construction activities which take place within 50 feet of sensitive creek, wetland, and riparian habitat areas. ***MM BIO-4*** *The Biological Mitigation and Monitoring Plan shall require avoidance of sensitive natural communities outside approved development footprints such as the Nassella pulchra Herbaceous Alliance, Central Coast Arroyo Willow Scrub Community, Coastal and Central Valley Freshwater Marsh, and wetland areas to the maximum extent feasible. Mitigation for impacted sensitive natural communities that cannot be avoided shall be achieved through one or more of the following options, subject to City approval:* *a) Onsite restoration, enhancement, or creation of suitable replacement habitat, if feasible onsite restoration opportunities exist and at ratios consistent with those identified in MM BIO-5;* *b) Offsite restoration or creation of suitable habitat for the impacted species at the minimum replacement ratio of 2:1 for sensitive natural communities, native grasslands, and riparian habitat;* *c) Financial contribution to an in-lieu fee program that results in restoration or creation of suitable habitat for the impacted natural communities and/or species; and/or* *d) Purchase of mitigation credits at a USFWS- and/or CDFW-approved mitigation bank.* **Plan Requirements and Timing.** All requirements shall be included in the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the BMMP and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Applicant's Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities pursuant to the approved Biological Mitigation and Monitoring Plan and HMMP. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt and review of monitoring reports, and site inspections. ***MM BIO-5*** *The Biological Mitigation and Monitoring Plan shall require all temporary and permanent impacts to wetlands, grasslands, and riparian habitat be mitigated, as follows:*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	a) Temporary wetland, native grassland, and riparian habitat impacts shall be mitigated at a minimum 1:1 mitigation ratio (area of restored habitat to impacted habitat). *b) Permanent impacts to sensitive natural communities, native grasslands, and riparian habitat shall be mitigated at a 2:1 ratio (area of restored and enhanced habitat to impacted habitat).* *c) Permanent direct impacts to wetlands shall be mitigated at a minimum 3:1 ratio unless otherwise directed by state and federal agencies, including but not limited to the CDFW, RWQCB, NMFS, and USFWS.* *d) Potential indirect impacts to the Calle Joaquin wetlands affected by the Froom Creek realignment and changes to site hydrology shall be mitigated at a minimum 2:1 ratio and require mitigation of at least 10.24 acres. For the purpose of this mitigation, the area of the Calle Joaquin wetlands potentially affected by the Project include those wetlands northwest of Calle Joaquin within the Specific Plan area and southeast of the proposed Froom Creek low-flow channel.* *e) Habitat revegetation or creation shall occur in the fall or winter no more than 1 year following habitat disturbance. Revegetation shall be monitored monthly for 7 years with a goal of at least 70-percent survival of container plants and 70-percent relative cover by vegetation type at the end of the 7-year period. Irrigation shall be provided during this period or until otherwise determined necessary by the Applicant's Environmental Coordinator.* *f) Riparian vegetation along Froom Creek shall be maintained in perpetuity to the satisfaction of the City by the Applicant or a City-approved designee. Froom Creek conditions shall be monitored annually following winter storm seasons to assess damage to riparian vegetation and need for maintenance restoration. Monitoring and maintenance of riparian vegetation conditions shall be conducted consistent with the requirements of the Habitat Mitigation and Monitoring Plan outlined in MM BIO-3.* **Plan Requirements and Timing.** All requirements shall be included in the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through receipt of monitoring reports and site inspections. ***MM BIO-6*** *The Biological Mitigation and Monitoring Plan shall detail timing and implementation of required habitat restoration and shall be submitted to the City's Natural Resources Manager for review and approval, including requirements for consultation with CDFW, NMFS, and USACE as needed. A copy of the final plan shall be submitted to the City for review and approval. The plan shall be implemented by the Project Applicant, under supervision by the City and the Applicant's Environmental Coordinator, and shall:* *a) Describe replacement of sensitive natural community habitats removed, lost, or adversely impacted by the Project, including a list of the soil, plants, and other materials that will be necessary for successful habitat restoration/ replacement, and a description of planting methods, location, spacing, erosion protection, and irrigation measures that will be needed. Restoration and habitat enhancement shall be limited to use of appropriate native species. Habitat restoration or enhancement areas shall be designed to facilitate establishment of appropriate native plants such as willows, cottonwoods, bunchgrass, and rushes.* *b) Habitat restoration or enhancement areas shall be established within the Project boundaries, adjacent to and contiguous with existing habitats to the maximum extent possible.* *c) Habitat restoration or enhancement sites shall be placed within existing or additional necessary deed-restricted area(s) and shall be maintained and monitored for a minimum of 7 years. If sufficient onsite mitigation area is not practicable, an offsite mitigation plan shall be prepared as part of the Biological Mitigation and Monitoring Plan and approved by permitting agencies.* *d) The Biological Mitigation and Monitoring Plan shall identify appropriate restoration and enhancement activities to compensate for impacts to creek, wetland, native bunch grass and riparian habitat, including a detailed planting plan and maintenance plans using locally*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	obtained native species, and shall include habitat enhancement to support native wildlife and plant species. *e) A weed management plan and weed identification list shall be included in the Biological Mitigation and Monitoring Plan.* *f) Habitat restoration or enhancement areas shall be maintained weekly for the first three years after Project completion and quarterly thereafter. Maintenance shall include replacement of unsuccessful planted specimens and eradication of noxious weeds found on California Department of Food and Agriculture (CDFA) Lists A and B. Noxious weeds on CDFA List C may be eradicated or otherwise managed.* *g) Quarterly and annual reports documenting site inspections and site recovery status shall be prepared and sent to the City and appropriate agencies.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt of monitoring reports and site inspections. ***MM BIO-9*** *Construction and grading of the realigned portion of Froom Creek, including planting of riparian vegetation, watering, and bank stabilization, shall be conducted prior to removal of the existing creek segment to ensure a habitat for special-status species within the creek is maintained through the Project site with no interruption during construction. Project phasing shall be adjusted as needed to accommodate this sequence of construction activities.* **Plan Requirements and Timing.** The Applicant shall demonstrate phasing and creek restoration within the final VTM, and the Biological Mitigation and Monitoring Plan. The Applicant shall submit the plan to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The City shall review the Biological Mitigation and Monitoring Plan, and final VTM for compliance. The Applicant's Environmental Coordinator shall monitor creek realignment activities to ensure compliance with this mitigation measure. ***MM BIO-11*** *The Biological Mitigation and Monitoring Plan shall address special-status wildlife species management. Grading and construction activities shall avoid the rainy season (typically October 15 to April 15) to the extent practicable, particularly within 50 feet of the existing and proposed Froom Creek channel, and other existing or proposed drainage features, riparian or wetland habitat, and any suitable nesting sites as determined by the City-approved biologist. Injury, mortality to, or significant disturbance of onsite sensitive species, including the California red-legged frog, south-central California coast steelhead, and white-tailed kite, shall be avoided. The plan shall include the following measures: pre-construction surveys; worker awareness; cessation of work in occupied areas if individuals are identified; relocation (if necessary) of frogs and steelhead from the work area by a professional biologist authorized by the USFWS and/or CDFW; and monitoring of construction activities within the vicinity of sensitive habitats by a qualified biologist during construction, consistent with MM BIO-2. Necessary permits shall be obtained from the state (CDFW) and federal (USACE and USFWS) regulatory agencies with jurisdiction and/or permitting authority over a portion of the Project. Any other sensitive species observed during the pre-construction surveys shall be relocated by the qualified biologist into the nearest suitable habitat outside the disturbance area as determined in consultation with the appropriate jurisdictional resource agency.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements in the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	MM BIO-12 *The Biological Mitigation and Monitoring Plan shall address the movement of special-status species, as follows:* *1. Migratory and Nesting Bird Management. Grading and construction activities shall avoid the breeding season (typically from February 15 to August 15) to the extent practicable, particularly within 50 feet of riparian or wetland habitat and mature trees. If Project activities must be conducted during this period and within the vicinity of riparian or wetland habitat and/or mature trees, pre-construction nesting bird surveys shall take place no more than one week prior to habitat disturbance associated with each phase; if active nests are located during these surveys, the following measures shall be implemented:* *a. Construction activities within 50 feet of active nests shall be restricted until chicks have fledged, unless the nest belongs to a raptor, in which case a 500-foot activity restriction buffer shall be observed.* *b. Construction shall be limited to daylight hours (7:00 AM to 7:00 PM or sunset, whichever is sooner).* *c. A pre-construction survey report shall be submitted to the City immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. If any sensitive species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedure for handling or avoidance of the specimen.* *d. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and the species involved. A report of findings and recommendations for bird protection shall be submitted to the City prior to vegetation removal. If sensitive species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedures for handling or avoidance of the specimen.* *2. Bat Colony Management. Prior to removal of any trees over 20 inches diameter-at-breast-height (DBH) or demolition/relocation of existing*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	onsite structures, a survey shall be conducted by a City and CDFW-approved biologist to determine if any tree or structure proposed for removal, trimming, demolition, or relocation harbors sensitive bat species or maternal bat colonies. Maternal bat colonies shall not be disturbed, and grading and construction activities shall avoid the bat breeding season to the extent feasible. If disturbance of structures must occur during the bat breeding season, buildings must be inspected and deemed clear of bat colonies/roosts within 7 days of demolition and an appropriately trained and approved biologist must conduct a daily site-clearance during demolition. If bats are roosting in a structure or tree in the Project site during the daytime but are not part of an active maternity colony, then exclusion measures shall be utilized and must include one-way valves that allow bats to leave but are designed so that the bats may not re-enter the structure. For each occupied roost removed, one bat box shall be installed in similar habitat as determined by the Project biologist and shall have similar cavities or crevices to those which are removed, including access, ventilation, dimensions, height above ground, and thermal conditions. If a bat colony would be eliminated from the Project site, appropriate alternate bat habitat shall be installed within the Project site. To the extent practicable, alternate bat house installation shall occur near onsite drainages. **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall include a management plan for migrating and nesting birds and bat colonies and shall be submitted for review and approval by the City prior to issuance of grading and construction permits and recordation of the final VTM. Construction shall be conducted between August 16 and February 14 unless pre-construction surveys are completed. Reports summarizing pre-construction species surveys (i.e., nesting, bat surveys, etc.) shall be submitted to the City within 10 days of survey completion. Construction work shall not commence until after the completion of surveys and City review of corresponding reports. Any required permits shall be obtained from appropriate state and federal agencies prior to issuance of grading and construction permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that appropriate requirements have been included to address potential impacts to bird and bat species. The City shall ensure compliance with requirements for the Biological Mitigation and	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities. ***MM BIO-13*** *The Applicant shall amend the FRSP to establish a 300-foot development buffer on the centerline of the confluence of Drainage 1, 2, and 3 and the realigned Froom Creek to maintain natural vegetation, ecological, hydrologic, and wildlife connectivity between the Irish Hills Natural Reserve and the Froom Creek corridor. The required buffer shall extend from the point at which the proposed realigned Froom Creek exits the Specific Plan area, upstream along the centerlines of Drainages 1, 2, and 3 for 600 linear feet. The Applicant shall relocate residential uses to areas outside of this buffer and should not exacerbate biological resource impacts in other areas of the site.* **Plan Requirements and Timing.** The above requirements shall be integrated into the Final FRSP and final VTM prior to recordation. City staff shall ensure the above measures are incorporated into building plans prior to issuance. **Monitoring.** The City shall ensure the above measure is incorporated into the Final FRSP prior to Project approval. ***MM BIO-14*** *Proposed roadway/pathway crossings over any drainage shall be designed to ensure adequate passage for wildlife, consistent with the design standards and guidelines of the Federal Highway Administration Wildlife Crossing Structure Handbook.* **Plan Requirements and Timing.** The above requirements shall be integrated into the Final FRSP. City staff shall ensure the above measures are incorporated into the improvement plans prior to approval. **Monitoring.** The City shall ensure the above measure is incorporated into the Final FRSP prior to Project approval.	
BIO-5. Project construction would result in the potential disturbance, trimming, or removal of up to 75 mature trees.	***MM BIO-15*** *Native Tree Protection. To ensure protection of native protected trees with respect to the tree trunk, canopy, and root zone, the Applicant shall hire a City-approved arborist or qualified biologist to conduct a daily, pre-construction survey of all activities occurring within the protected root zones of protected trees, and shall make recommendations for avoidance, and for any necessary remedial work to ensure the health and safety of trees that are encroached, and any measures necessary to reduce and/or remove potential safety hazards posed by any of these trees. Following construction, the health of affected trees shall be monitored by the arborist or qualified biologist for up to 5 years if necessary and as determined at the discretion of the City.*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Should Project activities result in the compromised health of native trees resulting from encroachment, the Applicant shall submit a native tree replacement planting program, prepared by a qualified biologist, arborist, or other resource specialist, which specifies replacement tree locations, tree or seedling size, planting specifications, and a monitoring program to ensure that the replacement planting program is successful, including performance standards for determining whether replacement trees are healthy and growing normally, and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines. Where the worsened health of a tree results in the loss of protected tree species, mitigation measures in the native tree replacement program shall include the planting of replacement trees on the Project site, if suitable area exists. Riparian trees 4 inches or greater measured at DBH shall be replaced in-kind at a minimum ratio of 3:1 (replaced: removed). Trees 24 inches or greater inches DBH shall be replaced in-kind at a minimum ratio of 10:1. Willows and cottonwoods may be planted from live stakes following guidelines provided in the California Salmonid Stream Habitat Restoration Manual for planting dormant cuttings and container stock (CDFW 2010). • *Tree replacement shall be conducted in accordance with a Natural Habitat Restoration and Enhancement Plan to be approved by the City's Natural Resources Manager.* • *The Natural Habitat Restoration and Enhancement Plan shall prioritize the planting of replacement trees on-site where feasible, but shall allow that replacement trees may be planted off-site with approval of the City's Natural Resources Manager.* • *Replacement trees may be planted in the fall or winter of the year in which trees were removed. All replacement trees will be planted no more than 1 year following the date upon which the native trees were removed.* *Where onsite mitigation through planting replacement trees is not feasible, mitigation shall be provided by one of the following methods:* • *Off-site mitigation shall be provided by planting no less than 10:1, at a suitable site that is restricted from development or is public parkland. The Applicant shall plant seedlings – less than 1-year old – in an area providing suitable habitat. In the case of oak trees, the seedlings shall be grown from acorns collected in the area; or*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *An in-lieu fee shall be provided for the unavoidable impacts of the loss of native tree habitat. The fee shall be based on the type, size and age of the tree(s) removed.* **Plan Requirements and Timing.** All requirements shall be included on final grading plans. The qualified biologist shall monitor for the health of trees during and following construction activities, for a period of up to 5 years if determined necessary by the City. **Monitoring.** The qualified biologist shall monitor all construction activities, and if necessary, periodically monitor the placement and planting program. City staff shall monitor for the health of affected individuals to determine compliance and potential need for further mitigation.	
3.5 Cultural and Tribal Resources Impacts		
CR-1. Project grading and construction would occur within areas of prehistoric archaeological sensitivity with the potential to impact subsurface cultural or tribal cultural resources.	***MM CR-1*** *A Phase 2 – Subsurface Archaeological Resource Evaluation (SARE) investigation shall be conducted prior to any grading or development proposed within 200 feet of the recorded P-40-000783 and P-40-001195 sites, or the unrecorded site comprising three mapped stone isolates, to evaluate the potential for unknown buried resources within these "archaeologically sensitive" areas, including but not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites, consistent with City Archeological Resource Preservation Program Guidelines. If discovery of unknown buried archaeological resources occurs through the SARE, a City-approved archaeologist shall evaluate the significance of the discovery pursuant to City Archaeological Resource Preservation Program Guidelines and CEQA. If the discovery is found to be a significant cultural resource, Project design shall be modified to avoid modification, disturbance, or destruction of the archeological resource. If the Phase 2 SARE investigations do not discover unknown buried archaeological resources but conclude there is a possibility that cultural resources exist within the archaeologically sensitive areas that were evaluated, the Community Development Department Director shall require that the Applicant retain a City-approved archaeologist and local Native American observer to monitor construction activities to identify and protect archaeological resources in accordance with the Archaeological Monitoring Plan described in MM CR-3.*	Less than Significant with Mitigation.

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. Any required Phase 2 SARE investigations shall be conducted by a City-approved archaeologist prior to approval of the VTM or Project entitlements. **Monitoring.** The City shall ensure the Phase 2 SARE investigations are completed by a City-approved archaeologist and consistent with City Archeological Resource Preservation Program Guidelines. Any potential modifications to the Project design shall be reviewed and approved by the City prior to approval of any subdivision map or other entitlement. ***MM CR-2*** *If any ground disturbing activities are proposed within 100 feet of the recorded sites P-40-000783, P-40-0011195, or the unrecorded site comprising three mapped stone isolates, on preparation of construction plans, the plans shall delineate a 50-foot buffer surrounding the boundaries of the recorded sites. The area shall be labeled as an "Environmentally Sensitive Area". Highly visible temporary construction fencing shall be installed along the boundary of the 50-foot buffer and shall remain in place until the archaeological monitor recommends removal. If feasible, no ground disturbance, construction worker foot traffic, storage of materials, or storage or use of equipment shall occur within the "Environmentally Sensitive Area". Archaeological monitoring shall occur during all construction activities occurring within 50 feet of the delineated boundary. Upon completion of archaeological monitoring, an archaeological monitoring report shall be prepared and submitted to the City Community Development Department and the Central Coast Information Center at the University of California Santa Barbara.* **Plan Requirements and Timing.** Prior to recordation of the final VTM and issuance of grading permits, plans shall incorporate the delineation of the "Environmentally Sensitive Area" and associated protection measures. **Monitoring.** The City shall verity that required elements are shown on the final VTM and grading permits. Compliance shall be verified pursuant to the approved Archaeological Monitoring Plan. ***MM CR-3*** *Prior to issuance of grading or building permits, and recordation of the final map, an Archaeological Monitoring Plan (AMP) shall be prepared. The AMP should include, but not be limited to, the following:* • *A list of personnel involved in the monitoring activities;* • *Description of Native American involvement;* • *Description of how the monitoring shall occur;*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Description of location and frequency of monitoring (e.g., full time, part time, spot checking);* • *Description of what resources are expected to be encountered;* • *Description of circumstances that would result in the halting of work at the project site;* • *Description of procedures for halting work on the site and notification procedures;* • *Description of monitoring reporting procedures; and* • *Provide specific, detailed protocols for what to do in the event of the discovery of human remains.* **Plan Requirements and Timing.** The AMP shall be prepared by a City-approved archaeologist prior to issuance of grading or building permits and recordation of the final map. **Monitoring.** The City shall ensure the AMP is prepared by a City-approved archaeologist and consistent with City Archeological Resource Preservation Program Guidelines. ***MM CR-4*** *The Applicant shall retain a City-approved archaeologist and local Native American observer to monitor Project-related ground-disturbing activities that have the potential to encounter previously unidentified archaeological resources, as outlined in the AMP prepared to satisfy MM CR-1. Archaeological and tribal monitoring may cease only if the City-approved archaeologist determines in coordination with the Applicant, Community Development Director, and the Native American monitor that Project activities do not have the potential to encounter and/or disturb unknown resources.* **Plan Requirements and Timing.** The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with a qualified archaeologist and Native American monitor. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards, consistent with the City's Archeological Resource Preservation Guidelines. **Monitoring.** City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and Project archaeologist	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery. ***MM CR-5*** *In the event of any inadvertent discovery of prehistoric archaeological resources, including but not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or historic-period archaeological resources, all work within 100 feet of the discovery shall immediately cease (or greater or lesser distance as needed to protect the discovery and determined in the field by the City-approved archaeologist). The Applicant and/or contractor shall immediately notify the City Community Development Department. The City-approved archaeologist shall evaluate the significance of the discovery pursuant to City Archaeological Resource Preservation Program Guidelines prior to resuming any activities that could impact the site/discovery. If the City-approved archaeologist or Native American monitor determine that the find may qualify for listing in the CRHR or as a tribal cultural resource, the site shall be avoided or shall be subject to a Phase II or III mitigation program consistent with City Archeological Resource Preservation Program Guidelines and funded by the Applicant. Work shall not resume until authorization is received from the City.* **Plan Requirements and Timing.** The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with identified Project archaeologist and Native American monitor. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards, consistent with the Archeological Resource Preservation Program Guidelines. **Monitoring.** City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery. ***MM CR-6*** *Prior to construction of each phase, workers shall receive education regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources, during construction. Such training shall provide construction personnel with direction regarding the procedures to be followed in the unlikely event that previously unidentified archaeological materials,*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	including Native American burials, are discovered during construction. Training shall also inform construction personnel that unauthorized collection or disturbance of artifacts or other cultural materials is not allowed. The training shall be prepared by a City-approved archaeologist and shall provide a description of the cultural resources that may be encountered in the Project site, specify areas of known sensitivity, outline steps to follow in the event that a discovery is made, and provide contact information for the City-approved archaeologist, Native American monitor, and appropriate City personnel. The training shall be conducted concurrent with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to archaeological resources is provided by a qualified instructor meeting applicable professional standards. **Plan Requirements and Timing.** Prior to ground disturbance for each phase, construction workers shall participate in an educational program that will enable them to recognize and report possible buried cultural remains and protect all cultural resources, including prehistoric and historic resources. The educational program shall be outlined within the Archaeological Monitoring Plan and submitted to the City for approval prior to issuance of grading permits for each phase. **Monitoring.** The City-approved archaeologist shall verify the training has been completed by all construction workers and shall ensure construction workers follow cultural resource discovery protocols. ***MM CR-7*** *If human remains are exposed during construction, the City Community Development Department shall be notified immediately. The Applicant and City shall comply with State Health and Safety Code Section 7050.5, which states that no further disturbance shall occur until the County Coroner has been notified and can make the necessary findings as to origin and disposition of the remains pursuant to PRC Section 5097.98. Construction shall halt around the discovery of human remains, the area shall be protected, and consultation and treatment shall occur as prescribed by law.* **Plan Requirements and Timing.** The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans and reflected in the AMP. **Monitoring.** City permit compliance staff shall confirm monitoring by the City-approved archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and City-	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	approved archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery.	
CR-2. Future resident recreational activities could impact archaeological resources located within proposed open space.	***MM CR-8*** *No designated recreational areas, facilities, pedestrian paths, or roadways shall be located with 50 feet of a known prehistoric or tribal cultural resource site. All archaeological site soils within 100 feet of a known prehistoric or tribal cultural site shall be seeded with shallow rooted vegetation unless existing natural vegetation (i.e., existing grasslands) can screen the cultural resource from view.* **Plan Requirements and Timing.** The Draft FRSP shall be amended to incorporate these measures as they apply to P-40-000783 or P-40-001195 and the unrecorded site, prior to adoption of the Final FRSP. **Monitoring.** A City-qualified archaeologist shall review and approve the established buffer between Project development and known cultural resource sites and review vegetation seeding covering the archaeological site boundaries prior to issuance of occupancy.	Less than Significant with Mitigation.
CR-3. The Project would result in relocation, demolition, disturbance, and/or removal of historic resources onsite, including individually eligible historic resources and a historic district.	***MM CR-9*** *The Applicant shall retain a qualified professional historic architect meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61) to review and comment on design and construction drawings and monitor construction to ensure conformance with the Secretary of the Interior's Standards. The role of the historic architect shall include collaboration on a range of items relating to materials selection, construction methods, design of exterior and interior alterations, and monitoring of construction activities. The historic architect and Applicant shall resolve any unforeseen circumstance in a manner that conforms with the Secretary of the Interior's Standards.* *a) The qualified professional historic architect shall work with the Applicant team to ensure:* *b) Deteriorated historic features would be repaired to the greatest extent feasible. Where features are deteriorated beyond repair, they would be replaced to exactly match the old.* *c) All character-defining features are retained.* *d) Physical treatments to historic material would use the gentlest means possible and would not damage material.* *e) Reconstruction would be clearly identified as a contemporary re-creation.* *f) Interpretative signage would clearly provide information regarding the history of the buildings and their reconstruction.*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings; the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication. **Plan Requirements and Timing.** The historic architect shall submit a report documenting conformance with the Secretary of the Interior's Standards to the City for review and approval prior to issuance of any building permits for the Project. Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings; the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication. The historic architect shall notify the Applicant if any unforeseen circumstance arises during construction that could potentially result in nonconformance with the Secretary of the Interior's Standards. **Monitoring.** The City shall ensure the report is reviewed and approved prior to issuance of grading permits for Phase 3. The historic architect shall participate in a pre-construction meeting with the general contractor and subcontractors and periodically monitor construction to completion of construction. ***MM CR-10*** *The Applicant shall retain a qualified professional photographer to prepare Historic American Building Survey (HABS) Level II documentation. This documentation shall record the existing appearance of all seven contributing buildings in large and medium format HABS photographs. All documentation components shall be completed in accordance with the Guidelines for Architectural and Engineering Documentation (HABS standards). The photographs shall consist primarily of large format, 4-inch by 5-inch, black and white negatives (one set), contact prints (one set) and 8-inch by 10-inch prints (two sets), archivally processed and printed on fiber-based paper. The set of original negatives shall be made at the time the photographs are taken. The original, archivally-sound negatives and prints shall be and distributed as follows: (1) the Library of Congress in Washington, DC through the National Park Service (one set of negatives and contact prints).*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. The draft documentation shall be assembled and submitted to the qualified professional historic architect and the City for review and approval prior to submittal to the repository. The HABS documentation shall be completed prior to the issuance of grading permits for Phase 1. **Monitoring.** A digital copy of the HABS documentation shall be reviewed by the City and approved prior to the issuance of grading permits. ***MM CR-11*** *The Applicant shall work with the City to develop an interpretive project that documents the potential historic district and its cultural and architectural heritage by means of a pamphlet. This pamphlet will highlight the former Froom Ranch Dairy, both primary and secondary contributors, in a social (Froom family) and industrial (dairy industry) context, with an emphasis on how these buildings were used on the dairy farm, and how this property relates to the larger dairy farm context in San Luis Obispo, the Central Coast, and California. Five hundred copies of the pamphlet shall be published. These professionally researched, written and printed materials shall be offered at no cost through the local museums and heritage organizations, and at the trailhead park. After the initial distribution of printed brochures, digital copies shall be available. Throughout the park, interpretive signs that provide information on building history and function (extant and demolished) shall also be incorporated.* **Plan Requirements and Timing.** The Applicant shall prepare and submit draft documentation to the City and Cultural Heritage Committee (CHC) for review and approval prior to the issuance of grading permits for Phase 3. **Monitoring.** The pamphlet and interpretive signage shall be reviewed by the CHC and approved by the Community Development Director. The Parks and Recreation Commission shall review any interpretive signage proposed to be located within the park. The City Community Development Department shall ensure park designs incorporate interpretive signage consistent with approved documentation. ***MM CR-12*** *The Applicant shall reuse original material to the greatest extent feasible in the proposed work on the contributing structures to be relocated and/or reconstructed within the proposed public park (main residence, dairy barn, creamery/house, and granary). The Applicant and historic architect shall work with the City to prepare a marketing plan to offer to the public any salvaged historic materials not used during rehabilitation and reconstruction of the primary contributors, and demolition of the secondary contributors. As*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	appropriate, unused or unretained historic materials will be offered to local historical societies and museums, then offered to architectural recycling before being disposed. **Plan Requirements and Timing.** The Applicant shall prepare and submit draft documentation to the City for review and approval by the Community Development Director prior to the issuance of grading permits for Phase 3. **Monitoring.** The marketing plan shall be reviewed and approved by the Community Development Director. ***MM CR-13*** *The Applicant and historic architect shall prepare design guidelines and a review process for new construction proximate to the main residence. New construction shall be undertaken in such a manner that the essential form and integrity of the main residence and its setting would be unimpaired. The design guidelines and review by City Community Development Director shall ensure new construction is compatible with main residence in material, features, size, scale and proportion, and massing.* **Plan Requirements and Timing.** The Applicant shall prepare and submit draft design guidelines to the City and CHC for review and approval prior to approval of entitlements and the issuance of grading permits for Phase 1. **Monitoring.** The design guidelines shall be reviewed by the CHC and approved by the Community Development Director. ***MM CR-14*** *Prior to commencement of Phase 1 construction, a City-approved qualified structural engineer and historical architect shall survey the existing foundations and other structural aspects of the main residence, creamery, dairy barn, and granary, and develop a preservation plan to protect the historic buildings from potential damage during construction activities.* *The qualified structural engineer shall identify any necessary temporary structural bracing for the historic structures to avoid damage to these resources during the duration of construction. The qualified structural engineer shall prepare a temporary historic structure stabilization plan identifying these techniques as necessary.* **Plan Requirements and Timing.** The Applicant shall submit the preservation plan and temporary historic structure stabilization plan to the City for review and approval prior to recordation of the final map and issuance of grading and building permits for Phase 1 of construction. Prior to the issuance of Phase 4 building and grading permits, the Applicant shall submit the final Historic Structures Plan and temporary historic structure stabilization	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	plan, with incorporation of any additional recommendations for repair, to the City for review and approval. **Monitoring.** The City engineer shall review and approve the preservation plan prior to recordation of the final map and issuance of grading permits for Phase 1. The City-approved structural engineer shall periodically monitor vibration during vibration-causing construction activities to ensure excessive vibration does not occur and that temporary historic structure stabilization plan strategies are effective at avoiding vibration damage. The structural engineer shall halt construction activity if he/she deems construction activity may harm historical resources and shall modify or augment the temporary historic structure stabilization plan strategies accordingly.	
3.6 Geology and Soils		
GEO-1. The Project would expose people or structures to adverse effects from earthquakes and seismically induced hazards.	None required	Less than Significant
GEO-2. The Project has the potential to exacerbate potential soils hazards, including expansive soils, differential settlement, and subsidence.	None required	Less than Significant
GEO-3. The Project would potentially cause erosion, landslides, and rockfall.	None required	Less than Significant
GEO-4. The Project would include subterranean parking in Villaggio and may require groundwater dewatering in areas with high groundwater.	None required	Less than Significant
GEO-5. Project construction could uncover paleontological resources in geologic deposits during earthwork activities. If improperly handled, such resources could be adversely impacted.	***MM GEO-1*** *Prior to construction of each phase, workers shall receive education regarding the recognition of possible paleontological resources, during grading and excavation. Such training shall provide construction personnel with direction regarding the procedures to be followed in the unlikely event that previously unidentified paleontological materials are discovered during construction. Training shall also inform construction personnel that unauthorized collection or disturbance of paleontological resources is not allowed. The training shall be prepared by a City-approved paleontologist and shall provide a description of paleontological resources that may be encountered in the Project site, outline steps to follow in the event that a discovery is made, and provide contact information for the Project*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	paleontologist and appropriate City personnel. The training shall be conducted concurrent with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to paleontological resources is provided by a qualified instructor meeting applicable professional qualifications standards. In order to prevent inadvertent potential significant impacts to paleontological resources that may be encountered during ground disturbance or construction activities, in the event of any inadvertent discovery of paleontological resources during construction, all work within the vicinity of the resource established by the City-approved paleontologist shall temporarily cease. If a paleontological resource is discovered, the City-approved paleontologist shall be notified to assess the significance of the find and provide recommendations as necessary for its proper disposition. **Plan Requirements and Timing.** Prior to ground disturbance for each phase, construction workers shall participate in an educational program that will enable them to recognize and report possible paleontological resources. The conditions for treatment of discoveries shall be printed on all grading plans. The City shall be notified immediately after the unanticipated discovery of a paleontological resource. Paleontological reports shall be reviewed and approved prior to issuance of occupancy. In the event that any potentially significant paleontological resources are uncovered during ground disturbance or construction activities: a) Temporarily cease grading in the vicinity of the resource established by the City-approved paleontologist and redirect activity elsewhere to ensure the preservation of the resource in which the discovery was made; b) Immediately notify the City of San Luis Obispo Community Development Department regarding the resource and redirected grading activity; c) Obtain the services of a City-approved professional paleontologist who shall assess the significance of the find and provide recommendations as necessary for its proper disposition for review and approval by City of San Luis Obispo Community Development Department. d) Complete all significance assessment and mitigation of impacts to the paleontological resource and verification reviewed and approved by City of San Luis Obispo Community Development Department prior to resuming grading in the area of the find.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. Paleontological reports prepared for the Project site in response to an unanticipated discovery shall be maintained by the City of San Luis Obispo Community Development Department.	
3.7 Hazards, Hazardous Materials, and Wildfire		
HAZ-1. The Project would exacerbate wildfire risks, thereby exposing occupants to wildfire hazards, and impair emergency response, and would require wildfire fuel management in the Irish Hills Natural Reserve.	***MM HAZ-1*** *The Applicant shall prepare and submit a Construction Impact Management Plan to the City of San Luis Obispo Fire Department (SLOFD) prior to the issuance of grading permits. The Plan shall list measures taken during construction to reduce the potential for brush or grass fires from use of heavy equipment, welding, vehicles with catalytic converters, and other potential activities. The Plan shall include SLOFD recommended measures including, but not limited to the following:* • *All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle;* • *In coordination with SLOFD, personnel shall be briefed on the dangers of wildfire and be able to respond accordingly should the need arise;* • *Onsite supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire;* • *All dead and decadent vegetation immediately surrounding the development area shall be removed to a minimum perimeter of 30 feet;* • *Smoking shall only occur in a designated area;* • *A water tender will be available on each construction site during the entire phase of construction; and* • *A water tender operator shall be available onsite during all construction and remain onsite a minimum of 30 minutes after all construction has finished for the day.* **Plan Requirements and Timing.** The Applicant shall prepare a Construction Impact Management Plan in coordination with SLOFD, the San Luis Obispo County Fire Department, and the City, and submit the Plan to the SLOFD for approval prior to the issuance of grading permits. Provisions for fire protection shall be restated on all grading and building plans. Fire protection measures shall be implemented throughout construction and draw upon the CALFIRE and San Luis Obispo County Fire Department Strategic Fire Plan. The name and telephone number of an onsite supervisor shall be provided to SLOFD prior to commencement of construction or grading activities.	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The SLOFD shall review the Construction Impact Management Plan and provide recommended measures as necessary. The City permit processing planner shall ensure measures are integrated into the final grading and building plans prior to permit approval. City monitoring staff shall spot check for compliance during construction for each phase of development. ***MM HAZ-2*** *In accordance with PRC Section 4291, the Applicant shall hire a City-qualified team that consists of appropriate specialists (i.e., fire management professionals, biologists) to prepare a Community Fire Protection Plan to design the creation and maintenance of required fire buffers and fuel management zones around developable areas and detail methods for achieving fire safety around new buildings while preserving the integrity and function of affected native plant communities to the maximum extent feasible, and that ensures that consistent fire fuel management practices are applied throughout the City. The Plan shall incorporate management strategies in coordination with adjacent property owners, including Mountainbrook Church and the Irish Hills Natural Reserve. The Plan shall outline the removal and control of invasive, non-native vegetation, and conservation of sensitive habitats and rare species, while developing fire fuel management practices that will discourage or prevent non-native grasses and other non-native invasive species from dominating surrounding areas. Landscaping shall be maintained by the Applicant and periodically inspected by the SLOFD during fire inspections in each of the fuel management zones to avoid the buildup of deadwood and leaf litter, which, if left to accumulate, would reduce the mitigating effect of the Plan. Specifically, the Plan shall include, but not be limited to, the following elements:* • *Vegetation coverage and type;* • *Setbacks between structures, sensitive wildlife species, and access routes;* • *Development plan landscaping and planting standards within the setback areas;* • *Native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place;* • *All allowable weed abatement techniques, qualifications, and requirements for weed abatement contractors, as well as measures and techniques that ensure the required fuel management and vegetation clearance, shall be designed and implemented to provide adequate*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	structure protection and avoid degradation of sensitive biological habitat; and • *Invasive species shall be removed and controlled.* **Plan Requirements and Timing.** Prior to approval of the final development plan, the Community Fire Protection Plan shall be prepared and submitted to the City Natural Resources Manager and SLOFD for review and approval, with coordination from the San Luis Obispo County Fire Department. The Plan shall be implemented consistent with the approved maintenance schedule. **Monitoring.** The City-qualified biologist shall submit a monitoring report to the City Natural Resources Manager and SLOFD at the end of the first year following Project occupancy documenting the fuel management activities that took place. Conformance with the Community Fire Protection Plan shall be demonstrated through the submittal of annual photo documentation by the Applicant or site visits as necessary at the discretion of the Compliance monitoring staff. ***MM HAZ-3*** *The Froom Ranch Specific Plan (FRSP) shall designate smoking areas, located away from onsite fire hazards areas and within acceptable locations consistent with Chapter 8.16, Smoking Prohibition and Secondhand Smoke Control, of the City Municipal Code. Otherwise, smoking shall be prohibited onsite. The Applicant shall amend the FRSP to include policies to requiring the allowed use of fire resistant landscaping and hardscaping in areas to reduce mulch/gorilla hair, which is the receptive embers, if determined appropriate by SLOFD.* **Plan Requirements and Timing.** Prior to adoption of the Final FRSP, the Applicant shall amend the Final FRSP to include these policies. The Applicant shall coordinate with SLOFD to identify appropriate locations for designated smoking areas and appropriate fire resistant landscaping and hardscaping features within the Project site. **Monitoring.** The Final FRSP shall be reviewed by the SLOFD and City for inclusion of the above measure. ***MM HAZ-4*** *The Applicant shall prepare and implement an Evacuation Plan, which shall address both Villaggio and Madonna Froom Ranch areas. The Evacuation Plan shall be subject to review by the City and SLOFD, and shall include, but not be limited to:* • *Accommodation for assisted living and special care individuals;* • *Shelter-in-place accommodations;*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Specified quantity and capacity of vehicles required to accommodate residents and employees of Villaggio, and maintenance of those vehicles;* • *Signage that clearly indicates evacuation routes and meeting areas;* • *Specified egress points for transportation vehicles;* • *A relocation plan from the Project site to a secondary facility, with associated transportation;* • *Contingency plans for changes to the construction schedule or phasing plan that would affect the primary evacuation plan and routes;* • *Periodic updates that would consider potential redevelopment activities or other roadway alterations; and* • *Regular practice drills (e.g., one per year) for implementation of the Evacuation Plan.* **Plan Requirements and Timing.** The above Evacuation Plan shall be prepared in coordination with the SLOFD and the San Luis Obispo County Fire Department and submitted for approval to the City and SLOFD prior to adoption of the Final VTTM. The Applicant shall resubmit the Plan to the City and SLOFD prior to the construction of each phase of development. Prior to occupancy of the first residential unit, the Applicant shall implement measures within the Evacuation Plan. **Monitoring.** The City and SLOFD shall review the Evacuation Plan and ensure all recommendations are incorporated. The City Fire Marshall shall inspect the Project site for compliance prior to the occupancy of the first residential unit for each phase. ***MM HAZ-5*** *The Froom Ranch Specific Plan (FRSP) shall designate fire access routes in at least two locations from the Project site to the Irish Hills Natural Reserve on at least 12-foot wide paths, one extending from Villaggio and one from Madonna Froom Ranch. Fire access routes shall be designed to allow emergency response to wildland area in the Irish Hills to support direct access for firefighting personnel and equipment.* **Plan Requirements and Timing.** Prior to adoption of the Final FRSP, the Applicant shall amend the Final FRSP to include the required accessway, in coordination with SLOFD to identify appropriate locations within the Project site. **Monitoring.** The Final FRSP shall be reviewed by the SLOFD and City for inclusion of the above measure.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
HAZ-2. The Project would potentially expose persons to toxic, hazardous, or otherwise harmful chemicals through accidental conditions involving the release of hazardous materials into the environment.	None Required.	Less than Significant
HAZ-3. The Project site is located within the ALUP Safety Areas and would potentially result in an airport-related safety hazard for people residing or working in the Project site.	None Required.	Less than Significant
3.8 Hydrology and Water Quality		
HYD-1. Project construction activities would result in impacts to water quality due to polluted runoff and increased erosion or siltation.	***MM HYD-1*** *Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.* **Plan Requirements and Timing.** The NOI shall be submitted for review and approval to the SWRCB. The City will verify that a Waste Discharge Identification (WDID) number is assigned by the Board prior to the issuance of grading permits for construction activities. The NOI shall address discharge during all phases of development of the site until all disturbed areas are permanently stabilized. **Monitoring.** The City will confirm WDID number assignment prior to approval of the grading permit(s). City monitoring staff will periodically inspect the site during construction to ensure compliance. ***MM HYD-2*** *For each phase of construction, the Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of 1 acre, or where the area of disturbance is less than 1 acre but is part of the Project's plan of development that in total disturbs 1 or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to stormwater and shall include specific BMPs to control the discharge of material from the site, including, but not limited to:*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Temporary detention basins, straw bales, sand bagging, mulching, erosion control blankets, silt fencing, and soil stabilizers shall be used.* • *Sufficient physical protection and pollution prevention measures to prevent sedimentation, siltation, and/or debris from entering the Calle Joaquin wetlands.* • *Soil stockpiles and graded slopes shall be covered after 14 days of inactivity and 24 hours prior to and during inclement weather conditions.* • *Fiber rolls shall be placed along the top of exposed slopes and at the toes of graded areas to reduce surface soil movement, as necessary.* • *A routine monitoring plan shall be implemented to ensure success of all onsite erosion and sedimentation control measures.* • *Dust control measures shall be implemented to ensure success of all onsite activities to control fugitive dust.* • *Streets surrounding the Project site shall be cleaned daily or as necessary.* • *BMPs shall be strictly followed to prevent spills and discharges of pollutants onsite (material and container storage, proper trash disposal, construction entrances, etc.).* • *Sandbags, or other equivalent techniques, shall be utilized along graded areas to prevent siltation transport to the surrounding areas.* • *Additional BMPs shall be implemented for any fuel storage or fuel handling that could occur onsite during construction. The SWPPP must be prepared in accordance with the guidelines adopted by the SWRCB. The SWPPP shall be submitted to the City along with grading/development plans for review and approval. The Applicant shall file a Notice of Completion for construction of the development, identifying that pollution sources were controlled during the construction of the Project and implementing a closure SWPPP for the site.* **Plan Requirements and Timing.** The Applicant shall prepare a SWPPP that includes the above and any additional required BMPs addressing each phase of construction and timing. The SWPPP and notices shall be submitted to the SWRCB under their Stormwater Multi-Application, Reporting, and Tracking System (SMARTS). The SWPPP shall be designed to address erosion and sediment control during all phases of development of the site until all	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	disturbed areas are permanently stabilized. The development plans submitted to the City shall include and reflect the erosion control plan and BMPs submitted to the State. **Monitoring.** City monitoring staff shall periodically inspect the site for compliance with the SWPPP during grading to monitor runoff and after conclusion of grading activities. A Qualified SWPPP Practitioner (QSP) will be retained by the developer for overall management and reporting responsibility regarding the SWPPP and documentation under SMARTS in accordance with their permitting requirement. The Applicant will keep a copy of the SWPPP on the Project site during grading and construction activities. ***MM HYD-3*** *Installation of the stormwater management system shall occur during the dry season (May through October), including realignment and restoration of Froom Creek, installation of hydrological connections for the stormwater detention basin, construction of onsite retention basins, and the installation of the Home Depot and LOVR ditches. Stormwater management system features shall be fully installed and restored to ensure soil stabilization and adequate stormwater conveyance capacity prior to the storm season (October through April).* **Plan Requirements and Timing.** The Applicant shall demonstrate compliance within grading and construction phasing plans subject to City review and approval prior to issuance of grading permits for each Project phase. **Monitoring.** The City shall review grading and construction plans for all phases to ensure compliance. City grading monitors shall spot check for compliance.	
HYD-2. The Project would potentially exacerbate flooding and erosion hazards onsite and in areas downstream, particularly related to the proposed realignment and design of Froom Creek and developed areas of the site.	***MM HYD-4*** *The Applicant shall submit final Froom Creek Realignment plans and supporting technical studies that provide a refined bio-engineering approach to ensure creek bank and channel bottom stability and avoidance or reduction of further erosion. Final creek design plans and a supporting engineering study shall address appropriate boulder sizes and bank protection measures necessary to prevent dislodgement or remobilization of in-channel or toe-slope protection rock. Natural methods (e.g., additional rock) shall be employed as needed to maintain the proposed creek alignment and downslope bank location between the channel and LOVR and the Calle Joaquin wetlands, and to protect mid- to upper-bank areas and top-of-bank from erosion from flood flows and aid in maintenance of riparian vegetation.*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. The Applicant shall submit revised plans and additional supporting technical studies to the City for review and approval prior to recordation of the final VTM. The final VTM shall depict all necessary revisions or improvements identified in the revised Froom Creek Realignment plans and supporting studies. **Monitoring.** City staff shall inspect Froom Creek realignment improvements and ensure compliance throughout all construction phases. Permit compliance monitoring staff shall perform periodic site inspections to verify compliance with planned improvements.	
HYD-3. Operation of the Project would potentially impact water quality of Froom Creek and San Luis Obispo Creek due to polluted urban runoff and sedimentation.	None Required.	Less than Significant
HYD-4. The Project would involve development of new impervious surfaces and potentially interfere with groundwater recharge.	None Required.	Less than Significant
3.9 Land Use		
LU-1. The Project would allow urban development above the 150-foot elevation and would relocate portions of the Froom Ranch Dairy complex, which would potentially conflict with City General Plan policies adopted for the purpose of avoiding impacts to visual, biological, and cultural resources and wildfire hazards.	***MM BIO-1*** *The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:* *1) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:* *a) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.* *b) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the construction period for each phase of development. Fencing and signage shall be removed following completion of construction. *c) During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources.* *d) All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.* *e) All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.* *f) The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.* *g) Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.* *h) All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches shall be inspected at the beginning of each work day to ensure that*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work. *i) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation.* **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. ***MM BIO-2*** *The Applicant shall retain a qualified Environmental Coordinator/qualified biologist, subject to review and approval by the City to oversee compliance with the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall monitor all construction activities, conduct a biological resources education program for all construction workers prior to the initiation of any clearing or construction activities, and provide quarterly reports to the City regarding construction activities, enforcement issues, and remedial measures. The Applicant's Environmental Coordinator shall be responsible for conducting inspections of the work area each work day to ensure that excavation areas and sensitive or restored habitats do not exhibit construction-related impacts or hazards to wildlife. If any exposure risk is identified, the Environmental Coordinator shall implement measures that could include, but not be limited to, hazing, fencing, and wildlife removals to eliminate the exposure risk.* *In addition, the Applicant's Environmental Coordinator shall monitor and regulate all construction occurring within 50 feet of the existing and proposed Froom Creek channel, other existing or proposed drainage features, riparian habitat, Drainages 1, 2, 3, and 4, and seasonal or permanent wetlands. During appropriate flowering, nesting, breeding, migration, and dispersal seasons, the Environmental Coordinator shall also conduct sensitive species surveys immediately prior to construction activities and shall monitor construction activities in the vicinity of habitats to be avoided.* *The work area boundaries and other off-limit areas shall be identified by the biologist and/or Environmental Coordinator on a daily basis. The biologist and/or Environmental Coordinator shall inspect construction and sediment control fencing each work day during construction activities. Any vegetation clearing activities shall be monitored by the biologist and/or Environmental Coordinator.* **Plan Requirements and Timing.** The City shall approve the Applicant's qualified Environmental Coordinator/qualified biologist prior to issuance of grading and building permits for each phase of construction. The Environmental Coordinator shall be present onsite to monitor construction activities pursuant to the approved Biological Mitigation and Monitoring Plan.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The Environmental Coordinator shall monitor all grading and construction activities occurring within the vicinity of sensitive habitats or known location of sensitive species, shall conduct regular site inspections throughout the entire site, and shall be responsible for compliance of the construction activities and the above BMPs within MM BIO-1 and MM BIO-3 through MM BIO-8. During construction, the Environmental Coordinator shall submit quarterly monitoring reports to the City to ensure compliance with the Biological Mitigation and Monitoring Plan and applicable laws, regulations, and policies. The Environmental Coordinator/qualified biologist shall be onsite during all construction activities which take place within 50 feet of sensitive creek, wetland, and riparian habitat areas. ***MM BIO-3*** *The Biological Mitigation and Monitoring Plan shall include a Habitat Mitigation and Monitoring Plan (HMMP) with details on timing and implementation of required habitat restoration, enhancement, or creation measures. The Biological Mitigation and Monitoring Plan and HMMP shall be prepared under the direction of, and approved by, the City's Natural Resources Manager in conjunction with regulatory agencies with permitting authority over the Project. The HMMP shall contain, at a minimum, the following components (or as otherwise modified by regulatory agency permitting conditions):* *a) Pre-construction surveys and delineation of vegetation communities, habitat, and wetland features, including clear maps and a summary of onsite habitats to be protected and acreage, design, and locations of required habitat mitigation sites.* *b) A description of the location and boundaries of the mitigation site and description of existing site conditions.* *c) A description of measures to be undertaken to enhance the mitigation site for the target species and to protect sensitive resources.* *d) Record necessary replacement of disturbed, altered, and/or lost area of habitat.* *e) A binding long-term agreement with the Applicant to implement and maintain protected and restored sensitive habitats, including native bunch grassland, wetlands, springs, seeps, tributary drainages, and other sensitive or restored native habitats. These measures shall identify typical performance and success criteria deemed acceptable by the City and CDFW based on measurable goals and objectives. Said criteria for restored habitats shall be, at a minimum, at least 70-percent*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	survival of container plants and 70-percent relative cover by vegetation type. *f) A description of habitat and species restoration and monitoring measures, including specific and objective performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. (At a minimum, success criteria shall be at least 70-percent survival of container plants and 70-percent relative cover by vegetation type and will include a replacement ratio of 2:1 and determination by a City-approved biologist that the mitigation site provides ecological functions and values for the focal species equal to or exceeding the impacted habitat.)* *g) Plan requirements that ensure mitigation elements that do not meet performance or final success criteria within 5 years are completed through an extension of the plan for an additional 2 years or at the discretion of the City Natural Resources Manager with the goal of completing all mitigation requirements prior to the HMMP end date.* *h) Monitoring of the mitigation and maintenance areas shall occur for the period established in the HMMP, or until success criteria are met; an endowment may be required in some cases as determined by the City. If success criteria cannot be met through the HMMP, the City Natural Resources Manager shall specify appropriate commensurate measures (e.g., onsite or offsite restoration, endowment, or bond to the City for completion of necessary mitigation).* *i) A binding long-term agreement with the Villaggio Life Plan Community to fund and retain a qualified biologist to train all landscaping crew staff hired over the life of the development on sensitive plant species and habitat within the vicinity of the development, including the identification and avoidance of sensitive plants and habitat. The qualified biologist shall conduct annual monitoring of vegetation surrounding the development and prepare a report summarizing the avoidance or disturbance of sensitive resources from operational activities of the Villaggio development, and identifying necessary replacement or restoration of affected resources. Necessary mitigation shall be subject to the same standards for performance, monitoring, and success identified in subitems b through h, above. The report shall be submitted to the City annually for review and approval.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	j) A plan for fencing and/or signage around the Upper Terrace of the Villaggio development, prohibiting residents, guests, and employees from accessing and disturbing the surrounding sensitive resources. *k) Requirements for payment of annual fees to the City to fund City review and inspection of the site and Biological Mitigation and Monitoring Plan and HMMP requirements.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection. The Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring and inspection of restoration activities. ***MM BIO-4*** *The Biological Mitigation and Monitoring Plan shall require avoidance of sensitive natural communities outside approved development footprints such as the Nassella pulchra Herbaceous Alliance, Central Coast Arroyo Willow Scrub Community, Coastal and Central Valley Freshwater Marsh, and wetland areas to the maximum extent feasible. Mitigation for impacted sensitive natural communities that cannot be avoided shall be achieved through one or more of the following options, subject to City approval:* *a) Onsite restoration, enhancement, or creation of suitable replacement habitat, if feasible onsite restoration opportunities exist and at ratios consistent with those identified in MM BIO-5;* *b) Offsite restoration or creation of suitable habitat for the impacted species at the minimum replacement ratio of 2:1 for sensitive natural communities, native grasslands, and riparian habitat;* *c) Financial contribution to an in-lieu fee program that results in restoration or creation of suitable habitat for the impacted natural communities and/or species; and/or* *d) Purchase of mitigation credits at a USFWS- and/or CDFW-approved mitigation bank.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. All requirements shall be included in the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the BMMP and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Applicant's Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities pursuant to the approved Biological Mitigation and Monitoring Plan and HMMP. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt and review of monitoring reports, and site inspections. ***MM BIO-5*** *The Biological Mitigation and Monitoring Plan shall require all temporary and permanent impacts to wetlands, grasslands, and riparian habitat be mitigated, as follows:* *a) Temporary wetland, native grassland, and riparian habitat impacts shall be mitigated at a minimum 1:1 mitigation ratio (area of restored habitat to impacted habitat).* *b) Permanent impacts to sensitive natural communities, native grasslands, and riparian habitat shall be mitigated at a 2:1 ratio (area of restored and enhanced habitat to impacted habitat).* *c) Permanent direct impacts to wetlands shall be mitigated at a minimum 3:1 ratio unless otherwise directed by state and federal agencies, including but not limited to the CDFW, RWQCB, NMFS, and USFWS.* *d) Potential indirect impacts to the Calle Joaquin wetlands affected by the Froom Creek realignment and changes to site hydrology shall be mitigated at a minimum 2:1 ratio and require mitigation of at least 10.24 acres. For the purpose of this mitigation, the area of the Calle Joaquin wetlands potentially affected by the Project include those wetlands northwest of Calle Joaquin within the Specific Plan area and southeast of the proposed Froom Creek low-flow channel.* *e) Habitat revegetation or creation shall occur in the fall or winter no more than 1 year following habitat disturbance. Revegetation shall be monitored monthly for 7 years with a goal of at least 70-percent survival of container plants and 70-percent relative cover by vegetation type at the end of the 7-year period. Irrigation shall be provided during*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	this period or until otherwise determined necessary by the Applicant's Environmental Coordinator. *f) Riparian vegetation along Froom Creek shall be maintained in perpetuity to the satisfaction of the City by the Applicant or a City-approved designee. Froom Creek conditions shall be monitored annually following winter storm seasons to assess damage to riparian vegetation and need for maintenance restoration. Monitoring and maintenance of riparian vegetation conditions shall be conducted consistent with the requirements of the Habitat Mitigation and Monitoring Plan outlined in MM BIO-3.* **Plan Requirements and Timing.** All requirements shall be included in the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through receipt of monitoring reports and site inspections. ***MM BIO-6*** *The Biological Mitigation and Monitoring Plan shall detail timing and implementation of required habitat restoration and shall be submitted to the City's Natural Resources Manager for review and approval, including requirements for consultation with CDFW, NMFS, and USACE as needed. A copy of the final plan shall be submitted to the City for review and approval. The plan shall be implemented by the Project Applicant, under supervision by the City and the Applicant's Environmental Coordinator, and shall:* *a) Describe replacement of sensitive natural community habitats removed, lost, or adversely impacted by the Project, including a list of the soil, plants, and other materials that will be necessary for successful habitat restoration/ replacement, and a description of planting methods, location, spacing, erosion protection, and irrigation measures that will be needed. Restoration and habitat enhancement shall be limited to use of appropriate native species. Habitat*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	restoration or enhancement areas shall be designed to facilitate establishment of appropriate native plants such as willows, cottonwoods, bunchgrass, and rushes. *b) Habitat restoration or enhancement areas shall be established within the Project boundaries, adjacent to and contiguous with existing habitats to the maximum extent possible.* *c) Habitat restoration or enhancement sites shall be placed within existing or additional necessary deed-restricted area(s) and shall be maintained and monitored for a minimum of 7 years. If sufficient onsite mitigation area is not practicable, an offsite mitigation plan shall be prepared as part of the Biological Mitigation and Monitoring Plan and approved by permitting agencies.* *d) The Biological Mitigation and Monitoring Plan shall identify appropriate restoration and enhancement activities to compensate for impacts to creek, wetland, native bunch grass and riparian habitat, including a detailed planting plan and maintenance plans using locally obtained native species, and shall include habitat enhancement to support native wildlife and plant species.* *e) A weed management plan and weed identification list shall be included in the Biological Mitigation and Monitoring Plan.* *f) Habitat restoration or enhancement areas shall be maintained weekly for the first three years after Project completion and quarterly thereafter. Maintenance shall include replacement of unsuccessful planted specimens and eradication of noxious weeds found on California Department of Food and Agriculture (CDFA) Lists A and B. Noxious weeds on CDFA List C may be eradicated or otherwise managed.* *g) Quarterly and annual reports documenting site inspections and site recovery status shall be prepared and sent to the City and appropriate agencies.* **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	shall ensure compliance during habitat compensation and/or restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt of monitoring reports and site inspections. ***MM BIO-9*** *Construction and grading of the realigned portion of Froom Creek, including planting of riparian vegetation, watering, and bank stabilization, shall be conducted prior to removal of the existing creek segment to ensure a habitat for special-status species within the creek is maintained through the Project site with no interruption during construction. Project phasing shall be adjusted as needed to accommodate this sequence of construction activities.* **Plan Requirements and Timing.** The Applicant shall demonstrate phasing and creek restoration within the final VTM, and the Biological Mitigation and Monitoring Plan. The Applicant shall submit the plan to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review the Biological Mitigation and Monitoring Plan, and final VTM for compliance. The Applicant's Environmental Coordinator shall monitor creek realignment activities to ensure compliance with this mitigation measure. ***MM BIO-10*** *Chorro Creek Bog Thistle Management. Prior to issuance of grading and building permits, the Applicant shall submit or fund a site survey for Chorro Creek bog thistle, and:* 1. *All individual locations of Chorro Creek bog thistle shall be mapped using GPS coordinates. No construction activities or disturbance shall occur within 50 feet of mapped Chorro Creek bog thistle. This setback shall be delineated and maintained with construction fencing and clear signage for the duration of grading and construction. If the site survey results identify Chorro Creek bog thistle that may be disturbed or lost from Project construction, the Project shall be redesigned to ensure a minimum 50 foot buffer from mapped Chorro Creek bog thistle occurrences.* 2. *Development adjacent to Drainages 1, 2, and 3 shall be set back a minimum of 50 feet from the top of the bank of these drainages and the edge of delineated associated wetlands.* 3. *Drainages 1, 2, and 3 and associated wetlands shall be fenced a minimum of 50 feet from the top of the bank or edge of delineated*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	wetland. The Applicant shall ensure and demonstrate to the City through frequent reporting requirements approved by the City that these areas are managed and maintained in perpetuity to maintain wetland and Chorro Creek bog thistle habitat values. **Plan Requirements and Timing.** All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities. ***MM BIO-11*** *The Biological Mitigation and Monitoring Plan shall address special-status wildlife species management. Grading and construction activities shall avoid the rainy season (typically October 15 to April 15) to the extent practicable, particularly within 50 feet of the existing and proposed Froom Creek channel, and other existing or proposed drainage features, riparian or wetland habitat, and any suitable nesting sites as determined by the City-approved biologist. Injury, mortality to, or significant disturbance of onsite sensitive species, including the California red-legged frog, south-central California coast steelhead, and white-tailed kite, shall be avoided. The plan shall include the following measures: pre-construction surveys; worker awareness; cessation of work in occupied areas if individuals are identified; relocation (if necessary) of frogs and steelhead from the work area by a professional biologist authorized by the USFWS and/or CDFW; and monitoring of construction activities within the vicinity of sensitive habitats by a qualified biologist during construction, consistent with MM BIO-2. Necessary permits shall be obtained from the state (CDFW) and federal (USACE and USFWS) regulatory agencies with jurisdiction and/or permitting authority over a portion of the Project. Any other sensitive species observed during the pre-construction surveys shall be relocated by the qualified biologist into the nearest suitable habitat outside the disturbance area as determined in consultation with the appropriate jurisdictional resource agency.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements in the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities. ***MM BIO-12*** *The Biological Mitigation and Monitoring Plan shall address the movement of special-status species, as follows:* *1. Migratory and Nesting Bird Management. Grading and construction activities shall avoid the breeding season (typically from February 15 to August 15) to the extent practicable, particularly within 50 feet of riparian or wetland habitat and mature trees. If Project activities must be conducted during this period and within the vicinity of riparian or wetland habitat and/or mature trees, pre-construction nesting bird surveys shall take place no more than one week prior to habitat disturbance associated with each phase; if active nests are located during these surveys, the following measures shall be implemented:* *a. Construction activities within 50 feet of active nests shall be restricted until chicks have fledged, unless the nest belongs to a raptor, in which case a 500-foot activity restriction buffer shall be observed.* *b. Construction shall be limited to daylight hours (7:00 AM to 7:00 PM or sunset, whichever is sooner).* *c. A pre-construction survey report shall be submitted to the City immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. If any sensitive species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedure for handling or avoidance of the specimen.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	d. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and the species involved. A report of findings and recommendations for bird protection shall be submitted to the City prior to vegetation removal. If sensitive species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedures for handling or avoidance of the specimen. *2. Bat Colony Management. Prior to removal of any trees over 20 inches diameter-at-breast-height (DBH) or demolition/relocation of existing onsite structures, a survey shall be conducted by a City and CDFW-approved biologist to determine if any tree or structure proposed for removal, trimming, demolition, or relocation harbors sensitive bat species or maternal bat colonies. Maternal bat colonies shall not be disturbed, and grading and construction activities shall avoid the bat breeding season to the extent feasible. If disturbance of structures must occur during the bat breeding season, buildings must be inspected and deemed clear of bat colonies/roosts within 7 days of demolition and an appropriately trained and approved biologist must conduct a daily site-clearance during demolition. If bats are roosting in a structure or tree in the Project site during the daytime but are not part of an active maternity colony, then exclusion measures shall be utilized and must include one-way valves that allow bats to leave but are designed so that the bats may not re-enter the structure. For each occupied roost removed, one bat box shall be installed in similar habitat as determined by the Project biologist and shall have similar cavities or crevices to those which are removed, including access, ventilation, dimensions, height above ground, and thermal conditions. If a bat colony would be eliminated from the Project site, appropriate alternate bat habitat shall be installed within the Project site. To the extent practicable, alternate bat house installation shall occur near onsite drainages.* **Plan Requirements and Timing.** The Biological Mitigation and Monitoring Plan shall include a management plan for migrating and nesting birds and bat colonies and shall be submitted for review and approval by the City prior to issuance of grading and construction permits and recordation of the final VTM. Construction shall be conducted between August 16 and February 14	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	unless pre-construction surveys are completed. Reports summarizing pre-construction species surveys (i.e., nesting, bat surveys, etc.) shall be submitted to the City within 10 days of survey completion. Construction work shall not commence until after the completion of surveys and City review of corresponding reports. Any required permits shall be obtained from appropriate state and federal agencies prior to issuance of grading and construction permits and recordation of the final VTM. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that appropriate requirements have been included to address potential impacts to bird and bat species. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities. ***MM CR-9*** *The Applicant shall retain a qualified professional historic architect meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61) to review and comment on design and construction drawings and monitor construction to ensure conformance with the Secretary of the Interior's Standards. The role of the historic architect shall include collaboration on a range of items relating to materials selection, construction methods, design of exterior and interior alterations, and monitoring of construction activities. The historic architect and Applicant shall resolve any unforeseen circumstance in a manner that conforms with the Secretary of the Interior's Standards.* *a) The qualified professional historic architect shall work with the Applicant team to ensure:* *b) Deteriorated historic features would be repaired to the greatest extent feasible. Where features are deteriorated beyond repair, they would be replaced to exactly match the old.* *c) All character-defining features are retained.* *d) Physical treatments to historic material would use the gentlest means possible and would not damage material.* *e) Reconstruction would be clearly identified as a contemporary re-creation.* *f) Interpretative signage would clearly provide information regarding the history of the buildings and their reconstruction.* *Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings;*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication. **Plan Requirements and Timing.** The historic architect shall submit a report documenting conformance with the Secretary of the Interior's Standards to the City for review and approval prior to issuance of any building permits for the Project. Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings; the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication. The historic architect shall notify the Applicant if any unforeseen circumstance arises during construction that could potentially result in nonconformance with the Secretary of the Interior's Standards. **Monitoring.** The City shall ensure the report is reviewed and approved prior to issuance of grading permits for Phase 3. The historic architect shall participate in a pre-construction meeting with the general contractor and subcontractors and periodically monitor construction to completion of construction. ***MM CR-10*** *The Applicant shall retain a qualified professional photographer to prepare Historic American Building Survey (HABS) Level II documentation. This documentation shall record the existing appearance of all seven contributing buildings in large and medium format HABS photographs. All documentation components shall be completed in accordance with the Guidelines for Architectural and Engineering Documentation (HABS standards). The photographs shall consist primarily of large format, 4-inch by 5-inch, black and white negatives (one set), contact prints (one set) and 8-inch by 10-inch prints (two sets), archivally processed and printed on fiber-based paper. The set of original negatives shall be made at the time the photographs are taken. The original, archivally-sound negatives and prints shall be and distributed as follows: (1) the Library of Congress in Washington, DC through the National Park Service (one set of negatives and contact prints).* **Plan Requirements and Timing.** The draft documentation shall be assembled and submitted to the qualified professional historic architect and	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	the City for review and approval prior to submittal to the repository. The HABS documentation shall be completed prior to the issuance of grading permits for Phase 1. **Monitoring.** A digital copy of the HABS documentation shall be reviewed by the City and approved prior to the issuance of grading permits. ***MM CR-11*** *The Applicant shall work with the City to develop an interpretive project that documents the potential historic district and its cultural and architectural heritage by means of a pamphlet. This pamphlet will highlight the former Froom Ranch Dairy, both primary and secondary contributors, in a social (Froom family) and industrial (dairy industry) context, with an emphasis on how these buildings were used on the dairy farm, and how this property relates to the larger dairy farm context in San Luis Obispo, the Central Coast, and California. Five hundred copies of the pamphlet shall be published. These professionally researched, written and printed materials shall be offered at no cost through the local museums and heritage organizations, and at the trailhead park. After the initial distribution of printed brochures, digital copies shall be available. Throughout the park, interpretive signs that provide information on building history and function (extant and demolished) shall also be incorporated.* **Plan Requirements and Timing.** The Applicant shall prepare and submit draft documentation to the City and Cultural Heritage Committee (CHC) for review and approval prior to the issuance of grading permits for Phase 3. **Monitoring.** The pamphlet and interpretive signage shall be reviewed by the CHC and approved by the Community Development Director. The Parks and Recreation Commission shall review any interpretive signage proposed to be located within the park. The City Community Development Department shall ensure park designs incorporate interpretive signage consistent with approved documentation. ***MM CR-12*** *The Applicant shall reuse original material to the greatest extent feasible in the proposed work on the contributing structures to be relocated and/or reconstructed within the proposed public park (main residence, dairy barn, creamery/house, and granary). The Applicant and historic architect shall work with the City to prepare a marketing plan to offer to the public any salvaged historic materials not used during rehabilitation and reconstruction of the primary contributors, and demolition of the secondary contributors. As appropriate, unused or unretained historic materials will be offered to local*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	historical societies and museums, then offered to architectural recycling before being disposed. **Plan Requirements and Timing.** The Applicant shall prepare and submit draft documentation to the City for review and approval by the Community Development Director prior to the issuance of grading permits for Phase 3. **Monitoring.** The marketing plan shall be reviewed and approved by the Community Development Director. ***MM CR-13*** *The Applicant and historic architect shall prepare design guidelines and a review process for new construction proximate to the main residence. New construction shall be undertaken in such a manner that the essential form and integrity of the main residence and its setting would be unimpaired. The design guidelines and review by City Community Development Director shall ensure new construction is compatible with main residence in material, features, size, scale and proportion, and massing.* **Plan Requirements and Timing.** The Applicant shall prepare and submit draft design guidelines to the City and CHC for review and approval prior to approval of entitlements and the issuance of grading permits for Phase 1. **Monitoring.** The design guidelines shall be reviewed by the CHC and approved by the Community Development Director. ***MM CR-14*** *Prior to commencement of Phase 1 construction, a City-approved qualified structural engineer and historical architect shall survey the existing foundations and other structural aspects of the main residence, creamery, dairy barn, and granary, and develop a preservation plan to protect the historic buildings from potential damage during construction activities.* *The qualified structural engineer shall identify any necessary temporary structural bracing for the historic structures to avoid damage to these resources during the duration of construction. The qualified structural engineer shall prepare a temporary historic structure stabilization plan identifying these techniques as necessary.* **Plan Requirements and Timing.** The Applicant shall submit the preservation plan and temporary historic structure stabilization plan to the City for review and approval prior to recordation of the final map and issuance of grading and building permits for Phase 1 of construction. Prior to the issuance of Phase 4 building and grading permits, the Applicant shall submit the final Historic Structures Plan and temporary historic structure stabilization plan, with incorporation of any additional recommendations for repair, to the City for review and approval.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The City engineer shall review and approve the preservation plan prior to recordation of the final map and issuance of grading permits for Phase 1. The City-approved structural engineer shall periodically monitor vibration during vibration-causing construction activities to ensure excessive vibration does not occur and that temporary historic structure stabilization plan strategies are effective at avoiding vibration damage. The structural engineer shall halt construction activity if he/she deems construction activity may harm historical resources and shall modify or augment the temporary historic structure stabilization plan strategies accordingly. ***MM HAZ-2*** *In accordance with PRC Section 4291, the Applicant shall hire a City-qualified team that consists of appropriate specialists (i.e., fire management professionals, biologists) to prepare a Community Fire Protection Plan to design the creation and maintenance of required fire buffers and fuel management zones around developable areas and detail methods for achieving fire safety around new buildings while preserving the integrity and function of affected native plant communities to the maximum extent feasible, and that ensures that consistent fire fuel management practices are applied throughout the City. The Plan shall incorporate management strategies in coordination with adjacent property owners, including Mountainbrook Church and the Irish Hills Natural Reserve. The Plan shall outline the removal and control of invasive, non-native vegetation, and conservation of sensitive habitats and rare species, while developing fire fuel management practices that will discourage or prevent non-native grasses and other non-native invasive species from dominating surrounding areas. Landscaping shall be maintained by the Applicant and periodically inspected by the SLOFD during fire inspections in each of the fuel management zones to avoid the buildup of deadwood and leaf litter, which, if left to accumulate, would reduce the mitigating effect of the Plan. Specifically, the Plan shall include, but not be limited to, the following elements:* • *Vegetation coverage and type;* • *Setbacks between structures, sensitive wildlife species, and access routes;* • *Development plan landscaping and planting standards within the setback areas;* • *Native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place;*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *All allowable weed abatement techniques, qualifications, and requirements for weed abatement contractors, as well as measures and techniques that ensure the required fuel management and vegetation clearance, shall be designed and implemented to provide adequate structure protection and avoid degradation of sensitive biological habitat; and* • *Invasive species shall be removed and controlled.* **Plan Requirements and Timing.** Prior to approval of the final development plan, the Community Fire Protection Plan shall be prepared and submitted to the City Natural Resources Manager and SLOFD for review and approval, with coordination from the San Luis Obispo County Fire Department. The Plan shall be implemented consistent with the approved maintenance schedule. **Monitoring.** The City-qualified biologist shall submit a monitoring report to the City Natural Resources Manager and SLOFD at the end of the first year following Project occupancy documenting the fuel management activities that took place. Conformance with the Community Fire Protection Plan shall be demonstrated through the submittal of annual photo documentation by the Applicant or site visits as necessary at the discretion of the Compliance monitoring staff. ***MM HAZ-3*** *The Froom Ranch Specific Plan (FRSP) shall designate smoking areas, located away from onsite fire hazards areas and within acceptable locations consistent with Chapter 8.16, Smoking Prohibition and Secondhand Smoke Control, of the City Municipal Code. Otherwise, smoking shall be prohibited onsite. The Applicant shall amend the FRSP to include policies to requiring the allowed use of fire resistant landscaping and hardscaping in areas to reduce mulch/gorilla hair, which is the receptive embers, if determined appropriate by SLOFD.* **Plan Requirements and Timing.** Prior to adoption of the Final FRSP, the Applicant shall amend the Final FRSP to include these policies. The Applicant shall coordinate with SLOFD to identify appropriate locations for designated smoking areas and appropriate fire resistant landscaping and hardscaping features within the Project site. **Monitoring.** The Final FRSP shall be reviewed by the SLOFD and City for inclusion of the above measure. ***MM HAZ-4*** *The Applicant shall prepare and implement an Evacuation Plan, which shall address both Villaggio and Madonna Froom Ranch areas. The*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Evacuation Plan shall be subject to review by the City and SLOFD, and shall include, but not be limited to: • *Accommodation for assisted living and special care individuals;* • *Shelter-in-place accommodations;* • *Specified quantity and capacity of vehicles required to accommodate residents and employees of Villaggio, and maintenance of those vehicles;* • *Signage that clearly indicates evacuation routes and meeting areas;* • *Specified egress points for transportation vehicles;* • *A relocation plan from the Project site to a secondary facility, with associated transportation;* • *Contingency plans for changes to the construction schedule or phasing plan that would affect the primary evacuation plan and routes;* • *Periodic updates that would consider potential redevelopment activities or other roadway alterations; and* • *Regular practice drills (e.g., one per year) for implementation of the Evacuation Plan.* **Plan Requirements and Timing.** The above Evacuation Plan shall be prepared in coordination with the SLOFD and the San Luis Obispo County Fire Department and submitted for approval to the City and SLOFD prior to adoption of the Final VTTM. The Applicant shall resubmit the Plan to the City and SLOFD prior to the construction of each phase of development. Prior to occupancy of the first residential unit, the Applicant shall implement measures within the Evacuation Plan. **Monitoring.** The City and SLOFD shall review the Evacuation Plan and ensure all recommendations are incorporated. The City Fire Marshall shall inspect the Project site for compliance prior to the occupancy of the first residential unit for each phase. ***MM HAZ-5*** *The Froom Ranch Specific Plan (FRSP) shall designate fire access routes in at least two locations from the Project site to the Irish Hills Natural Reserve on at least 12-foot wide paths, one extending from Villaggio and one from Madonna Froom Ranch. Fire access routes shall be designed to allow emergency response to wildland area in the Irish Hills to support direct access for firefighting personnel and equipment.* **Plan Requirements and Timing.** Prior to adoption of the Final FRSP, the Applicant shall amend the Final FRSP to include the required accessway, in	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	coordination with SLOFD to identify appropriate locations within the Project site. **Monitoring.** The Final FRSP shall be reviewed by the SLOFD and City for inclusion of the above measure. ***MM TRANS-21*** *The Project shall include a landscaped median along LOVR from the terminus of the existing median at northern Project frontage to Calle Joaquin. Project is responsible for construction of median improvements prior to occupancy of the Lower Area of Villaggio, or fair-share contribution if constructed by others sooner.* **Plan Requirements and Timing.** The final FRSP shall be amended to incorporate the above median improvement prior to adoption and submitted to the City for review and approval. The median shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval. ***MM TRANS-22*** *The Project shall include an emergency access point from Villaggio's Lower Area to the Irish Hills Natural Reserve to provide access to the existing dirt road network to fight fires in Irish Hills, specifically to Neil Havlik Way which connects to the four utility power line structures at the top of the ridgeline. This access point may be gated to ensure site security in consultation with SLOFD.* **Plan Requirements and Timing.** The final FRSP shall be amended to incorporate the above emergency access connection prior to adoption and submitted to the City and SLOFD for review and approval. The above access road shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval. ***MM TRANS-23*** *The Project shall integrate access to the Project site perimeters for defending the Project site development. Specifically, these measures should address access to the wildland area immediately abutting the western boundary of Villaggio's Lower Area. This measure shall include access from the proposed Local Road "C" to the Irish Hills, which may include use of space between proposed buildings for firefighting vehicle access, ramps up proposed retaining walls, and similar vehicle infrastructure to maintain access to the base of the Irish Hills.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. The final FRSP shall be amended to incorporate the above emergency access connection along the Irish Hills prior to adoption, and submitted to the City and SLOFD for review and approval. The above access road shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.	
LU-2. The Project would potentially be inconsistent with existing easements and setback requirements onsite.	None Required.	Less than Significant
3.10 Noise		
NO-1. Project construction, including site grading and heavy truck trips, would generate noise levels that exceed thresholds established in the City's General Plan Noise Element and Noise Guidebook resulting in potentially significant impacts to proximate sensitive receptors.	***MM NO-1*** *Except for emergency repair of public service utilities, or where an exception is issued by the Community Development Department, no operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work shall occur between the hours of 7:00 PM and 7:00 AM, or any time on Sundays, holidays, or after sunset, such that the sound creates a noise disturbance that exceeds 75 dBA for single-family residential uses, 80 dBA for multi-family residential uses, and 85 dBA for mixed residential/commercial land uses, as shown in Table 3.10-9 and Table 3.10-10, across a residential or commercial property line.* **Plan Requirements and Timing.** Plans submitted for grading and building permits shall clearly indicate construction hours and shall be submitted to the City for approval prior to grading and building permit issuance for each Project phase. To ensure response to and resolution of potential public noise nuisance complaints, plans submitted for grading and building permits shall clearly identify the Project's construction manager (or similar) and 24-hour contact information. At the pre-construction meeting required for all phases of grading and development, all construction workers shall be briefed on restricted construction hour limitations. A workday schedule shall be adhered to for the duration of construction for all phases. **Monitoring.** The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules and respond to complaints. ***MM NO-2*** *For all construction activity at the Project site, noise attenuation techniques shall be employed to ensure that noise levels are maintained within*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	levels allowed by the City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control). Such techniques shall include: • *Sound blankets on noise-generating equipment.* • *Stationary construction equipment that generates noise levels above 65 dBA at the Project boundaries shall be shielded with a barrier that meets a sound transmission class (a rating of how well noise barriers attenuate sound) of 25.* • *All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.* • *Temporary sound barriers shall be constructed between construction sites and affected uses.* **Plan Requirements and Timing.** The Applicant shall designate the proposed area of operation of stationary construction equipment and depict acoustic shielding around these areas on building and grading plans. Equipment and shielding shall be installed prior to construction and remain in the designated location throughout construction activities. Construction plans shall identify Best Management Practices (BMPs) to be implemented during construction. All construction workers shall be briefed at a pre-construction meeting on how, why, and where BMP measures are to be implemented. BMPs shall be identified and described for submittal to the City for review and approval prior to building or grading permit issuance. BMPs shall be adhered to for the duration of the Project. Construction plans shall include truck routes and shall be submitted to the City prior to grading and building permit issuance for each Project phase. **Monitoring.** City staff shall ensure compliance throughout all construction phases. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules. ***MM NO-3*** *The Applicant shall inform landowners and business operators at properties within 300 feet of the Project site of proposed construction timelines and noise complaint procedures to minimize potential annoyance or nuisance complaints related to construction noise no less than 10 days prior to initiation of any grading and construction activity for any Phase. The notice shall include the name and contact information of the Project's construction manager and contact information for the City's Community Development Department.* **Plan Requirements and Timing.** The Applicant shall provide and post signs stating these restrictions and the Project's construction manager's name and	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	contact information at construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction of any Phase. The construction schedule and mailing list shall be submitted to the City Community Development Department 10 days prior to initiation of any earth movement. **Monitoring.** City staff shall ensure compliance throughout all construction phases. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules and respond to complaints.	
NO-2. Project construction activities (e.g., excavation, transportation of heavy equipment) could result in exposure of sensitive receptors and buildings to excessive groundborne vibration.	None Required.	Less than Significant with Mitigation
NO-3. Long-term operational noise impacts would include higher roadway noise levels from increased vehicle traffic generated by the Project, Project operational noise, and exposure of future residents to high noise levels that could result in the exceedance of thresholds in the City's General Plan Noise Element and Noise Guidelines.	None Required.	Less than Significant
NO-4. Future residents and occupants of the Project could be exposed to periodic high noise levels from nearby commercial uses (e.g., delivery trucks, forklifts, backup alarms) that would exceed City thresholds for residential land uses.	***MM NO-4*** *Prior to approval of park and residential development within the Madonna Froom Ranch area of the Specific Plan, the Applicant shall submit a project-specific noise study that evaluates the potential for noise exposure from adjacent commercial uses and identifies project-specific design measures to attenuate exterior and interior noise consistent with the City's Noise Element and Noise Ordinance. If necessary to reduce noise within acceptable levels, noise reduction measures may include a planted earthen berm, sound wall, or similar noise attenuating feature along the site boundary with Irish Hills Plaza, consistent with Policy 1.8.2 of the Noise Element.* **Plan Requirements and Timing.** The Applicant shall incorporate the above mitigation within the final FRSP prior to adoption. **Monitoring**. City staff shall ensure compliance with required site design and noise reduction measures within the final FRSP prior to adoption and shall confirm any required noise attenuation measures are shown on construction plans prior to issuance of building permits.	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
3.11 Population and Housing		
PH-1. Residential and commercial development associated with the Project would induce population growth.	None Required.	Less than Significant
PH-2. The Project would provide additional housing for the City, assisting the jobs-to-housing ratio.	None Required.	Less than Significant
PH-3. The Project would provide additional affordable housing for the City	None Required.	Less than Significant
3.12 Public Services and Recreation		
PS-1. The Project would increase demand on the SLOPD for police protection services.	None Required.	Less than Significant
PS-2. The Project would increase the demand on SLOFD and CALFIRE for fire protection services and create potential declines in firefighter-to-population ratios; however, the Project would be located within the accepted response time performance area. Development of senior residential uses, which are associated with higher than average calls for emergency medical service, would increase emergency calls for service	None Required.	Less than Significant
PS-3. The Project would generate increases in enrollment at public schools (especially C.L. Elementary and Laguna Middle Schools).	None Required.	Less than Significant
PS-4. The Project would increase the demand for public parkland and neighborhood parks from increased residential population.	***MM PS-1*** *Public Parkland Requirements for Villaggio. Mitigation shall be calculated based on actual buildout populations within Madonna Froom Ranch. At the discretion of the Community Development Department and City of San Luis Obispo Parks and Recreation Department, and to ensure that parkland would satisfy the needs of the proposed population of Villaggio, the Applicant shall either:* *a) Identify, purchase, and develop up to 7.32 acres of parkland, including 2.79 acres of neighborhood park, within the City's Sphere of Influence, consistent with City General Plan PRE Policies 3.13.1, 3.15.1, 5.0.1,*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	and 5.0.2. If feasible, land for development of neighborhood park space should be identified within interior areas of the City Sphere of Influence to maximize use and access; or *b) Provide a contribution of fees in-lieu of dedication of parkland, restricted solely for parkland acquisition and improvement.* **Plan Requirements and Timing.** The development of parkland and/or dedication of fees shall be completed by the Applicant prior to issuance of building permits. While coordinating with the City Parks and Recreation Department, the Applicant shall modify the FRSP to demonstrate the provision of recreational facilities to meet the demand of Villaggio residents if an onsite option is selected. **Monitoring.** The City shall ensure compliance with General Plan PRE Policies 3.13.1, 3.15.1, 5.0.1, and 5.0.2, and shall ensure the above measure is implemented prior issuance of building permits. ***MM PS-2*** *Public Parkland Requirements for Madonna Froom Ranch. The Applicant shall identify, designate, dedicate, and/or develop up to 1.16 acres of public parkland into the Froom Ranch Specific Plan to be operational at the time of buildout of the Project. Mitigation shall be calculated based on actual buildout populations within Madonna Froom Ranch and may be implemented using one of the following options, at the discretion of the Community Development Department and City Parks and Recreation Department:* *a) The Applicant shall designate an additional area of up to 1.16 acres of public facilities land use with the intention of providing parkland, within the Specific Plan area, consistent with City General Plan PRE Policies 3.13.1, 3.15.1, 5.0.1, and 5.0.2, or* *b) The Applicant shall identify and purchase or dedicate up to 1.16 acres of parkland within the City's Sphere of Influence, or* *c) The Applicant shall provide a contribution of fees in-lieu of dedication of up to 1.16 acres of parkland, restricted solely for parkland acquisition and improvement.* **Plan Requirements and Timing.** The development of parkland and/or dedication of fees shall be completed by the Applicant prior to issuance of building permits. While coordinating with the City Parks and Recreation Department, the Applicant shall modify the FRSP to demonstrate the provision of recreational facilities to meet the demand of Madonna Froom Ranch residents if an onsite option is selected.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Monitoring. The City shall ensure compliance with General Plan PRE Policies 3.13.1, 3.13.1, 5.0.1, and 5.0.2, and shall ensure the above measure is implemented prior to issuance of building permits.	
3.13 Transportation and Traffic		
TRANS-1. Project construction activities would potentially create traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, equipment, etc.) as well as temporary traffic lane and sidewalk closures.	***MM TRANS-1*** *The Applicant shall prepare a Construction Transportation Management Plan for all phases of the Project for review and approval by the City prior to issuance of grading or building permits to address and manage traffic during construction. The Plan shall be designed to:* • *Prevent traffic impacts on the surrounding roadway network;* • *Restrict construction staging to within the Project site;* • *Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;* • *Ensure safety for both those construction vehicles and works and the surrounding community; and* • *Prevent substantial truck traffic through residential neighborhoods.* *The Construction Transportation Management Plan shall be subject to review and approval by the Public Works Director to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:* • *Ongoing Requirements throughout the Duration of Construction:* • *A detailed Construction Transportation Management Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Plan shall include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such Plan shall be reviewed and approved by the Community Development Department and implemented in accordance with this approval.* • *Heavy haul construction vehicles and cement trucks shall not pass through Villaggio's Lower Area access roads once any of the Lower*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Area residences become occupied, and must utilize access from Calle Joaquin to access the Upper Terrace after that time. • *Work within the public right-of-way shall be reviewed and approved by the City on a case-by-case basis based on the magnitude and type of construction activity. Work shall generally be performed between 8:30 AM and 4:00 PM. This work includes dirt hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit administered by the Building and Safety Division. Additional restrictions may be put in place by Public Works Department depending on particular construction activities and conditions.* • *Streets and equipment shall be cleaned in accordance with established Public Works requirements.* • *Trucks shall only travel on a City-approved construction route. Limited queuing may occur on the construction site itself.* • *Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.* • *Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.* *Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction:* • *The traveling public shall be advised of impending construction activities that may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Impact Mitigation Plan).* • *A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way,*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	detours, or any other work within the public right-of-way shall be obtained. • *Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 0.25 mile.* • *Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.* • *Public Works Department approval of any haul routes for construction materials and equipment deliveries shall be obtained.* **Plan Requirements and Timing.** The Applicant shall submit the Construction Transportation Management Plan to the City for review and approval prior to issuance of grading or building permits. The Construction Transportation Management Plan shall be updated as needed to reflect changing conditions over the Project's five-year construction schedule. The Applicant shall conduct necessary construction employee training prior to the commencement of construction. The City Public Works Department, Community Development Department, Police Department, and Fire Department, and nearby residences and businesses shall be notified of the construction schedule prior to initiation of construction. The Applicant shall submit individual traffic control plans and part of encroachment permits for work within the public right-of-way. **Monitoring.** The City shall ensure compliance with the Construction Transportation Management Plan with periodic inspections of the Project site during construction. Complaints related to construction traffic at the site shall be directed to the City Public Works Department.	
TRANS-2. Under Existing plus Project conditions, the addition of Project traffic would exacerbate existing queuing and peak hour traffic for automobiles, and poor levels of service for pedestrians and bicycle modes of transportation, causing transportation deficiencies in the Project vicinity.	***MM AQ-6*** *The Applicant shall revise the FRSP to include measures necessary to reduce the Project's operational, mobile-source emissions, and VMT to the maximum extent feasible, including, but not limited to the following:* • *Rideshare and Employee Ridership Programs: The FRSP shall be amended to include measures for encouraging and incentivizing residents and employees of the proposed development participate in the San Luis Obispo Regional Rideshare program.*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Senior Shuttle Service: Villaggio shall provide clean fuel shuttle services or coordinate with existing shuttle services such as Dial-A-Ride and the Senior Go! Shuttle to provide curb-to-curb shuttle service for residents of the Villaggio Life Community Plan.* • *All Electric Small Vehicles: The FRSP shall require all personal small vehicles (e.g., golf carts) be 100 percent electric powered.* • *Car Share: Provide car-sharing opportunities within the Villaggio Life Community Plan and Madonna Froom Ranch areas.* • *Promote Carpools, Vanpools, and Electric Vehicle (EV) Vehicles: Provide dedicated parking for carpools, vanpools, and high-efficiency vehicles in exceedance of Cal Green Tier 2 standards.* • *Offsite EV Improvements: Work with SLO County APCD to expand or fund the expansion of EV charging stations throughout the City.* **Requirements and Timing.** The Applicant shall include all feasible Best Management Strategies as part of the final FRSP and final VTM. For the selected Best Management Strategies, the Applicant shall work with City and SLO County APCD staff to calculate estimated mobile-source emissions to ensure emissions are reduced to the maximum extent feasible. City and SLO County APCD staff shall ensure the above measures are incorporated into the FRSP and final VTM prior to recordation. **Monitoring.** City staff shall ensure measures are listed on the final VTM submitted for review and approval by the City. City and SLO County APCD staff shall work with the Applicant to ensure that these strategies are implemented. The City shall verify compliance in consultation with the SLO County APCD. ***MM TRANS-2*** *The Project Applicant shall design and construct the extension of the westbound left-turn pocket at the LOVR/U.S. 101 southbound ramps intersection to provide a storage length of 320 feet, and design and construct the extension of the southbound right-turn pocket at the LOVR/U.S. 101 southbound ramps intersection to provide a storage length of 140 feet. In coordination with the Applicant, the City and Caltrans shall also optimize traffic signal timings and coordination between LOVR/Calle Joaquin and LOVR/U.S. 101 southbound ramps. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs. This mitigation measure requires Caltrans approval and coordination.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for roadway improvements and a Traffic Engineering Study for signal timing recommendations for review and approval by the City. Implementation of improvements shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant shall make a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-3*** *The Project Applicant shall design and install measures to restrict left turns at the South Higuera Street/Vachell Lane intersection, extend Buckley Road from Vachell Lane to South Higuera Street, and install a traffic signal at Buckley Road/South Higuera Street intersection. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs. This mitigation measure requires County approval and coordination.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant shall make a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-4*** *The Project Applicant shall design and install the restriping of the westbound approach of the South Higuera Street/Suburban Road intersection to extend the left- and right-turn pocket storage to 250 feet. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant may be responsible for making a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-5*** *The Project Applicant shall extend the westbound bike lane on Tank Farm Road approaching the South Higuera Street/Tank Farm Road intersection to the intersection and install a bike box to facilitate bicycle left-turn movements. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. If improvements are completed sooner by others, the Applicant may be responsible for a fair share contribution prior to issuance of building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-6*** *The Project Applicant shall design and install a second southbound left-turn lane at the South Higuera Street/Tank Farm Road intersection. The Project Applicant shall also pay fair share costs for construction of the Prado Road Overpass/Interchange project. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs through participation in the Citywide Transportation Impact Fee program.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City for the South Higuera/Tank Farm intersection improvements. Implementation of	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	intersection improvements shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. Intersection improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. Participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation towards the Prado Road Overpass/Interchange project and the South Higuera/Tank Farm Road intersection improvements, if constructed sooner by others. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant pays fair share costs in accordance to the approved phase and design plans. ***MM TRANS-7*** *The Project Applicant shall design and install a second northbound left-turn lane at the South Higuera Street/Prado Road intersection, which requires the replacement of the Prado Road Bridge just west of South Higuera. Project is responsible for implementation prior to development of Madonna Froom Ranch, or fair share contribution through participation in the Citywide Transportation Impact Fee program if improvements are constructed sooner by others.* **Plan Requirements and Timing**. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If improvements are completed sooner by others, the Applicant shall make a fair share contribution through participation in the Citywide Transportation Impact Fee program prior to issuance of building permits for the Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-8*** *The Project Applicant shall design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes. Improvement extents shall occur in the northbound direction between Laguna Lane and Diablo Drive,*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	and in the southbound direction between Diablo Drive and Madonna Road. Project is responsible for fair share contribution towards improvement costs. **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-9*** *The Project Applicant shall design and install ADA-compliant curb, gutter and sidewalk along the west side of LOVR to complete the sidewalk connection between the Irish Hills Plaza and Calle Joaquin. The Project Applicant shall also design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes in the northbound and southbound directions between Madonna Road and South Higuera Street. The Project is responsible for all costs related to construction of sidewalks, curb and gutter, and a fair share contribution towards Class IV bikeway improvements. This mitigation measure requires Caltrans approval and coordination for improvements near LOVR/U.S. 101 interchange.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Bikeway improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-10*** *The Project Applicant shall design and install a Class I Multi-Use Path parallel to Madonna Road between Oceanaire Drive and the U.S. 101 southbound ramps intersection. The Project is responsible for a fair*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	share contribution towards improvements through payment of City Traffic Impact Fees. **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If improvements are completed sooner by others, the Applicant shall make a fair share contribution through participation in the Citywide Transportation Impact Fee program prior to issuance of building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-11*** *The Project is responsible for incorporating traffic calming measures (e.g., speed humps, bulb-outs, chicanes, etc.) into the design of Local Road "A" prior to development of Villaggio's Lower Area.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for development of Villaggio's Lower Area. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans.	
TRANS-3. Under Near-Term plus Project (Scenario 2) conditions, the addition of Project traffic would exacerbate existing queuing and peak hour traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing transportation deficiencies in the Project vicinity.	***MM TRANS-2*** *The Project Applicant shall design and construct the extension of the westbound left-turn pocket at the LOVR/U.S. 101 southbound ramps intersection to provide a storage length of 320 feet, and design and construct the extension of the southbound right-turn pocket at the LOVR/U.S. 101 southbound ramps intersection to provide a storage length of 140 feet. In coordination with the Applicant, the City and Caltrans shall also optimize traffic signal timings and coordination between LOVR/Calle Joaquin and LOVR/U.S. 101 southbound ramps. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs. This mitigation measure requires Caltrans approval and coordination.*	Significant and Unavoidable

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for roadway improvements and a Traffic Engineering Study for signal timing recommendations for review and approval by the City. Implementation of improvements shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant shall make a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-5*** *The Project Applicant shall extend the westbound bike lane on Tank Farm Road approaching the South Higuera Street/Tank Farm Road intersection to the intersection and install a bike box to facilitate bicycle left-turn movements. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. If improvements are completed sooner by others, the Applicant may be responsible for a fair share contribution prior to issuance of building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-6*** *The Project Applicant shall design and install a second southbound left-turn lane at the South Higuera Street/Tank Farm Road intersection. The Project Applicant shall also pay fair share costs for construction of the Prado Road Overpass/Interchange project. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs through participation in the Citywide Transportation Impact Fee program.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City for the South Higuera/Tank Farm intersection improvements. Implementation of intersection improvements shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. Intersection improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. Participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation towards the Prado Road Overpass/Interchange project and the South Higuera/Tank Farm Road intersection improvements, if constructed sooner by others. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant pays fair share costs in accordance to the approved phase and design plans. ***MM TRANS-8*** *The Project Applicant shall design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes. Improvement extents shall occur in the northbound direction between Laguna Lane and Diablo Drive, and in the southbound direction between Diablo Drive and Madonna Road. Project is responsible for fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-9*** *The Project Applicant shall design and install ADA-compliant curb, gutter and sidewalk along the west side of LOVR to complete the sidewalk connection between the Irish Hills Plaza and Calle Joaquin. The Project Applicant shall also design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	vehicular traffic lanes in the northbound and southbound directions between Madonna Road and South Higuera Street. The Project is responsible for all costs related to construction of sidewalks, curb and gutter, and a fair share contribution towards Class IV bikeway improvements. This mitigation measure requires Caltrans approval and coordination for improvements near LOVR/U.S. 101 interchange. **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Bikeway improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-12*** *In coordination with the County, the Project Applicant shall coordinate and fund any costs required to optimize the traffic signal timing at the County intersection of LOVR/Foothill Boulevard to reduce queues for the southbound left-turn movement. This mitigation measure requires County approval and coordination.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the County. Signal optimization shall be completed to the satisfaction of the County prior to City issuance of a certificate of occupancy or building permits for development of Villaggio's Lower Area. **Monitoring.** The City shall verify that the Applicant implements the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share to the satisfaction of the County. ***MM TRANS-13*** *In coordination with the City, the Project Applicant shall fund any costs required to implement Lead Pedestrian Intervals for each pedestrian crossing phase at the LOVR/Madonna Road intersection.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	modifications for review and approval by the City. The proposed Lead Pedestrian Intervals shall be installed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-14*** *The Project Applicant shall pay fair share costs for construction of the Prado Road Overpass/Interchange project and northbound U.S. 101 ramps through participation in the Citywide Transportation Impact Fee program.* **Plan Requirements and Timing.** Participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation towards the Prado Road Overpass/Interchange project. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant contributes an appropriate fair share as approved by the City. ***MM TRANS-15*** *In coordination with the City, the Project Applicant shall fund any costs required to implement Lead Pedestrian Intervals for each pedestrian crossing phase at the South Higuera Street/Tank Farm Road intersection.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the City. The proposed Lead Pedestrian Intervals shall be installed prior to the issuance of an occupancy or building permit for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-16*** *The Project Applicant shall design and install improvements to extend the northbound right-turn pocket storage at the South Higuera Street/Tank Farm Road intersection to 230 feet. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	a Public Street Improvement Plan for review and approval by the City. The proposed improvements shall be completed prior to the issuance of an occupancy or building permit for Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-17*** *The Project Applicant shall design and install restriping modifications at the South Higuera Street/Prado Road intersection to accommodate a second southbound left-turn lane and second eastbound through lane. This requires striping modifications, potential street parking removal on the eastern leg of the intersection, and potential traffic signal modifications to accommodate the modified intersection configuration. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of an occupancy or building permit for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-18*** *In coordination with the City and Caltrans, the Project Applicant shall fund any costs required to optimize traffic signal timings at three intersections along LOVR between Calle Joaquin and the U.S. 101 northbound ramps to improve traffic coordination and operations along this*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	roadway segment. These intersections include LOVR/Calle Joaquin, LOVR/U.S. 101 southbound ramps, and LOVR/U.S. 101 northbound ramps. This requires coordination with Caltrans. **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the City and Caltrans. Signal optimization shall be completed to the satisfaction of the City and Caltrans prior to City issuance of a certificate of occupancy or building permits for Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-19*** *The Project Applicant shall design and install restriping modifications at the LOVR/Madonna Road intersection to increase turn pocket storage to 365 feet and optimize signal timings to improve operations and reduce queuing at the SB left-turn lane. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of an occupancy or building permit for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-20*** *The Project Applicant shall modify the traffic signal at the Madonna Road/Dalidio Drive intersection to provide EB right-turn overlap phase concurrent with NB left-turn phase. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of an occupancy or building permit for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.	
TRANS-4. The Project would result in traffic safety impacts and inadequate emergency access and evacuation options, resulting in potential for structural damage, injuries, or loss of life due to wildland fires or other emergency situations.	***MM HAZ-4*** *The Applicant shall prepare and implement an Evacuation Plan, which shall address both Villaggio and Madonna Froom Ranch areas. The Evacuation Plan shall be subject to review by the City and SLOFD, and shall include, but not be limited to:* • *Accommodation for assisted living and special care individuals;* • *Shelter-in-place accommodations;* • *Specified quantity and capacity of vehicles required to accommodate residents and employees of Villaggio, and maintenance of those vehicles;* • *Signage that clearly indicates evacuation routes and meeting areas;* • *Specified egress points for transportation vehicles;* • *A relocation plan from the Project site to a secondary facility, with associated transportation;* • *Contingency plans for changes to the construction schedule or phasing plan that would affect the primary evacuation plan and routes;* • *Periodic updates that would consider potential redevelopment activities or other roadway alterations; and* • *Regular practice drills (e.g., one per year) for implementation of the Evacuation Plan.* **Plan Requirements and Timing.** The above Evacuation Plan shall be prepared in coordination with the SLOFD and the San Luis Obispo County Fire Department and submitted for approval to the City and SLOFD prior to adoption of the Final VTTM. The Applicant shall resubmit the Plan to the City	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	and SLOFD prior to the construction of each phase of development. Prior to occupancy of the first residential unit, the Applicant shall implement measures within the Evacuation Plan. **Monitoring.** The City and SLOFD shall review the Evacuation Plan and ensure all recommendations are incorporated. The City Fire Marshall shall inspect the Project site for compliance prior to the occupancy of the first residential unit for each phase. ***MM TRANS-21*** *The Project shall include a landscaped median along LOVR from the terminus of the existing median at northern Project frontage to Calle Joaquin. Project is responsible for construction of median improvements prior to occupancy of the Lower Area of Villaggio, or fair-share contribution if constructed by others sooner.* **Plan Requirements and Timing.** The final FRSP shall be amended to incorporate the above median improvement prior to adoption and submitted to the City for review and approval. The median shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval. ***MM TRANS-22*** *The Project shall include an emergency access point from Villaggio's Lower Area to the Irish Hills Natural Reserve to provide access to the existing dirt road network to fight fires in Irish Hills, specifically to Neil Havlik Way which connects to the four utility power line structures at the top of the ridgeline. This access point may be gated to ensure site security in consultation with SLOFD.* **Plan Requirements and Timing.** The final FRSP shall be amended to incorporate the above emergency access connection prior to adoption and submitted to the City and SLOFD for review and approval. The above access road shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval. ***MM TRANS-23*** *The Project shall integrate access to the Project site perimeters for defending the Project site development. Specifically, these measures should address access to the wildland area immediately abutting the western boundary of Villaggio's Lower Area. This measure shall include access from the proposed Local Road "C" to the Irish Hills, which may include use of space between proposed buildings for firefighting vehicle*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	access, ramps up proposed retaining walls, and similar vehicle infrastructure to maintain access to the base of the Irish Hills. **Plan Requirements and Timing.** The final FRSP shall be amended to incorporate the above emergency access connection along the Irish Hills prior to adoption, and submitted to the City and SLOFD for review and approval. The above access road shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.	
TRANS-5. Onsite circulation would result in safety impacts to pedestrian and bicycle access.	***MM TRANS-24*** *To address pedestrian and bicycle circulation safety issues, the following modifications to the preliminary Project concept designs throughout the Project site are recommended based on design guidance published by National Association of City Transportation Officials and the Federal Highway Administration:* • *Install pedestrian refuges within center medians at north and south legs of the LOVR/Auto Park Way intersection;* • *Install a single northbound left-turn lane at the LOVR/Auto Park Way intersection in lieu of dual left-turn lanes, as currently proposed, to shorten pedestrian crossing distance at the south leg of the intersection.* • *Install a bulb-out at the southwest corner of the intersection to shorten pedestrian crossing distance at the south leg of the LOVR/Auto Park Way intersection;* • *Install Lead Pedestrian Intervals at all pedestrian crossings at the LOVR/Auto Park Way intersection;* • *Install protected bicycle intersection features as part of signalization and intersection improvements at the LOVR/Auto Park Way intersection, consistent with planned improvements at the nearby LOVR/Froom Ranch Way and Madonna Road/Dalidio Drive intersections;* • *Provide physically protected bicycle lanes (Class IV bikeway) along LOVR approaching/departing the Auto Park Way intersection and along Commercial Collector "A". The Class IV bikeways shall be installed on-street with a physical barrier between cyclists and*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	vehicular traffic or by constructing raised bicycle facilities at the sidewalk level adjacent to pedestrian sidewalks; • *Sidewalks shall be provided within the Madonna Froom Ranch development area of the Project site as per City standards; and* • *Sidewalk design shall meet ADA requirements for a comfortable walking environment.* **Plan Requirements and Timing.** The final FRSP shall be amended to incorporate the above improvements prior to adoption and submitted to the City and SLOFD for review and approval. The above improvements shall be integrated to the final VTM prior to approval of development plans. **Monitoring.** The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.	
TRANS-6. Under long-term Cumulative plus Project conditions, Project-generated traffic would result in a cumulatively considerable contribution to traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing transportation deficiencies in the Project vicinity.	***MM TRANS-8*** *The Project Applicant shall design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes. Improvement extents shall occur in the northbound direction between Laguna Lane and Diablo Drive, and in the southbound direction between Diablo Drive and Madonna Road. Project is responsible for fair share contribution towards improvement costs.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-9*** *The Project Applicant shall design and install ADA-compliant curb, gutter and sidewalk along the west side of LOVR to complete the sidewalk connection between the Irish Hills Plaza and Calle Joaquin. The Project Applicant shall also design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes in the northbound and southbound directions between Madonna Road and South Higuera Street. The Project is responsible for all*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	costs related to construction of sidewalks, curb and gutter, and a fair share contribution towards Class IV bikeway improvements. This mitigation measure requires Caltrans approval and coordination for improvements near LOVR/U.S. 101 interchange. **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Bikeway improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-13*** *In coordination with the City, the Project Applicant shall fund any costs required to implement Lead Pedestrian Intervals for each pedestrian crossing phase at the LOVR/Madonna Road intersection.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the City. The proposed Lead Pedestrian Intervals shall be installed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City. ***MM TRANS-25*** *In coordination with the County, the Project Applicant shall pay its fair share fees to fund modifications to the northbound approach at the LOVR/Foothill Boulevard intersection to provide one left-turn, two through, and one right-turn lane, or similar operational improvements to the satisfaction of the County Public Works Director. Additional minor traffic signal, striping, and signage modifications may be required for implementation of these improvements. This mitigation measure requires County approval and coordination.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan and Engineer's Estimate of Probable Cost	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	for review and approval by the County. The Applicant shall pay its fair share fees to the County prior to the issuance of an occupancy or building permit for Madonna Froom Ranch development to fund implementation of the future intersection improvements. **Monitoring.** The City shall verify that the Applicant provides the required design plans and contributes an appropriate fair share as approved by the County in accordance to the approved development phase. ***MM TRANS-26*** *The Project Applicant shall pay its fair share fees to fund striping modifications to extend the northbound left-turn pocket at the LOVR/Royal Way intersection to 150 feet, and to optimize the traffic signal timings along the LOVR corridor between Descanso Street and South Higuera Street. This mitigation measure requires Caltrans approval and coordination.* **Plan Requirements and Timing.** Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City. **Monitoring.** The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements. ***MM TRANS-27*** *In coordination with the City, the Project Applicant shall pay its fair share fees to fund the implementation of Lead Pedestrian Intervals for each pedestrian crossing phase at the LOVR/Calle Joaquin intersection.* **Plan Requirements and Timing.** Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City. **Monitoring.** The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements. ***MM TRANS-28*** *The Project Applicant shall pay its fair share fees to fund the extension of the southbound left-turn pocket storage at the South Higuera Street/Tank Farm Road intersection to 300 feet.* **Plan Requirements and Timing.** Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City. **Monitoring.** The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements.	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	MM TRANS-29 *The Project Applicant shall pay its fair share fee to the City to fund the extension of the westbound right-turn pocket storage at the Madonna Road/Oceanaire Drive intersection to 200 feet. This may require replacement of the existing culvert on Madonna Road east of Oceanaire Drive.* **Plan Requirements and Timing.** Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City. **Monitoring.** The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements. ***MM TRANS-30*** *The Project Applicant shall coordinate and fund the City to modify the traffic signal phasing and timing plans at the Madonna Road/Dalidio Drive intersection to provide an eastbound right-turn overlap phase concurrent with the northbound left-turn phase. The Applicant shall be responsible for implementation prior to development of Madonna Froom Ranch or fair share contribution if constructed sooner by others.* **Plan Requirements and Timing.** Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. The proposed improvements shall be completed prior to the issuance of an occupancy permit for Madonna Froom Ranch development. **Monitoring.** The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.	
3.14 Utilities and Energy Conservation		
UT-1. The Project would require the expansion of utility infrastructure to serve new development, including water, sewer, natural gas, and electricity into the site; the construction of which could cause environmental effects.	***MM AQ-1*** *A Construction Activity Management Plan (CAMP) shall be included as part of Project grading and building plans and shall be submitted to SLO County APCD and to the City for review and approval prior to the start of construction. The plan shall include but not be limited to the following elements:* *7. A Dust Control Management Plan that encompasses the following dust control measures:* • *Reduce the amount of disturbed area where possible;* • *Water trucks or sprinkler trucks shall be used during construction to keep all areas of vehicle movement damp enough to prevent dust*	Less than Significant with Mitigation

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	from leaving the site and from exceeding the APCD's limit of 20 percent opacity for greater than 3 minutes in any 60-minute period. At a minimum, this would require twice-daily applications. Increased watering frequency would be required when wind speeds exceed 15 miles per hour (mph). Reclaimed water or the onsite water well (non-potable) shall be used when possible. The contractor or builder shall consider the use of a SLO County APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control; • *All dirt stock-pile areas shall be sprayed daily as needed;* • *Permanent dust control measures identified in the approved Project revegetation and landscape plans of any development within the Specific Plan area should be implemented as soon as possible following completion of any soil disturbing activities;* • *Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;* • *All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by SLO County APCD;* • *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;* • *Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;* • *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least 2 feet of freeboard in accordance with California Vehicle Code Section 23114;* • *Designate access points and require all employees, subconsultants, and others to use them. Install and operate a "track-out prevention device" where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can be any device or combination of devices that are effective at preventing track-out, located at the point of intersection of any*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	unpaved area and a paved road. If utilized, rumble strips or steel plate devices shall be cleaned periodically. If paved roadways accumulate tracked-out soils, the track-out prevention device shall be modified or replaced to prevent track-out; • *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;* • *All of these fugitive dust mitigation measures shall be shown on grading and building plans; and* • *The contractor or builder shall designate a person or persons to monitor the fugitive dust control 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 holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to SLO County APCD Compliance Division prior to the start of any grading, earthwork or demolition.* 8. *Implementation of the following BACT for diesel-fueled construction equipment. The BACT measures shall include:* • *Use of at least Tier 3 off-road equipment and 2010 on-road compliant engines;* • *Repowering equipment with the cleanest engines available; and* • *Installing California Verified Diesel Emission Control Strategies.* 9. *Implementation of the following standard air quality measures to minimize diesel emissions:* • *Maintain all construction equipment in proper tune according to manufacturer's specifications;* • *Fuel all off-road and portable diesel-powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).* • *Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines and comply with the State On-Road Regulation;* • *Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance; • *On- and off-road diesel equipment shall not be allowed to idle for more than five minutes. Signs shall be posted in the designated queuing areas to remind drivers and operators of the five-minute idling limit;* • *Diesel idling within 1,000 feet of sensitive receptors is not permitted;* • *Staging and queing areas shall not be loated within 1,000 feet of sensitive receptors;* • *Electrify equipment when feasible;* • *Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,* • *Use alternatively fueled construction equipment onsite where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.* 10. *Tabulation of on- and off-road construction equipment (age, horse-power, and miles and/or hours of operation);* 11. *Schedule construction truck trips during non-peak hours (as determined by the Public Works Director) to reduce peak hour emissions; and* 12. *Limit the length of the construction work-day period to 8 hours max.* **Plan Requirements and Timing.** The CAMP shall be submitted to SLO County APCD and to the City for review and approval prior to issuance of grading and construction permits and recordation of the final VTM. All required fugitive dust and emissions control measures shall be noted on all grading and building plans and all construction activities shall adhere to measures throughout all grading, hauling, and construction activities. The contractor or builder shall provide the City Community Development Director and SLO County APCD with the name and contact information for an assigned onsite dust and emissions control monitor(s) who has the responsibility to: a) assure all dust control requirements are complied with including those covering weekends and holidays, b) order increased watering as necessary to prevent transport of dust offsite, and c) attend the pre-construction meeting. The dust monitor shall be designated prior to grading permit issuance for each Project phase. The dust control components apply	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	from the beginning of any grading or construction throughout all development activities until occupancy is issued and landscaping is successfully installed. **Monitoring.** City staff shall ensure measures are depicted on the CAMP and all submitted grading and construction plans for each Project phase. The Applicant shall be responsible for compliance during construction activities, including holidays or weekends when work may not be in progress. City grading and building inspectors shall spot check and ensure compliance onsite. ***MM BIO-1*** *The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:* *2) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:* *j) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.* *k) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the construction period for each phase of development. Fencing and signage shall be removed following completion of construction.* *l) During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	m) All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB. *n) All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.* *o) The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.* *p) Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.* *q) All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches shall be inspected at the beginning of each work day to ensure that no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work.* *r) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department. **Monitoring.** The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. ***MM CR-3*** *Prior to issuance of grading or building permits, and recordation of the final map, an Archaeological Monitoring Plan (AMP) shall be prepared. The AMP should include, but not be limited to, the following:* • *A list of personnel involved in the monitoring activities;* • *Description of Native American involvement;* • *Description of how the monitoring shall occur;* • *Description of location and frequency of monitoring (e.g., full time, part time, spot checking);* • *Description of what resources are expected to be encountered;*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Description of circumstances that would result in the halting of work at the project site;* • *Description of procedures for halting work on the site and notification procedures;* • *Description of monitoring reporting procedures; and* • *Provide specific, detailed protocols for what to do in the event of the discovery of human remains.* **Plan Requirements and Timing.** The AMP shall be prepared by a City-approved archaeologist prior to issuance of grading or building permits and recordation of the final map. **Monitoring.** The City shall ensure the AMP is prepared by a City-approved archaeologist and consistent with City Archeological Resource Preservation Program Guidelines. ***MM CR-4*** *The Applicant shall retain a City-approved archaeologist and local Native American observer to monitor Project-related ground-disturbing activities that have the potential to encounter previously unidentified archaeological resources, as outlined in the AMP prepared to satisfy MM CR-1. Archaeological and tribal monitoring may cease only if the City-approved archaeologist determines in coordination with the Applicant, Community Development Director, and the Native American monitor that Project activities do not have the potential to encounter and/or disturb unknown resources.* **Plan Requirements and Timing.** The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with a qualified archaeologist and Native American monitor. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards, consistent with the City's Archeological Resource Preservation Guidelines. **Monitoring.** City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery. ***MM CR-5*** *In the event of any inadvertent discovery of prehistoric archaeological resources, including but not limited to stone, bone, glass,*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	ceramics, fossils, wood, or shell artifacts, or historic-period archaeological resources, all work within 100 feet of the discovery shall immediately cease (or greater or lesser distance as needed to protect the discovery and determined in the field by the City-approved archaeologist). The Applicant and/or contractor shall immediately notify the City Community Development Department. The City-approved archaeologist shall evaluate the significance of the discovery pursuant to City Archaeological Resource Preservation Program Guidelines prior to resuming any activities that could impact the site/discovery. If the City-approved archaeologist or Native American monitor determine that the find may qualify for listing in the CRHR or as a tribal cultural resource, the site shall be avoided or shall be subject to a Phase II or III mitigation program consistent with City Archeological Resource Preservation Program Guidelines and funded by the Applicant. Work shall not resume until authorization is received from the City. **Plan Requirements and Timing.** The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with identified Project archaeologist and Native American monitor. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards, consistent with the Archeological Resource Preservation Program Guidelines. **Monitoring.** City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery. ***MM HAZ-1*** *The Applicant shall prepare and submit a Construction Impact Management Plan to the City of San Luis Obispo Fire Department (SLOFD) prior to the issuance of grading permits. The Plan shall list measures taken during construction to reduce the potential for brush or grass fires from use of heavy equipment, welding, vehicles with catalytic converters, and other potential activities. The Plan shall include SLOFD recommended measures including, but not limited to the following:* • *All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle;*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *In coordination with SLOFD, personnel shall be briefed on the dangers of wildfire and be able to respond accordingly should the need arise;* • *Onsite supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire;* • *All dead and decadent vegetation immediately surrounding the development area shall be removed to a minimum perimeter of 30 feet;* • *Smoking shall only occur in a designated area;* • *A water tender will be available on each construction site during the entire phase of construction; and* • *A water tender operator shall be available onsite during all construction and remain onsite a minimum of 30 minutes after all construction has finished for the day.* **Plan Requirements and Timing.** The Applicant shall prepare a Construction Impact Management Plan in coordination with SLOFD, the San Luis Obispo County Fire Department, and the City, and submit the Plan to the SLOFD for approval prior to the issuance of grading permits. Provisions for fire protection shall be restated on all grading and building plans. Fire protection measures shall be implemented throughout construction and draw upon the CALFIRE and San Luis Obispo County Fire Department Strategic Fire Plan. The name and telephone number of an onsite supervisor shall be provided to SLOFD prior to commencement of construction or grading activities. **Monitoring.** The SLOFD shall review the Construction Impact Management Plan and provide recommended measures as necessary. The City permit processing planner shall ensure measures are integrated into the final grading and building plans prior to permit approval. City monitoring staff shall spot check for compliance during construction for each phase of development. ***MM HYD-1*** *Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.* **Plan Requirements and Timing.** The NOI shall be submitted for review and approval to the SWRCB. The City will verify that a Waste Discharge Identification (WDID) number is assigned by the Board prior to the issuance of grading permits for construction activities. The NOI shall address discharge	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	during all phases of development of the site until all disturbed areas are permanently stabilized. **Monitoring.** The City will confirm WDID number assignment prior to approval of the grading permit(s). City monitoring staff will periodically inspect the site during construction to ensure compliance. ***MM HYD-2*** *For each phase of construction, the Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of 1 acre, or where the area of disturbance is less than 1 acre but is part of the Project's plan of development that in total disturbs 1 or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to stormwater and shall include specific BMPs to control the discharge of material from the site, including, but not limited to:* • *Temporary detention basins, straw bales, sand bagging, mulching, erosion control blankets, silt fencing, and soil stabilizers shall be used.* • *Sufficient physical protection and pollution prevention measures to prevent sedimentation, siltation, and/or debris from entering the Calle Joaquin wetlands.* • *Soil stockpiles and graded slopes shall be covered after 14 days of inactivity and 24 hours prior to and during inclement weather conditions.* • *Fiber rolls shall be placed along the top of exposed slopes and at the toes of graded areas to reduce surface soil movement, as necessary.* • *A routine monitoring plan shall be implemented to ensure success of all onsite erosion and sedimentation control measures.* • *Dust control measures shall be implemented to ensure success of all onsite activities to control fugitive dust.* • *Streets surrounding the Project site shall be cleaned daily or as necessary.* • *BMPs shall be strictly followed to prevent spills and discharges of pollutants onsite (material and container storage, proper trash disposal, construction entrances, etc.).*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Sandbags, or other equivalent techniques, shall be utilized along graded areas to prevent siltation transport to the surrounding areas.* • *Additional BMPs shall be implemented for any fuel storage or fuel handling that could occur onsite during construction. The SWPPP must be prepared in accordance with the guidelines adopted by the SWRCB. The SWPPP shall be submitted to the City along with grading/development plans for review and approval. The Applicant shall file a Notice of Completion for construction of the development, identifying that pollution sources were controlled during the construction of the Project and implementing a closure SWPPP for the site.* **Plan Requirements and Timing.** The Applicant shall prepare a SWPPP that includes the above and any additional required BMPs addressing each phase of construction and timing. The SWPPP and notices shall be submitted to the SWRCB under their Stormwater Multi-Application, Reporting, and Tracking System (SMARTS). The SWPPP shall be designed to address erosion and sediment control during all phases of development of the site until all disturbed areas are permanently stabilized. The development plans submitted to the City shall include and reflect the erosion control plan and BMPs submitted to the State. **Monitoring.** City monitoring staff shall periodically inspect the site for compliance with the SWPPP during grading to monitor runoff and after conclusion of grading activities. A Qualified SWPPP Practitioner (QSP) will be retained by the developer for overall management and reporting responsibility regarding the SWPPP and documentation under SMARTS in accordance with their permitting requirement. The Applicant will keep a copy of the SWPPP on the Project site during grading and construction **activities**. ***MM NO-1*** *Except for emergency repair of public service utilities, or where an exception is issued by the Community Development Department, no operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work shall occur between the hours of 7:00 PM and 7:00 AM, or any time on Sundays, holidays, or after sunset, such that the sound creates a noise disturbance that exceeds 75 dBA for single-family residential uses, 80 dBA for multi-family residential uses, and 85 dBA for mixed residential/commercial land uses, as shown in Table 3.10-9 and Table 3.10-10, across a residential or commercial property line.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Plan Requirements and Timing. Plans submitted for grading and building permits shall clearly indicate construction hours and shall be submitted to the City for approval prior to grading and building permit issuance for each Project phase. To ensure response to and resolution of potential public noise nuisance complaints, plans submitted for grading and building permits shall clearly identify the Project's construction manager (or similar) and 24-hour contact information. At the pre-construction meeting required for all phases of grading and development, all construction workers shall be briefed on restricted construction hour limitations. A workday schedule shall be adhered to for the duration of construction for all phases. **Monitoring.** The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules and respond to complaints. ***MM NO-2*** *For all construction activity at the Project site, noise attenuation techniques shall be employed to ensure that noise levels are maintained within levels allowed by the City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control). Such techniques shall include:* • *Sound blankets on noise-generating equipment.* • *Stationary construction equipment that generates noise levels above 65 dBA at the Project boundaries shall be shielded with a barrier that meets a sound transmission class (a rating of how well noise barriers attenuate sound) of 25.* • *All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.* • *Temporary sound barriers shall be constructed between construction sites and affected uses.* **Plan Requirements and Timing.** The Applicant shall designate the proposed area of operation of stationary construction equipment and depict acoustic shielding around these areas on building and grading plans. Equipment and shielding shall be installed prior to construction and remain in the designated location throughout construction activities. Construction plans shall identify Best Management Practices (BMPs) to be implemented during construction. All construction workers shall be briefed at a pre-construction meeting on how, why, and where BMP measures are to be implemented. BMPs shall be identified and described for submittal to the City for review and approval prior to building or grading permit issuance. BMPs shall be adhered to for the duration of the Project. Construction plans shall include truck routes and shall	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	be submitted to the City prior to grading and building permit issuance for each Project phase. **Monitoring.** City staff shall ensure compliance throughout all construction phases. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules. ***MM NO-3*** *The Applicant shall inform landowners and business operators at properties within 300 feet of the Project site of proposed construction timelines and noise complaint procedures to minimize potential annoyance or nuisance complaints related to construction noise no less than 10 days prior to initiation of any grading and construction activity for any Phase. The notice shall include the name and contact information of the Project's construction manager and contact information for the City's Community Development Department.* **Plan Requirements and Timing.** The Applicant shall provide and post signs stating these restrictions and the Project's construction manager's name and contact information at construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction of any Phase. The construction schedule and mailing list shall be submitted to the City Community Development Department 10 days prior to initiation of any earth movement. **Monitoring.** City staff shall ensure compliance throughout all construction phases. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules and respond to complaints. ***MM NO-4*** *Prior to approval of park and residential development within the Madonna Froom Ranch area of the Specific Plan, the Applicant shall submit a project-specific noise study that evaluates the potential for noise exposure from adjacent commercial uses and identifies project-specific design measures to attenuate exterior and interior noise consistent with the City's Noise Element and Noise Ordinance. If necessary to reduce noise within acceptable levels, noise reduction measures may include a planted earthen berm, sound wall, or similar noise attenuating feature along the site boundary with Irish Hills Plaza, consistent with Policy 1.8.2 of the Noise Element.* **Plan Requirements and Timing.** The Applicant shall incorporate the above mitigation within the final FRSP prior to adoption. **Monitoring**. City staff shall ensure compliance with required site design and noise reduction measures within the final FRSP prior to adoption and shall	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	confirm any required noise attenuation measures are shown on construction plans prior to issuance of building permits. ***MM TRANS-1*** *The Applicant shall prepare a Construction Transportation Management Plan for all phases of the Project for review and approval by the City prior to issuance of grading or building permits to address and manage traffic during construction. The Plan shall be designed to:* • *Prevent traffic impacts on the surrounding roadway network;* • *Restrict construction staging to within the Project site;* • *Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;* • *Ensure safety for both those construction vehicles and works and the surrounding community; and* • *Prevent substantial truck traffic through residential neighborhoods.* *The Construction Transportation Management Plan shall be subject to review and approval by the Public Works Director to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:* • *Ongoing Requirements throughout the Duration of Construction:* • *A detailed Construction Transportation Management Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Plan shall include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such Plan shall be reviewed and approved by the Community Development Department and implemented in accordance with this approval.* • *Heavy haul construction vehicles and cement trucks shall not pass through Villaggio's Lower Area access roads once any of the Lower Area residences become occupied, and must utilize access from Calle Joaquin to access the Upper Terrace after that time.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Work within the public right-of-way shall be reviewed and approved by the City on a case-by-case basis based on the magnitude and type of construction activity. Work shall generally be performed between 8:30 AM and 4:00 PM. This work includes dirt hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit administered by the Building and Safety Division. Additional restrictions may be put in place by Public Works Department depending on particular construction activities and conditions.* • *Streets and equipment shall be cleaned in accordance with established Public Works requirements.* • *Trucks shall only travel on a City-approved construction route. Limited queuing may occur on the construction site itself.* • *Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.* • *Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.* *Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction:* • *The traveling public shall be advised of impending construction activities that may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Impact Mitigation Plan).* • *A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way shall be obtained.*	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	• *Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 0.25 mile.* • *Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.* • *Public Works Department approval of any haul routes for construction materials and equipment deliveries shall be obtained.* **Plan Requirements and Timing.** The Applicant shall submit the Construction Transportation Management Plan to the City for review and approval prior to issuance of grading or building permits. The Construction Transportation Management Plan shall be updated as needed to reflect changing conditions over the Project's five-year construction schedule. The Applicant shall conduct necessary construction employee training prior to the commencement of construction. The City Public Works Department, Community Development Department, Police Department, and Fire Department, and nearby residences and businesses shall be notified of the construction schedule prior to initiation of construction. The Applicant shall submit individual traffic control plans and part of encroachment permits for work within the public right-of-way. **Monitoring.** The City shall ensure compliance with the Construction Transportation Management Plan with periodic inspections of the Project site during construction. Complaints related to construction traffic at the site shall be directed to the City Public Works Department. ***MM UT-1*** *The Applicant shall amend the FRSP to require that the size, location, and alignment of all on- and offsite water supply, recycled water, wastewater, and energy infrastructure shall be subject to review and approval by the City's Public Works and Utilities Departments. The Applicant shall be responsible for constructing all required onsite and offsite utility improvements, as well as for repaving of damaged roadways.* **Plan Requirements and Timing.** The Applicant is required to implement the above standard mitigation measures prior to approval of grading and the final VTM. City staff shall ensure the above measures are incorporated into the	

Table ES-1. Project Impacts, Mitigation Measures and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
	Final FRSP and building plans prior grading and recordation of the final VTM. **Monitoring.** City staff shall ensure measures are on all Project plans. City staff shall work with the Applicant to ensure that these requirements are implemented.	
UT-2. Project-related increases in water use would increase demand for the City's potable water supply.	None Required.	Less than Significant
UT-3. Project-generated wastewater would contribute to demand for wastewater collection facilities and remaining available and planned capacity of the City's WRRF.	***MM UT-2*** *The Applicant shall pay fair share costs for replacement of the Laguna lift station or construction of capacity improvements through negotiation of a private reimbursement agreement with the City.* **Plan Requirements and Timing.** Negotiation of a private reimbursement agreement with the City will fulfil the Project's fair share financial obligation towards construction of necessary capacity improvements or replacement of the Laguna lift station. Appropriate fees shall be negotiated with the City. Payment of fees shall be required prior to issuance of building permits for each development phase. **Monitoring.** The City shall approve the private reimbursement agreement and verify that the Applicant contributes appropriate fair share fees as approved by the City.	Less than Significant with Mitigation
UT-4. The Project would generate additional solid waste for disposal at the Cold Canyon Landfill.	None Required.	Less than Significant
UT-5. The Project would result in an increase of energy consumption and requirement for additional energy resources.	None Required.	Less than Significant
3.15 Mineral Resources		
MN-1. Project implementation would result in the loss of the existing onsite red rock quarry (Froom Ranch Pit).	None Required.	Less than Significant

ES-6 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines state that an "EIR shall describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives" (Section 15126.6). Several alternatives to the proposed Project, including the No Project Alternative and Minimum LUE-Compliant Project Alternative, were considered. Each alternative considers the ability of a particular alternative to substantially reduce or eliminate the Project's significant environmental impacts, while still meeting basic Project objectives.

This EIR discusses alternatives to the proposed Project, including the No Project Alternative, Alternative 1 – Clustered Development Below the 150-foot Elevation Alternative (the Actionable Alternative), Alternative 2 – Residential Development Project Alternative, Alternative 3 – Minimum LUE-Compliant Project Alternative, and alternatives that were considered and discarded. Each of these considers the ability of a particular alternative to substantially reduce or eliminate the Project's significant environmental impacts, while still meeting basic Project objectives. Consistent with CEQA Guidelines Section 15126.6(c), a range of alternatives that do not provide any environmental advantages compared to the proposed Project, meet key Project objectives, nor achieve overall agency policy goals were eliminated from further consideration, including retention of agricultural uses on site, increasing housing development, majorly reducing the Project, and developing a business park.

The alternatives analyzed in the EIR include:

No Project Alternative:

Under the No Project Alternative, no development or annexation of the site to the City would occur, and the site would remain designated for agricultural and commercial uses by the County. The site would continue to be designated as SP-3 of the City General Plan and remain within the City's Sphere of Influence, and all General Plan LUE requirements for SP-3 for potential future development would remain applicable. No new development or construction would occur under this alternative and the site would continue to be used as grazing land and as a staging and operations site for the existing construction company. Froom Creek would not be realigned or enhanced and no changes to existing stormwater conveyance and management systems would occur. The existing wetlands and onsite stormwater

detention basin would remain. All structures associated with the Froom Ranch Dairy complex would remain in place, would not be rebuilt or restored, and would continue to be utilized for construction business operations (offices, equipment storage, etc.). Daily vehicle trips would remain low/negligible associated with limited employee trips from the existing construction business onsite.

Alternative 1 – Clustered Development Below the 150-foot Elevation Line (the Actionable Alterative):

Alternative 1 would include a major reconfiguration of the proposed land use plan and redesign of key Project elements specifically to cluster proposed land uses into a smaller development footprint, thereby reducing environmental impacts identified in the EIR. Alternative 1 represents an alternative largely designed by the Project Applicant (see Appendix C for a conceptual design plan that informed this alternative analysis) with three key changes to respond to the EIR's impact analysis for the Project, as discussed further below. This alternative is analyzed at a high level of detail to allow City adoption of this alternative (if selected). Alternative 1 would include three primary features that differ from the Project to substantially reduce identified Project impacts: 1) consistency with the 2014 General Plan LUE policies for restricting urban development below the 150-foot elevation line; 2) clustered development within the Lower Area of Villaggio and Madonna Froom Ranch with increases in building density and height; and 3) increased emergency access.

Alternative 2 – Residential Development Project Alternative:

Alternative 2 would include a major reconfiguration of the proposed land use plan and redesign of key Project elements similar to Alternative 1, including substantially increased clustering of development within Madonna Froom Ranch and the Lower Area of Villaggio to reduce environmental impacts identified in the EIR. This alternative would continue to provide a Life Plan Community and new multi-family neighborhood; however, unlike the Project and Alternative 1, Alternative 2 would eliminate commercial uses on site. Instead, Alternative 2 would support 178 multi-family residential units (four more than proposed under the Project or Alternative 1), 404 senior independent living units, 51 beds in residential health care facilities, and 3.3 acres of public parkland. Four primary features of this alternative are intended to substantially reduce identified Project impacts: 1) no commercial development within Madonna Froom Ranch; 2) consistency with the

2014 General Plan LUE policies for restricting urban development below the 150-foot elevation line; 3) clustered development within the Lower Area of Villaggio and Madonna Froom Ranch with increases in building density and height; and 4) increased emergency access.

Alternative 3 – Minimum LUE-Compliant Project Alternative:

Alternative 3 would be a low-build alternative with the most restricted area for development and a major redesign of key Project elements. Alternative 3 would substantially reduce the development capacity of the Project site to the minimum development allowed by the General Plan LUE. This alternative would be most closely aligned with the existing General Plan LUE performance standards and minimum development policy framework for the Project site with regard to the land use mix and allowable development levels. Alternative 3 would support 200 multiple family residential units, 50,000 sf of commercial uses and 3.0 acres of public facilities, but would not support development of a Life Plan Community. This development would be clustered in already-disturbed areas of the Project site on the northern side and below the 150-foot elevation line, which would avoid or minimize a range of environmental impacts identified in this EIR. Alternative 3 would reduce or change Project impacts through: 1) reducing residential development to 200 units consistent with the minimum development performance standards of the LUE SP-3, Madonna on LOVR Specific Plan Area; 2) reducing commercial development to 50,000 sf consistent with the minimum development performance standards of the LUE SP-3; 3) no development of the Villaggio Life Plan Community; 4) retention of the existing Froom Creek channel; 5) consistency with the 2014 General Plan LUE policies for restricting urban development below the 150-foot elevation line; and 6) increased emergency access.

Impacts associated with each of these alternatives is summarized in Table ES-2.

ES-7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table ES-2 summarizes the environmental impacts associated with the proposed Project and the analyzed alternatives. The *No Project Alternative* would involve no development on site and, as a result, would have the fewest impacts and would be environmentally superior to the Project. However, the No Project Alternative would not achieve the Project objectives. Further, CEQA Guidelines Section 15126.6 states that if the environmentally

superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

Alternative 1 is considered to be the environmentally superior alternative since impacts would be reduced for many issue areas and all Project objectives would be met, as described below. Alternative 1 would substantially reduce impacts as compared to the Project in the following resource areas: aesthetics and visual resources; biological resources; cultural and tribal cultural resources; hazards, hazardous materials, and wildfires; and land use and planning. For instance, avoidance of development within the Upper Terrace area of Villaggio would greatly eliminate impacts to biological resources, including serpentine native bunchgrass grassland habitats, and would minimize impacts to springs, seeps, and wetland habitats along Drainages 1, 2, and 3, as well as associated impacts to 12 special status plant species. Despite substantial reductions to many impacts under Alternative 1 as compared to the Project, Alternative 1 would continue to result in significant and unavoidable impacts to air quality and greenhouse gases; biological resources; historic resources; hazards, hazardous materials, and wildfires; land use and planning; noise; and transportation and traffic.

Table ES-2. Impact Comparison of Alternatives to the Proposed Project

Issue Area	No Project	Alternative 1 – Clustered Development Below the 150-Foot Elevation Alternative (Actionable Alternative)	Alternative 2 – Residential Development Project Alternative	Alternative 3 – Minimum LUE-Compliant Project Alternative
Aesthetics and Visual Resources	Less	Less	Less	Less
Agricultural Resources	Less	Similar	Similar	Less
Air Quality and GHG Emissions	Less	Similar	Similar	Less
Biological Resources	Less	Less	Less	Less
Cultural and Tribal Resources	Greater	Less	Less	Less
Geology and Soils	Less	Similar	Similar	Similar
Hazards, Hazardous Materials, and Wildfires	Less	Less	Less	Less
Hydrology and Water Quality	Less	Similar	Similar	Less
Land Use and Planning	Less	Less	Less	Less
Noise	Less	Less	Less	Less
Population and Housing	Greater	Similar	Similar	Less
Public Services	Less	Similar	Similar	Less
Transportation and Traffic	Less	Similar	Similar	Less
Utilities and Energy Conservation	Less	Similar	Similar	Less
Mineral Resources	Less	Similar	Similar	Similar
Project Objectives Met?	No	Yes	Partially	Partially

TABLE OF CONTENTS

Page

ACRONYMS AND ABBREVIATIONS XIV

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1-1
1.1 OVERVIEW 1-1
1.2 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES 1-2
1.3 PURPOSE AND LEGAL AUTHORITY 1-3
1.4 EIR PREPARATION 1-5
1.5 SCOPE OF THE EIR 1-6
1.5.1 Areas of Known Public Controversy 1-8
1.6 ORGANIZATION OF THE EIR 1-9

2.0 PROJECT DESCRIPTION 2-1
2.1 INTRODUCTION 2-1
2.1.1 Overview of Proposed FRSP 2-1
2.1.2 Project Applicant Team 2-3
2.2 EXISTING SETTING 2-3
2.2.1 Project Site Boundaries 2-3
2.2.2 Project Vicinity 2-6
2.2.3 Existing Project Site Characteristics 2-8
2.3 PROJECT OBJECTIVES 2-11
2.4 PROJECT OVERVIEW 2-12
2.4.1 Proposed Land Use Plan 2-14
2.4.1.1 Villaggio Life Plan Community 2-17
2.4.1.2 Madonna Froom Ranch 2-22
2.4.1.3 Proposed Open Space 2-23
2.4.2 Project Design 2-24
2.4.2.1 Architectural Design 2-24
2.4.2.2 Sustainability Initiatives 2-25
2.4.2.3 Retaining Walls 2-26
2.4.2.4 Relocation and Reconstruction of Historic Structures 2-27
2.4.2.5 Security Features 2-28
2.4.3 Circulation 2-28
2.4.3.1 Los Osos Valley Road Improvements 2-32
2.4.3.2 Primary Access 2-32
2.4.3.3 Project Roadway Network 2-33
2.4.3.4 Bicycle and Pedestrian Facilities 2-37
2.4.3.5 Parking 2-38
2.4.3.6 Transit Improvements 2-39
2.4.4 Utilities and Services 2-39
2.4.4.1 Water Supply Infrastructure 2-39
2.4.4.2 Sanitary Sewer Infrastructure 2-42

Page

2.4.4.3 Electricity, Gas, Telephone, Cable, and Solid Waste Facilities 2-42
2.4.4.4 Stormwater Management System and Froom Creek Realignment 2-44
2.4.4.5 Froom Creek Realignment and Reconstruction 2-45
2.4.4.6 Stormwater Detention Features 2-48
2.4.4.7 Point- and Non-Point Source Water Quality Treatment 2-49
2.4.4.8 Headwalls and Culverts for Drainage Crossings 2-51
2.5 REQUIRED APPROVALS 2-52
2.6 PROJECT CONSTRUCTION 2-54
2.6.1 Construction Phasing and Implementation 2-54
2.6.2 Construction Activities 2-56
2.6.2.1 Site Preparation, Demolition and Grading 2-56
2.6.2.2 Infrastructure Improvements 2-58
2.6.2.3 Building Construction 2-58

3.0 ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION MEASURES 3-1
3.0.1 Impact Classification 3-1
3.0.2 Mitigation Measures 3-2
3.0.3 Cumulative Impact Analysis 3-2
3.1 AESTHETICS AND VISUAL RESOURCES 3.1-1
3.1.1 Existing Setting 3.1-1
3.1.1.1 General Visual Character 3.1-1
3.1.1.2 Visual Character of the Project Vicinity 3.1-2
3.1.1.3 Visual Condition of the Project Site 3.1-4
3.1.1.4 Scenic Resources 3.1-6
3.1.1.5 Light and Glare 3.1-11
3.1.2 Regulatory Setting 3.1-11
3.1.2.1 State 3.1-11
3.1.2.2 Local 3.1-12
3.1.3 Environmental Impact Analysis 3.1-18
3.1.3.1 Thresholds of Significance 3.1-18
3.1.3.2 Impact Assessment Methodology 3.1-19
3.1.3.3 Project Impacts and Mitigation Measures 3.1-24
3.1.3.4 Cumulative Impacts 3.1-39
3.2 AGRICULTURAL RESOURCES 3.2-1
3.2.1 Environmental Setting 3.2-1
3.2.1.1 Regional Setting 3.2-1
3.2.1.2 Project Site 3.2-2
3.2.2 Regulatory Setting 3.2-6
3.2.2.1 State 3.2-6
3.2.2.2 Local 3.2-8
3.2.3 Environmental Impact Analysis 3.2-12
3.2.3.1 Thresholds of Significance 3.2-12

Page

3.2.3.2 Impact Assessment Methodology 3.2-13
3.2.3.3 Project Impacts and Mitigation Measures 3.2-14
3.2.3.4 Cumulative Impacts 3.2-19
3.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS 3.3-1
3.3.1 Environmental Setting 3.3-1
3.3.1.1 Regional Climate and Meteorology 3.3-1
3.3.1.2 Greenhouse Gases and Global Climate Change 3.3-2
3.3.1.3 Regional Air Quality 3.3-3
3.3.1.4 Regional Emissions 3.3-4
3.3.1.5 Emissions in the Vicinity of the Project Site 3.3-6
3.3.1.6 Sensitive Receptors 3.3-8
3.3.1.7 Odors/Nuisance Emissions 3.3-9
3.3.2 Regulatory Setting 3.3-9
3.3.2.1 Federal 3.3-9
3.3.2.2 State 3.3-10
3.3.2.3 Local 3.3-15
3.3.3 Environmental Impact Analysis 3.3-17
3.3.3.1 Thresholds of Significance 3.3-17
3.3.3.2 Impact Assessment Methodology 3.3-22
3.3.3.3 Project Impacts and Mitigation Measures 3.3-26
3.4 BIOLOGICAL RESOURCES 3.4-1
3.4.1 Environmental Setting 3.4-1
3.4.1.1 Regional Biological Resources Setting 3.4-1
3.4.1.2 Project Site Overview 3.4-2
3.4.1.3 Vegetation and Habitat Types/Communities 3.4-7
3.4.1.4 Critical Habitat 3.4-14
3.4.1.5 Special Status Species 3.4-15
3.4.1.6 Additional Common Wildlife Species 3.4-25
3.4.1.7 Tree Inventory 3.4-26
3.4.2 Regulatory Setting 3.4-27
3.4.2.1 Federal 3.4-27
3.4.2.2 State 3.4-29
3.4.2.3 Local 3.4-29
3.4.3 Environmental Impact Analysis 3.4-34
3.4.3.1 Thresholds of Significance 3.4-34
3.4.3.2 Impact Assessment Methodology 3.4-35
3.4.3.3 Project Impacts and Mitigation Measures 3.4-37
3.4.3.4 Cumulative Impacts 3.4-86
3.5 CULTURAL AND TRIBAL CULTURAL RESOURCES 3.5-1
3.5.1 Environmental Setting 3.5-1
3.5.1.1 Prehistoric and Ethnohistoric Setting 3.5-1
3.5.1.2 Historical Setting 3.5-2
3.5.1.3 Project Site History 3.5-3
3.5.1.4 Documented Archaeological and Historical Resources 3.5-4
3.5.2 Regulatory Setting 3.5-14
3.5.2.1 Federal 3.5-14

Page

3.5.2.2 State 3.5-14
3.5.2.3 Local 3.5-16
3.5.3 Environmental Impact Analysis 3.5-19
3.5.3.1 Thresholds of Significance 3.5-19
3.5.3.2 Impact Assessment Methodology 3.5-19
3.5.3.3 Project Impacts, Mitigation Measures, and Residual Impacts 3.5-23
3.5.3.4 Cumulative Impacts 3.5-39
3.6 GEOLOGY AND SOILS 3.6-1
3.6.1 Environmental Setting 3.6-1
3.6.1.1 Regional Setting 3.6-1
3.6.1.2 Site Topography 3.6-2
3.6.1.3 Project Site Soils and Formational Units 3.6-2
3.6.1.4 Geologic Hazards 3.6-3
3.6.1.5 Paleontological Resources 3.6-10
3.6.2 Regulatory Setting 3.6-12
3.6.2.1 Federal 3.6-12
3.6.2.2 State 3.6-13
3.6.2.3 Local 3.6-14
3.6.3 Environmental Impact Analysis 3.6-16
3.6.3.1 Thresholds of Significance 3.6-16
3.6.3.2 Impact Assessment Methodology 3.6-17
3.6.3.3 Project Impacts and Mitigation Measures 3.6-18
3.6.3.4 Cumulative Impacts 3.6-29
3.7 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE 3.7-1
3.7.1 Environmental Setting 3.7-1
3.7.1.1 Regional Setting 3.7-1
3.7.1.2 Project Site 3.7-1
3.7.1.3 Wildfire Risk 3.7-2
3.7.1.4 Hazardous Materials 3.7-8
3.7.1.5 Airport Safety Hazards 3.7-9
3.7.2 Regulatory Setting 3.7-12
3.7.2.1 Federal 3.7-12
3.7.2.2 State 3.7-13
3.7.2.3 Local 3.7-16
3.7.3 Environmental Impact Analysis 3.7-20
3.7.3.1 Thresholds of Significance 3.7-20
3.7.3.2 Impact Assessment Methodology 3.7-22
3.7.3.3 Project Impacts and Mitigation Measures 3.7-23
3.7.3.4 Cumulative Impacts 3.7-39
3.8 HYDROLOGY AND WATER QUALITY 3.8-1
3.8.1 Environmental Setting 3.8-1
3.8.1.1 Regional Hydrology 3.8-1
3.8.1.2 Project Site Hydrology 3.8-6
3.8.2 Regulatory Setting 3.8-13
3.8.2.1 Federal 3.8-13

Page

3.8.2.2 State 3.8-14
3.8.2.3 Local 3.8-16
3.8.3 Environmental Impact Analysis 3.8-21
3.8.3.1 Thresholds of Significance 3.8-21
3.8.3.2 Impact Assessment Methodology 3.8-22
3.8.3.3 Project Impacts and Mitigation Measures 3.8-24
3.9 LAND USE AND PLANNING 3.9-1
3.9.1 Environmental Setting 3.9-1
3.9.1.1 Regional Land Use and Planning 3.9-1
3.9.1.2 Project Site Land Uses and Planning 3.9-4
3.9.1.3 Easements within Project Site 3.9-5
3.9.2 Regulatory Setting 3.9-7
3.9.2.1 State 3.9-7
3.9.2.2 Regional 3.9-8
3.9.2.3 Local 3.9-11
3.9.3 Consistency with Plans and Policies 3.9-15
3.9.4 Environmental Impact Analysis 3.9-58
3.9.4.1 Thresholds of Significance 3.9-58
3.9.4.2 Impact Assessment Methodology 3.9-58
3.9.4.3 Project Impacts and Mitigation Measures 3.9-59
3.9.4.4 Cumulative Impacts 3.9-65
3.10 NOISE 3.10-1
3.10.1 Environmental Setting 3.10-1
3.10.1.1 Fundamentals of Sound and Environmental Noise 3.10-1
3.10.1.2 Existing Noise Environment 3.10-5
3.10.1.3 Sensitive Receptors 3.10-11
3.10.2 Regulatory Setting 3.10-12
3.10.2.1 Federal 3.10-12
3.10.2.2 State 3.10-12
3.10.2.3 Local 3.10-13
3.10.3 Environmental Impact Analysis 3.10-18
3.10.3.1 Thresholds of Significance 3.10-18
3.10.3.2 Impact Assessment Methodology 3.10-18
3.10.3.3 Project Impacts and Mitigation Measures 3.10-24
3.10.3.4 Cumulative Impacts 3.10-37
3.11 POPULATION AND HOUSING 3.11-1
3.11.1 Environmental Setting 3.11-1
3.11.1.1 Population 3.11-1
3.11.1.2 Employment 3.11-3
3.11.1.3 Housing 3.11-6
3.11.2 Regulatory Setting 3.11-13
3.11.2.1 State 3.11-13
3.11.2.2 Local 3.11-14
3.11.3 Environmental Impact Analysis 3.11-18
3.11.3.1 Thresholds of Significance 3.11-18
3.11.3.2 Impact Assessment Methodology 3.11-18

Page

3.11.3.3 Project Impacts and Mitigation Measures 3.11-19
3.11.3.4 Cumulative Impacts 3.11-24
3.12 PUBLIC SERVICES AND RECREATION 3.12-1
3.12.1 Environmental Setting 3.12-1
3.12.1.1 Police Services 3.12-3
3.12.1.2 Fire Protection Services 3.12-4
3.12.1.3 Schools 3.12-7
3.12.1.4 Recreation and Parks 3.12-8
3.12.2 Regulatory Setting 3.12-9
3.12.2.1 Federal 3.12-9
3.12.2.2 State 3.12-9
3.12.2.3 Local 3.12-10
3.12.3 Environmental Impact Analysis 3.12-12
3.12.3.1 Thresholds of Significance 3.12-12
3.12.3.2 Impact Assessment Methodology 3.12-13
3.12.3.3 Project Impacts and Mitigation Measures 3.12-15
3.12.3.4 Cumulative Impacts 3.12-25
3.13 TRANSPORTATION AND TRAFFIC 3.13-1
3.13.1 Environmental Setting 3.13-1
3.13.1.1 Existing Roadway Network 3.13-2
3.13.1.2 Existing Pedestrian Facilities 3.13-6
3.13.1.3 Existing Bicycle Facilities 3.13-6
3.13.1.4 Existing Transit Facilities 3.13-7
3.13.1.5 Existing Collision History 3.13-7
3.13.1.6 Multi-Modal Transportation System Operations 3.13-8
3.13.2 Regulatory Setting 3.13-51
3.13.2.1 Federal 3.13-51
3.13.2.2 State 3.13-51
3.13.2.3 Local 3.13-53
3.13.3 Environmental Impact Analysis 3.13-57
3.13.3.1 Thresholds of Significance 3.13-57
3.13.3.2 Impact Assessment Methodology 3.13-62
3.13.3.3 Project Impacts and Mitigation Measures 3.13-70
3.14 UTILITIES AND ENERGY CONSERVATION 3.14-1
3.14.1 Environmental Setting 3.14-1
3.14.1.1 Wastewater Treatment 3.14-2
3.14.1.2 Water Supply 3.14-4
3.14.1.3 Solid Waste Disposal 3.14-11
3.14.1.4 Energy Services 3.14-12
3.14.2 Regulatory Setting 3.14-15
3.14.2.1 State 3.14-15
3.14.2.2 Local 3.14-17
3.14.3 Environmental Impact Analysis 3.14-26
3.14.3.1 Thresholds for Determining Significance 3.14-26
3.14.3.2 Impact Assessment Methodology 3.14-27
3.14.3.3 Project Impacts and Mitigation Measures 3.14-28

Page

3.14.3.4 Cumulative Impacts 3.14-45
3.15 MINERAL RESOURCES 3.15-1
3.15.1 Environmental Setting 3.15-1
3.15.1.1 Regional Setting 3.15-1
3.15.1.2 Local Setting 3.15-2
3.15.1.3 Project Site 3.15-2
3.15.2 Regulatory Setting 3.15-3
3.15.2.1 State 3.15-4
3.15.2.2 Local 3.15-5
3.15.3 Environmental Impact Analysis 3.15-7
3.15.3.1 Thresholds of Significance 3.15-7
3.15.3.2 Impact Assessment Methodology 3.15-7
3.15.3.3 Project Impacts and Mitigation Measures 3.15-7
3.15.3.4 Cumulative Impacts 3.15-9

4.0 OTHER CEQA ISSUES 4-1
4.1 IRREVERSIBLE ENVIRONMENTAL IMPACTS 4-1
4.2 GROWTH-INDUCING IMPACTS 4-2
4.3 EFFECTS FOUND NOT TO BE SIGNIFICANT 4-5
4.3.1 Forestry Resources 4-5
4.4 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS 4-5

5.0 LIST OF REFERENCES 5-1

6.0 LIST OF PREPARERS 6-1

7.0 REFERENCES AND PERSONS OR ORGANIZATIONS CONTACTED 7-1

LIST OF APPENDICES

A Initial Study
B Notice of Preparation and Comment Letters
C Froom Ranch Specific Plan
D Air Quality and Greenhouse Gas
E Biological Resources
F Historic and Cultural Resources Studies
G Geologic Resources Studies
H Hydrologic Resources Studies
I Acoustics Assessment
J Multimodal Transportation Impact Analysis Report
K Water Supply Assessment
L Agricultural Resources

LIST OF FIGURES

		Page
Figure 2-1.	Key View Locations along Cole Grade Road	2.1-5
Figure 2-1.	Regional Location	2-4
Figure 2-2.	Project Site Existing Setting	2-5
Figure 2-3.	Villaggio Life Plan Community and Madonna Froom Ranch	2-13
Figure 2-4.	Proposed Land Use Plan	2-15
Figure 2-5.	Conceptual Site Plan	2-19
Figure 2-6.	Villaggio Life Plan Community Conceptual Cross Sections	2-21
Figure 2-7.	Proposed Plan for Historic Froom Ranch Structures	2-29
Figure 2-8.	Fencing Plan	2-30
Figure 2-9.	Proposed Circulation Plan	2-31
Figure 2-10.	LOVR Improvements	2-32
Figure 2-11.	Public Roads Cross Sections	2-35
Figure 2-12.	Private Road Cross Sections	2-36
Figure 2-13.	Water Supply System	2-41
Figure 2-14.	Wastewater Collection System	2-43
Figure 2-15.	Conceptual Creek Cross Sections	2-47
Figure 2-16.	Stormwater Control Plan	2-50
Figure 3.0-1.	Cumulative Projects	3-10
Figure 3.1-1.	KVA Location Map	3.1-21
Figure 3.2-1.	Agricultural Resource within the Project Site	3.2-3
Figure 3.2-2.	Agricultural Soils within the Project Site	3.2-6
Figure 3.4-1.	Existing Biological Setting	3.4-6
Figure 3.4-2.	Project Site Biological Constraints	3.4-8
Figure 3.6-1.	Active Fault Lines at the Project Site	3.6-5
Figure 3.6-2.	Active Faults and Recommended Setback at the Project Site	3.6-21
Figure 3.7-1.	Fire Hazard Severity Zones	3.7-4
Figure 3.7-2.	Conceptual Defensible Space Area	3.7-28
Figure 3.7-3.	Illustrative Defensible Space Setback Cross Section	3.7-29
Figure 3.8-1.	Existing Drainage Conditions on the Project Site	3.8-5
Figure 3.9-1.	Land Use Designations	3.9-2
Figure 3.10-1.	Noise Environment	3.10-8
Figure 3.12-1.	Public Services	3.12-2
Figure 3.13-1.	Existing Traffic Conditions	3.13-3
Figure 3.13-2.	Existing Plus Project Traffic Impacts	3.13-78
Figure 3.13-3.	Applicant Funded City Improvements to Transportation Network	3.13-89

LIST OF TABLES

		Page
Table ES-1.	Project Impacts, Mitigation Measures and Residual Impacts	ES-7
Table ES-2.	Impact Comparison of Alternatives to the Proposed Project	ES-149
Table 2-1.	Proposed Development Standards for Residential Zones	2-14
Table 2-2.	Summary of Proposed Zoning and Land Uses	2-16
Table 2-3.	Types of Senior Housing within Villaggio	2-18
Table 2-4.	Summary of Proposed Open Space	2-24
Table 2-5.	Proposal for Existing Structures Onsite	2-27
Table 2-6.	Pipe Sizes at Drainage Crossings	2-52
Table 2-7.	Project Construction Phases	2-55
Table 2-8.	List of Construction Equipment	2-56
Table 2-9.	Project Grading Estimates	2-57
Table 3.0-1.	Cumulative Projects List	3-4
Table 3.1-1.	Summary of Project Impacts	3.1-24
Table 3.2-1.	Project Site FMMP Resources	3.2-3
Table 3.2-2.	Specific Plan Area Soil Capabilities	3.2-5
Table 3.2-3.	Proposed Stormwater Detention Basin Area Soil Capabilities	3.2-5
Table 3.2-4.	Summary of Project Impacts	3.2-15
Table 3.2-5.	Final LESA Score Sheet	3.2-16
Table 3.3-1.	Ambient Air Quality Standards and County Attainment Status (2019)	3.3-5
Table 3.3-2.	Ambient Air Quality Data at San Luis Obispo - Higuera Street Station	3.3-8
Table 3.3-3.	Thresholds of Significance for Construction Operations	3.3-19
Table 3.3-4.	Thresholds of Significance for Operational Operations	3.3-20
Table 3.3-5.	Summary of Project Impacts	3.3-27
Table 3.3-6.	Short-term Construction Emissions (Unmitigated)	3.3-29
Table 3.3-7.	Short-Term Construction Emissions (Mitigated)	3.3-35
Table 3.3-8.	Long-Term Operational Emissions (Unmitigated)	3.3-36
Table 3.3-9.	Mitigation Measures from APCD CEQA Air Quality Handbook	3.3-37
Table 3.3-10.	Estimated Construction GHG Emissions (Unmitigated)	3.3-50
Table 3.3-11.	Estimated Operational GHG Emissions (Unmitigated)	3.3-50
Table 3.4-1.	Habitat Types Located within the Project Site	3.4-9
Table 3.4-2.	Special-Status Plants with High Potential to Occur in the Project Site	3.4-16
Table 3.4-3.	Sensitive Wildlife Species with Potential to Occur in the Project Site	3.4-18
Table 3.4-4.	Species of Local Concern Within Vicinity of the Project	3.4-20
Table 3.4-5.	Inventory of Mature Trees within the Project Site	3.4-27
Table 3.4-6.	Summary of Project Impacts	3.4-37
Table 3.4-7.	Impacts to Sensitive Habitat Types Located within the Project Site	3.4-38
Table 3.4-8.	Project Impacts to Jurisdictional Features	3.4-75
Table 3.5-1.	Cultural Resources Recorded within the Project Site	3.5-4
Table 3.5-2.	Cultural Resources Recorded within 0.5 Mile of the Project Site	3.5-5

Table 3.5-3. Structures Associated with the Historic Froom Ranch Dairy 3.5-8
Table 3.5-4. Summary of Project Impacts 3.5-25
Table 3.6-1. Project Site Soils Characterization 3.6-3
Table 3.6-2. Seismic Parameters for Active Faults near the Project Site 3.6-4
Table 3.6-3. Geologic Units and Paleontological Potential Within Project Vicinity 3.6-11
Table 3.6-4. Non-UCMP Pleistocene Localities of San Luis Obispo County 3.6-12
Table 3.6-5. Summary of Project Impacts 3.6-19
Table 3.7-1. Potential for Firefighting Success and Tactics on Steep Slopes 3.7-6
Table 3.7-2. USTs and Cleanup Sites within a 0.5 mile-Radius of the Project Site 3.7-10
Table 3.7-3. Fatal Aircraft Accidents within the Vicinity of San Luis Obispo County Regional Airport 3.7-12
Table 3.7-4. Summary of Project Impacts 3.7-23
Table 3.8-1. Existing Peak Flows in Froom Creek 3.8-10
Table 3.8-2. Summary of Project Impacts 3.8-24
Table 3.8-3. Projected Peak Flow in Realigned Froom Creek 3.8-31
Table 3.8-4. Required Onsite Runoff Retention 3.8-34
Table 3.8-5. Required Offsite Runoff Retention 3.8-34
Table 3.9-1. Existing City and County Zoning Districts within Project Vicinity 3.9-1
Table 3.9-2. LUCE Performance Standards for Madonna at LOVR Specific Plan Area 3.9-5
Table 3.9-3. City General Plan Policy Consistency Analysis 3.9-16
Table 3.9-4. County General Plan Policy Consistency Summary 3.9-52
Table 3.9-5. Summary of Project Impacts 3.9-55
Table 3.10-1. Representative Noise Levels 3.10-3
Table 3.10-2. Human Response to Different Levels of Groundborne Vibration 3.10-4
Table 3.10-3. LUCE Update EIR Projected Roadway Noise Levels within Project Site 3.10-6
Table 3.10-4. Measured Noise Levels within the Project Site1 ..... 3.10-9
Table 3.10-5. City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Transportation Noise Sources 3.10-14
Table 3.10-6. City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Stationary Noise Sources 3.10-16
Table 3.10-7. City of San Luis Obispo Exterior Noise Limits 3.10-17
Table 3.10-8. Maximum Time Periods for Increased Noise Levels 3.10-17
Table 3.10-9. Maximum Noise Levels for Nonscheduled, Intermittent, Short-Term Operation (Less than 10 Days) of Mobile Equipment at Residential Properties 3.10-17
Table 3.10-10. Maximum Noise Levels for Repetitively Scheduled, Relatively Long-Term Operation (10 Days or More) of Stationary Equipment at Residential Properties 3.10-18
Table 3.10-11. Noise Ranges of Typical Construction Equipment 3.10-21
Table 3.10-12. Caltrans Vibration Annoyance Potential Criteria 3.10-22
Table 3.10-13. Vibration Source Levels for Construction Equipment 3.10-22

Table 3.10-14. Noise Ranges of Typical Commercial Equipment 3.10-24
Table 3.10-15. Summary of Project Impacts 3.10-25
Table 3.10-16. Maximum Estimated Outdoor Construction Peak Noise Levels at Sensitive Receptors (Unmitigated) 3.10-28
Table 3.10-17. Projected Traffic and Noise Level Increases along Adjacent Roadways 3.10-32
Table 3.10-18. Maximum Noise Level Estimates and Thresholds Resulting from Nearby Commercial Activities 3.10-36
Table 3.11-1. Population Growth between 1990 and 2019 ..... 3.11-1
Table 3.11-2. SLOCOG Medium Growth Population Projections 3.11-2
Table 3.11-3. Population Growth, 2005-2019, San Luis Obispo City, County, and State of California 3.11-3
Table 3.11-4. Division of Labor by Industry within the City and County (2017) . 3.11-4
Table 3.11-5. City of San Luis Obispo Labor Force and Unemployment 2000-2017 ..... 3.11-5
Table 3.11-6. SLOCOG Medium Employment Projections 3.11-6
Table 3.11-7. 1.0 Percent City Population Growth Projection 3.11-7
Table 3.11-8. Affordable Rent and Purchase Prices for All Income Categories 3.11-9
Table 3.11-9. Remaining RHNA Need Based on Dwelling Units Approved, Under Construction, or Built, 2014 to 2019 ..... 3.11-10
Table 3.11-10. City and Regional Jobs-to-Housing Ratio 3.11-11
Table 3.11-11. SLOCOG Projections vs. LUCE Buildout Capacity for 2035 ..... 3.11-12
Table 3.11-12a. Inclusionary Housing Requirements 3.11-17
Table 3.11-12b. Inclusionary Housing Adjustment Factors 3.11-17
Table 3.11-13. Summary of Project Impacts 3.11-19
Table 3.11-14. Summary of Estimated Population Generated by the Project 3.11-21
Table 3.11-15. City and Countywide Population and Housing Projections, 2010-2035 ..... 3.11-24
Table 3.12-1. Public Services Serving the Project Vicinity 3.12-1
Table 3.12-2. Existing Capacity and Enrollment at SLCUSD Schools (2016-2017) 3.12-7
Table 3.12-3. Summary of Project Impacts 3.12-15
Table 3.12-4. Project Student Generation 3.12-19
Table 3.12-5. Student Accommodation by Nearest Schools 3.12-20
Table 3.13-1. LOS Criteria for Signalized and Unsignalized Intersections 3.13-10
Table 3.13-2. Automobile Segment LOS Methodology 3.13-10
Table 3.13-3. Freeway Segments LOS Methodology 3.13-10
Table 3.13-4. LOS Criteria for Bicycle, Pedestrian, and Transit Facilities/Services 3.13-11
Table 3.13-5. Pedestrian Segment LOS Methodology 3.13-12
Table 3.13-6. Bicycle and Transit Segment LOS Methodology 3.13-12
Table 3.13-7. Existing Intersection LOS - Automobile 3.13-15
Table 3.13-8. Existing Intersection LOS - Pedestrian 3.13-16
Table 3.13-9. Existing Intersection LOS - Bicycle 3.13-19
Table 3.13-10. Existing Conditions - 95th-Percentile Queuing 3.13-21
Table 3.13-11. Existing Segment LOS - Automobile 3.13-27

Table 3.13-12. Existing Segment LOS - Pedestrian 3.13-28
Table 3.13-13. Existing Segment LOS - Bicycle 3.13-29
Table 3.13-14. Existing Segment LOS - Transit 3.13-30
Table 3.13-15. Existing Segment LOS - Freeway Mainline, Ramps and Weaving Sections 3.13-31
Table 3.13-16. Near-Term Transportation Project List 3.13-32
Table 3.13-17. Near-Term Scenario 2 Intersection LOS - Automobile 3.13-33
Table 3.13-18. Near-Term Scenario 2 Intersection LOS - Pedestrian 3.13-35
Table 3.13-19. Near-Term Scenario 2 Intersection LOS - Bicycle 3.13-37
Table 3.13-20. Near-Term Scenario 2 Intersection LOS - 95th-Percentile Queuing 3.13-40
Table 3.13-21. Near-Term Scenario 2 Segment Level of Service - Automobile 3.13-46
Table 3.13-22. Near-Term Scenario 2 Segment Level of Service - Pedestrian 3.13-47
Table 3.13-23. Near-Term Scenario 2 Segment LOS - Bicycle 3.13-48
Table 3.13-24. Near-Term Scenario 2 Segment LOS - Transit 3.13-49
Table 3.13-25. Near-Term Scenario 2 Segment LOS - Freeway Mainline, Ramps and Weaving Sections 3.13-50
Table 3.13-26. LOS Objective and Minimum Standard for Each Transportation Mode 3.13-58
Table 3.13-27. City LOS Modal Priority Ranking by Area 3.13-60
Table 3.13-28. Project Person Trips by Mode of Travel 3.13-65
Table 3.13-29. Net External Vehicle Trip Generation Forecast 3.13-66
Table 3.13-30. Project Operational Vehicle Trip Generation by Phase 3.13-66
Table 3.13-31. Average Estimated Year 2035 VMT for the City, County and Project 3.13-69
Table 3.13-32. Summary of Project Impacts 3.13-71
Table 3.13-33. Existing Plus Project Transportation Impact Summary 3.13-90
Table 3.13-34. Near-Term Plus Project Transportation Impact Summary 3.13-100
Table 3.13-35. Cumulative Plus Project Transportation Impact Summary 3.13-116
Table 3.14-1. Utilities Serving the Project Site 3.14-1
Table 3.14-2. City of San Luis Obispo's Water Resource Annual Availability (2018) 3.14-8
Table 3.14-3. Water Demand and Water Availability in the City of San Luis Obispo Based on WWME Policies 3.14-9
Table 3.14-4. 2018 City Potable Water Supply Accounting 3.14-9
Table 3.14-5. 2018 County and State Energy Demands 3.14-14
Table 3.14-6. Summary of Project Impacts 3.14-29
Table 3.14-7. Estimated Water Demand from Project WSA based on City Water Use Factors 3.14-34
Table 3.14-8. City Water Supply Availability and Froom Ranch Water Usage 3.14-34
Table 3.14-9. Wastewater Projections Resulting from the Project. 3.14-35
Table 3.14-10. Estimated Solid Waste Production 3.14-39
Table 3.14-11. Estimated Project Electricity and Natural Gas Demands 3.14-40
Table 3.14-12. Estimated Project Construction Fuel Consumption 3.14-41
Table 3.14-13. Per Capita Vehicle Miles Traveled 3.14-42
Table 3.14-14. Estimated Operational Fuel Consumption 3.14-42

Table 3.14-15. Comparison of Total and Per Capita Electricity and Natural Gas Demands 3.14-43
Table 3.15-1. Summary of Project Impacts..... 3.15-7

ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	microgram per cubic meter
AARP	American Association of Retired Persons
AB	Assembly Bill
ACM	asbestos-containing material
ADT	average daily trips
AEP	Association of Environmental Professionals
AF	acre-feet
AFY	acre-feet per year
AG	Agriculture
Airport	San Luis Obispo County Regional Airport
ALUC	San Luis Obispo Airport Land Use Commission
ALUP	Airport Land Use Plan
ALUPA	Airport Land Use Planning Area
AMP	Archaeological Monitoring Plan
AOZ	Airport Overlay Zone
APCD	Air Pollution Control District
Applicant	JM Development Group, Inc.
APS	Alternative Planning Strategy
ARC	Architectural Review Commission
ARI	Archaeological Resource Inventory
ARIM	Archaeological Resource Impact Mitigation
AST	aboveground storage tank
AT&T	American Telephone and Telegraph Company
ATCM	Air Toxics Control Measure
BACT	Best Available Control Technology
bgs	below ground surface
BMP	best management practices
BTP	Bicycle Transportation Plan
BTU	British Thermal Unit
C&D	construction and demolition
C/OS	Conservation/Open Space
CAAQS	California Ambient Air Quality Standards
CAC	Certified Asbestos Consultant
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALFIRE	California Department of Forestry and Fire Protection
CAL-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAMP	Construction Activity Management Plan
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCIC	Central Coast Information Center
CCR	California Code of Regulations

CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CE	Circulation Element
CEC	California Energy Commission
CED	California Energy Demand
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CHC	Cultural Heritage Commission
City	City of San Luis Obispo
CLOMR	Conditional Letter of Map Revision
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO2	carbon dioxide
COSE	Conservation and Open Space Element
County	County of San Luis Obispo
County Sheriff	San Luis Obispo County Sheriff
CPUC	California Public Utilities Commission
CR	Commercial Retail
C-R	retail-commercial
CRHR	California Register of Historic Resources
C-R-SP	retail-commercial (Specific Plan)
CSA-7A	County Service Area No. 7A
C-S-PD	Commercial-Service-Planned Development
C-S-S	Commercial-Service-Special Considerations
CSU	California State University
C-T	Commercial-Tourist
CVC	California Vehicle Code
CWA	Clean Water Act
cy	cubic yard
dB	decibel
dBA	A-weighted decibel
DBH	diameter-at-breast-height
DCDA	double detector check assembly
DDM	Drainage Design Manual
DHS	Department of Health Services
DPM	diesel particulate matter
DTSC	Department of Toxic Substances
du/ac	dwelling units per acre

du/ac	dwelling units per acre
EB	eastbound
EBL	eastbound thru-lane
EBR	eastbound right-turn lane
EIR	Environmental Impact Report
EOP	Emergency Operations Plan
ESA	Endangered Species Act
EV	Electric Vehicle
EX	Energy and Extraction Area
FAA	Federal Aviation Administration
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
fps	feet per second
FRSP	Froom Ranch Specific Plan
FTA	Federal Transit Administration
FWHA	Federal Highway Administration
g/L	gram per liter
gal/hp/hr	gallons per horsepower per hour
GHG	greenhouse gas
GIS	Geographic Information System
Golden State Highway	State Route 277
GPAR	General Plan Annual Report
gpcd	gallons per capita per day
GPM	gallons per minute
GWh	gigawatt hours
H_2S	hydrogen sulfide
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HAP	hazardous air pollutant
HCD	California Department of Housing and Community Development
HCM	Highway Capacity Manual
HDD	horizontal directional drilling
HE	Housing Element
HEC	Hydraulic Engineering Circular
HMMP	Habitat Mitigation and Monitoring Plan
HRE	Historic Resource Evaluation
HTL	high tidal line
HVAC	heating, ventilation, and air conditioning
IBC	International Building Code
in/sec	inches per second
IS	Initial Study

ITE	Institute of Transportation Engineers
KMA	Kevin Merk Associates, LLC
KVA	Key Viewing Area
LAFCO	San Luis Obispo Local Agency Formation Commission
LBP	lead-based paint
lbs/day	pounds per day
LCC	land compatibility classification
L_{dn}	day-night average noise level
LED	light-emitting diodes
LEED	Leadership in Energy and Environmental Design
L_{eq}	equivalent energy noise level
LID	low impact development
L_{max}	maximum instantaneous noise level
L_{min}	minimum instantaneous noise level
LNG	liquified natural gas
LOMR	Letter of Map Revision
LOS	Level of Service
LOVR	Los Osos Valley Road
LRA	Local Responsibility Area
LUCE	Land Use and Circulation Element
LUE	Land Use Element
LUST	Leaking Underground Storage Tank
MBCP	Monterey Bay Community Power
MBTA	Migratory Bird Treaty Act
MDZ	Mining Disclosure Zone
mg/m^3	milligram per cubic meter
MGD	million gallons per day
MMLOS	Multi-Modal Level of Service
MMT CO_2e	million metric tons CO2 equivalent
MOA	Memorandum of Agreement
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MRF	Material Recovery Facility
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
msl	mean sea level
MT CO_2e	metric tons CO2 equivalent
MUN	Municipal and Domestic Water Supply
MWh	megawatt hours
MWh/yr	megawatt hours per year
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NB	northbound
NBL	northbound thru-lane

NBR	northbound right-turn lane
NBT	northbound trap
NCTC	Northern Chumash Tribal Council
NE	Noise Element
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO_2	nitrous oxide
NOA	Naturally Occurring Asbestos
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries	NOAA National Marine Fisheries Service
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OHWM	ordinary high water mark
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	lead
pc/mi/h	passenger cars per mile per hour
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PCR	Post Construction Requirement
PF	public facilities
PF-SP	public facilities (Specific Plan)
PG&E	Pacific Gas & Electric
PM_{10}	10-micron particulate matter
$PM_{2.5}$	2.5-micron particulate matter
ppb	parts per billion
ppm	parts per million
PPM	Pollution Prevention Methods
PPVRef	reference Peak Particle Velocity
PRC	Public Resources Code
PRE	Parks and Recreation Element
Project	Froom Ranch Specific Plan Project
PV	photovoltaic
R-3	medium-high density residential
R-3-SP	medium-high density residential (Specific Plan)
R-4	high density residential
R-4-SP	high density residential (Specific Plan)
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Needs Allocation

RL	Rural Lands
ROG	reactive organic gas
RPZ	Runway Protection Zone
RRP	Resource Recovery Park
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SA	Special Animal
SANDAG	San Diego Association of Governments
SARE	Subsurface Archaeological Resource Evaluation
SB	Senate Bill
SB	southbound
SBL	southbound thru-lane
SBR	southbound right-turn lane
SBT	southbound trap
SCCAB	South Central Coast Air Basin
SCS	Sustainable Communities Strategy
SE	Safety Element
sf	square feet
sf/p	square feet per person
SIP	State Implementation Plan
SLCUSD	San Luis Coastal Unified School District
SLO County APCD	San Luis Obispo County Air Pollution Control District
SLO Transit	City Transit Division
SLOCOG	San Luis Obispo County Association of Goverments
SLOFD	City of San Luis Obispo Fire Department
SLOPD	City of San Luis Obispo Police Department
SLORTA	San Luis Obispo Regional Transit Authority
SMARA	Surface Mining and Reclamation Act
SMARTS	Stormwater Multi-Application, Reporting, and Tracking System
SO_2	sulfur dioxide
SoCal Gas	Southern California Gas Company
SOI	Secretary of Interior
SP	service population
SP-3	Special Focus Area
SRA	State Responsibility Area
SRO	school resource officer
SSC	Species of Special Concern
SVP	Society of Vertebrate Paleontology
SWMP	Stormwater Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
therms/yr	therms per year
TIA	Traffic Impact Analysis

TIS	Transportation Impact Study
TMDL	total maximum daily load
ton/qtr	tons per quarter
TSO	Time Schedule Order
U.S. 101	U.S. Highway 101
U.S. EIA	U.S. Energy Information Administration
U.S. EPA	U.S. Environmental Protection Agency
UCMP	University of California Museum of Paleontology
URL	Urban Reserve Line
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VdB	vibration decibel
VDECS	Verified Diesel Emission Control Strategies
Villaggio	Villaggio Life Plan Community
VMT	vehicle miles traveled
VOC	volatile organic compound
vpd	vehicles per day
VTTM	Vesting Tentative Tract Map
WB	westbound
WBL	westbound thru-lane
WBR	westbound right-turn lane
WDID	Waste Discharge Identification
WMP	Waterways Management Plan
WMZ	Watershed Management Zone
Wood	Wood Environment & Infrastructure Solutions, Inc.
WRRF	Waste Resources Recovery Facility
WSA	Water Supply Assessment
WSE	water surface elevation
WWME	Water and Wastewater Management Element

1.0 INTRODUCTION

1.1 OVERVIEW

This Environmental Impact Report (EIR) evaluates the potential environmental impacts of the proposed Froom Ranch Specific Plan (Project) in the City of San Luis Obispo (City), California. This EIR discloses the potential environmental impacts of adoption and implementation of the Project. The City prepared this EIR with assistance from its environmental planning consultant, Wood Environment and Infrastructure Solutions, Inc. (Wood).

JM Development Group, Inc. (Applicant) proposes the Draft Froom Ranch Specific Plan (FRSP) dated July 28, 2017 for adoption by the City, including an amendment to the City's General Plan, pre-zoning, annexation to the City, and related actions to allow for development of a 116.8-acre Project site with several offsite infrastructure improvements, as further described in Chapter 2, *Project Description*. The Project site is currently unincorporated in San Luis Obispo County (County) but is located within the City's adopted Sphere of Influence immediately southwest of the City limits and adjacent to Los Osos Valley Road (LOVR) between Calle Joaquin and Irish Hills Plaza. The City's 2014 Land Use Element (LUE) of the General Plan designates the Specific Plan area (109.7 acres within the Project site) as a Special Focus Area (SP-3) for provision of residential and small-scale commercial uses, along with open space and/or agricultural uses. The SP-3 designation requires a specific plan to guide development and operation within the Specific Plan area following annexation to the City, per Section 8.1.5 of the LUE.

The Project would allow for the development of senior housing and multi-family residential units, a public park, and commercial development along LOVR at the southwestern edge of the City. To accommodate proposed development, the Project includes realignment of Froom Creek, which flows across the Project site.

The Project site is primarily undeveloped and used for agriculture (horse grazing) and stormwater management but contains historic farming structures, a construction office, and a permitted (but inactive) red rock quarry in the northwestern portion used for construction materials storage. Froom Creek traverses the Project site in a mostly north to south direction and joins San Luis Obispo Creek south of the Project site before flowing towards the Pacific Ocean.

The Project site is largely undeveloped but supports the historic Froom Ranch Dairy complex, construction company office and material storage within an existing quarry, and horse grazing.

The proposed Project would allow for a mix of residential uses (39.1 acres), open space (59.0 acres), a public park (2.9 acres), and retail commercial uses (3.1 acres) within the approximately 109.7-acre Specific Plan area. The Project would allow for eventual construction of up to 578 residential units, including 174 multi-family housing units and 404 senior housing units within a Life Plan Community known as Villaggio that includes assisted living and health care facilities. The Project would also allow for up to 100,000 square feet (sf) of commercial retail space, including approximately 70,000 sf of hotel use with up to 120 rooms and 30,000 sf of proposed retail and restaurant uses. The Project would retain approximately 54 percent of the Project site as open space and include a 2.9-acre public park that would connect to the existing trail network within the adjacent Irish Hills Natural Reserve. The Project would include an internal network of public and private roads with some bicycle and pedestrian access. The Project would also implement a complex stormwater management system, including realignment of Froom Creek through the Specific Plan area, relocation and expansion of an existing onsite stormwater detention basin immediately south of the Specific Plan area, and onsite water quality retention and treatment areas.

1.2 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

Per Section 21067 of the California Environmental Quality Act (CEQA) and Sections 15367 and 15050 through 15053 of the State CEQA Guidelines, the City is the Lead Agency under whose authority this document has been prepared. The City has primary discretionary authority to determine whether to approve the Project.

Responsible and trustee agencies are public agencies responsible for certain discretionary Project approvals or implementing specific onsite and/or offsite components of the Project. For the purposes of CEQA, a "responsible agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the Project (CEQA Section 15381). A "trustee agency" is defined as a state agency having jurisdiction over certain resources held in trust for the people of California but do not have legal authority for approval of the Project (CEQA Section 15386). Responsible and trustee agencies for the Project include the following, as more fully described in Section 2.5, *Required Approvals* of the EIR:

- San Luis Obispo County Airport Land Use Commission (ALUC)
- California Department of Transportation (Caltrans)
- County of San Luis Obispo
- Federal Emergency Management Agency (FEMA)
- San Luis Obispo Local Agency Formation Commission (LAFCO)
- Central Coast Regional Water Quality Control Board (RWQCB)
- San Luis Obispo County Air Pollution Control District (APCD)
- U.S. Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- U.S. Fish and Wildlife Service (USFWS)
- National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NOAA Fisheries)

1.3 PURPOSE AND LEGAL AUTHORITY

This EIR is prepared in accordance with CEQA (Division 13, California Public Resources Code 21000 et. seq.) and State CEQA Guidelines, published by the Natural Resources Agency of the State of California (Title 14, California Code of Regulations 15000 et. seq.). It is intended to provide information to public agencies, decision-makers, and the general public regarding the environmental impacts that would result from implementation of the Project. Under the provisions of CEQA, "the purpose of the environmental impact report is to identify the significant effects of a project on the environment, to identify alternatives to the project, and to indicate the manner in which significant effects can be mitigated or avoided" (Public Resources Code 21002.1[a]). The CEQA process was established to enable public agencies to evaluate a project in terms of its environmental consequences, to

examine and implement methods of eliminating or reducing any potentially adverse impacts, and to consider alternatives to the project. CEQA Section 15021(a) requires that major consideration be given to avoiding environmental damage.

In a practical sense, this EIR functions as a tool for fact-finding, allowing the public, the City, and other responsible agencies, through a full disclosure process, an opportunity to collectively review and evaluate baseline existing conditions and the Project's potential to result in environmental impacts. Additionally, this EIR provides the primary source of environmental information for agencies to consider when exercising any permitting or approval authority directly related to the Project. Nevertheless, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, taking into account economic, legal, social, and technological factors.

Although the Project takes the form of a Specific Plan and General Plan amendment, this EIR contains an environmental review that fulfills the requirement of a Project-level EIR. As defined in CEQA Guidelines Section 15161, a Project-level EIR examines the environmental impacts of a specific development project and focuses primarily on the changes in the environment that would result from the project. This EIR examines all phases of the Project including construction and operation. Pursuant to CEQA Guidelines Section 15182, where a public agency prepares an EIR on a specific plan, future residential projects that conform to the specific plan would not require further environmental review in accordance with Government Code Section 65457, as long as the residential development is within the scope of the EIR, no new environmental effects are anticipated to occur, and no new mitigation measures are required for the residential development.

Where relevant to the analysis of impacts, this EIR also incorporates by reference, the findings and/or mitigation measures of the City's previously certified 2014 Land Use and Circulation Elements Update EIR (LUCE Update EIR). The LUCE Update EIR evaluated the impacts associated with future development occurring under the LUCE at a Program-level, including those associated with development of the Project site within SP-3. The LUCE Update EIR is available for public review at:

http://www.slocity.org/government/department-directory/community-development/planning-zoning/general-plan.

1.4 EIR PREPARATION

The City prepared an Initial Study (IS) for the Project in July 2017, made publicly available through the Notice of Preparation (NOP) distribution process in July 2017. Pursuant to Section 21080(d) of the Public Resources Code and Section 15064(f)(1) of the CEQA Guidelines, if there is substantial evidence that a project may have a significant effect on the environment, the Lead Agency shall prepare an EIR, even when other substantial evidence has been presented that a project will not have a significant effect. The IS found that the Project may have potentially significant impacts to the following resources: aesthetics, agriculture, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities (Appendix A). Consequently, the City has determined that the preparation of an EIR is required to analyze potential environmental impacts of the Project.

In compliance with the procedural requirements of CEQA, the City completed a public scoping process consistent with Section 15083 of the CEQA Guidelines. The public was provided an opportunity to comment on the scope of the EIR through a NOP released on July 10, 2017, which was distributed to federal, state, regional, and local agencies, as well as key stakeholders, interested parties, and neighborhood groups. The NOP comment period ran from July 10, 2017 through August 14, 2017, and a public hearing was held on July 26, 2017. During the NOP comment period, the City received 12 comment letters. Comments received during the NOP comment period were considered during EIR preparation and are included in Appendix B.

This Draft EIR has been distributed to federal, state, regional, and local agencies, key stakeholders, interested parties, neighborhood groups, and NOP commenters. The Draft EIR is available for review online at the City's Community Development Department website at:

http://www.slocity.org/government/department-directory/community-development/documents-online/environmental-review-documents

Hardcopies of the Draft EIR are available for review at City Hall, as well as local libraries. The Draft EIR public review period runs from November 8th, 2019 to December 23rd, 2019. Comments on the Draft EIR may be sent to:

City of San Luis Obispo
Community Development Department
919 Palm Street
San Luis Obispo, California 93401

Comments on the Draft EIR may also be emailed to Shawna Scott, Senior Planner, at sscott@slocity.org. Comments received during this period will be responded to in writing and addressed in the Final EIR.

1.5 SCOPE OF THE EIR

This EIR assesses the potential environmental impacts that could occur as a result of implementation of the Project. The scope of the EIR includes evaluation of potentially significant environmental issues identified in the IS and raised in response to the NOP and during scoping discussions. The IS and NOP scoping process determined that the Project may result in potentially significant impacts with respect to the following issue areas, which are addressed in detail in this EIR:

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Hazards, Hazardous Materials, and Wildfire
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation and Traffic
- Utilities and Energy Conservation

- Mineral Resources

Since preparation of the IS, the CEQA Guidelines have been updated to include resource areas that are addressed specifically in this EIR, as follows. Issues related to Energy and Energy Conservation as required by CEQA are discussed within Section 3.14, *Utilities and Energy Conservation,* and issues related to Wildfire are discussed in Section 3.7, *Hazards, Hazardous Materials, and Wildfire.* This EIR addresses the issues referenced above and identifies potential environmental impacts, including Project-specific and cumulative effects of the Project, in accordance with the provisions set forth in the State CEQA Guidelines. In addition, this EIR recommends feasible mitigation measures, where necessary, that would reduce or eliminate adverse environmental effects. In accordance with State CEQA Guidelines Section 15128 (Effects Not Found to Be Significant), environmental impacts related to Forestry Resources were not considered significant, and are discussed in Chapter 4, *Other CEQA Sections*.

A summary of cumulative impacts, which gives consideration to other projects or plans in the vicinity, are described in each resource section within Chapter 3, *Environmental Impact Analysis and Mitigation Measures*. Cumulative project analyses represent a comprehensive assessment of potential impacts on City resources using a list of past, present, and probable future projects capable of producing related or compounded impacts.

Consistent with CEQA Guidelines Section 15126.6(d), this EIR includes an assessment of a reasonable range of alternatives to the Project that could feasibly attain the Project objectives while avoiding or substantially lessening any of the significant effects of the Project. The alternatives analysis includes alternatives that were considered but discarded from further analysis, and four alternatives fully analyzed per the CEQA Statute and Guidelines. Please refer to Chapter 5, *Alternatives*. The four alternatives fully analyzed in Chapter 5, *Alternatives* include:

- CEQA "No Project" Alternative;
- Alternative 1 – Clustered Development Below the 150-foot Elevation Alternative (the Actionable Alternative)
- Alternative 2 – Residential Development Project Alternative
- Alternative 3 – Minimum LUCE-Compliant Alternative

Alternative 1 is developed and analyzed based on an alternate land use plan and conceptual site design provided by the Project Applicant (Appendix C) and, therefore, has been

evaluated at a Project-level of detailed to allow for detailed comparison of impacts relative to the Project, including visual impact analysis and air emissions estimates. The other three alternatives are evaluated programmatically relative to the Project since land use and conceptual design plans are not available for these alternatives.

1.5.1 Areas of Known Public Controversy

Section 15123 of the CEQA Guidelines states that an EIR shall identify areas of controversy known to the Lead Agency, including issues raised by the agency and the public. Based on comments received during the public hearing and NOP comment period, the following issues are known to be of concern and may be controversial. Each issue is further evaluated in the EIR:

- Land use policy consistency related to onsite development and uses above 150-feet in elevation;
- Visual impacts to public views within the adjacent Irish Hills Natural Reserve;
- Loss of agricultural land, including the offset and/or preservation of onsite agricultural easement area;
- Potential impacts to rare plant species with known occurrences onsite, particularly within the higher elevations and rocky outcrops;
- Potential impacts to sensitive biological resources along Froom Creek connecting into San Luis Obispo Creek, and along natural drainages from the Irish Hills;
- Loss of wildlife corridors and ecotones along drainages and in the Irish Hills;
- Potential impacts from proposed realignment and restoration of Froom Creek and associated impacts on high-quality wetlands located adjacent to LOVR and Calle Joaquin;
- Onsite and offsite flooding and water quality effects;
- Increased traffic congestion and impacts to circulation, especially on LOVR, Madonna Road, and associated interchanges;
- Adequacy of utility infrastructure and dependent resources, including the existing water system and available water supply;
- Housing supply and relationship to City population;
- Construction-related impacts, such as interference with pedestrian and vehicle traffic circulation, dust, and other emissions; and
- Potential impacts to historic Froom Ranch Dairy complex onsite.

1.6 ORGANIZATION OF THE EIR

This EIR is organized into the following chapters:

- Chapter 1, *Introduction*, summarizes the background of the Project and explains the environmental review process.
- Chapter 2, *Project Description,* provides a detailed description of the Project site, Project objectives, and all proposed Project components.
- Chapter 3, *Environmental Impact Analysis and Mitigation Measures*, provides analysis of existing environmental conditions, applicable federal, state, and local regulations, specific direct and indirect Project impacts, cumulative impacts, mitigation measures, secondary impacts, and residual impacts.
- Chapter 4, *Other CEQA Sections*, identifies significant and irreversible, growth-inducing, and unavoidable effects, and a brief discussion of resource areas that would not be significantly affected by the Project.
- Chapter 5, *Alternatives*, describes alternatives to the Project, and identifies the Environmentally Superior Alternative.
- Chapter 6, *List of Preparers*, identifies the EIR Project team.
- Chapter 7, *References*, provides information about resources used in preparation of the EIR.
- Appendices to the EIR include the IS/NOP, NOP comment letters, the Draft FRSP, and supporting technical studies used as a basis of information and analyses in preparation of the EIR.

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

JM Development Group, Inc. (Applicant) proposes adoption of the Draft Froom Ranch Specific Plan (FRSP; see Appendix C) by the City of San Luis Obispo (City). The proposed FRSP includes a request for a General Plan Amendment to allow development above the 150-foot elevation, which is currently prohibited by Land Use Element (LUE) Policy 6.4.7(H), Hillside Planning Areas. The City Council authorized initiation of the proposed FRSP on April 5, 2016. However, as part of that approval, the City Council required that this EIR also evaluate an actionable alternative that locates all proposed development below the 150-foot elevation. The proposed FRSP is described in this section and evaluated in Section 3.0, *Environmental Impact Analysis*. The actionable alternative (Alternative 1) is described in Chapter 5, *Alternatives*, of the EIR.

2.1.1 Overview of Proposed FRSP

The proposed FRSP (Project) provides a land use and development program with associated goals, policies, and development standards to guide future development within the 109.7-acre Specific Plan area located off Los Osos Valley Road (LOVR) and Calle Joaquin.

The Project would result in development of two main components: Villaggio Life Plan Community (Villaggio) and Madonna Froom Ranch.

- Villaggio would provide up to 404 units of senior housing that would include independent and assisted living units, as well as health care facilities with 51 beds for memory care and skilled nursing.
- Madonna Froom Ranch would provide up to 174 multi-family housing units and up to 100,000 square feet (sf) of mixed commercial uses, including a potential 70,000-sf hotel and 30,000 sf of retail commercial uses.

The Project would include roadway, bicycle, and pedestrian circulation improvements, including a new signalized intersection at LOVR and Auto Park Way, and would extend urban infrastructure improvements (e.g., water lines, sewer service) to serve the site. The

Project would also include 2.9 acres for a new public park within Madonna Froom Ranch and dedication of 59.0 acres within the Specific Plan area to open space. The Project would realign Froom Creek within the Specific Plan area and develop stormwater management facilities both within and adjacent to the Specific Plan area, including overflow to the existing Calle Joaquin wetlands and a proposed 7.1-acre stormwater detention basin, both within the Project site.

The FRSP would guide development of residential, commercial, and recreation uses on the former Froom Ranch Dairy Farm property, along with proposed General Plan amendments and annexation to the City.

Project entitlements to support adoption of the FRSP would include General Plan amendments, prezoning, annexation of the Specific Plan area into the City, and a Vesting Tentative Tract Map (VTTM). Amendments to the General Plan would include a change in the land uses to include a senior residential community and to allow development above 150 feet in elevation, since hillside development is regulated by several General Plan policies and programs, including Policy 6.4.7(H), which specifies that no building sites should be allowed above the 150-foot elevation line in the Irish Hills area (see also, Section 2.5, *Required Approvals* and Section 3.10, *Land Use and Planning*).

The City's LUE identifies the Specific Plan area as the Madonna on LOVR Specific Plan Area (SP-3). The LUE requires adoption of a Specific Plan for SP-3 prior to development to comprehensively address appropriate development of the site while protecting sensitive environmental resources. LUE Section 8.1.5 identifies the following land use and design goals related to SP-3:

- development of a design that is sensitive to environmental constraints, including wetland protection, slope protection, historic structures, and open space protection;
- maintenance of viewsheds of surrounding mountains, and securing steeper hillsides as protected open space areas;
- varying height limits to protect views of adjacent hills;
- providing access to trails;

- providing a plan for adequate and safe infrastructure, including appropriate points of access to LOVR;
- addressing neighborhood commercial needs of new neighborhoods; and
- providing connectivity to adjacent development.

2.1.2 Project Applicant Team

Applicant:

JM Development Group, Inc.
John Madonna
PO Box 5310
San Luis Obispo, CA 93406

Project Design:

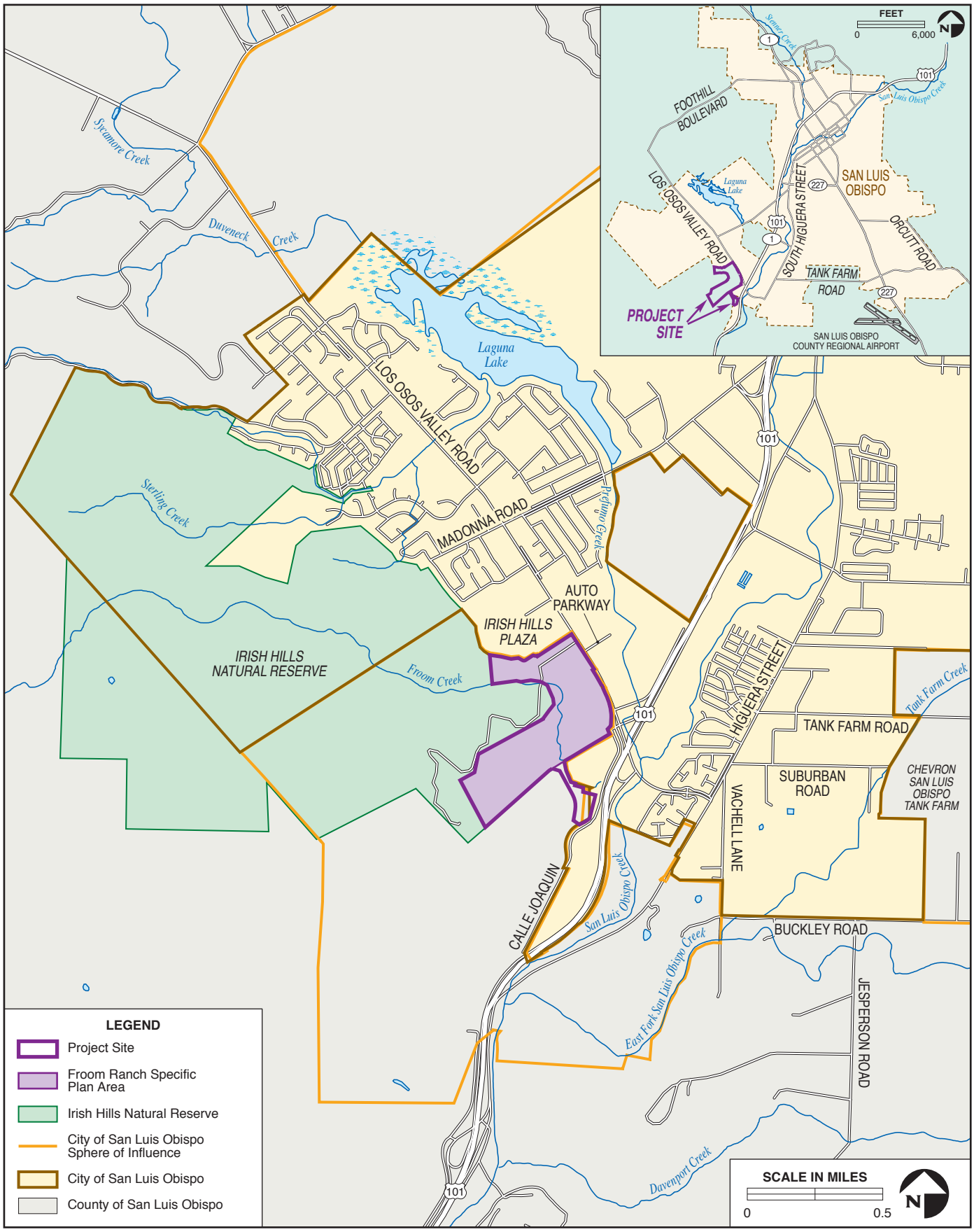
RRM Design Group
Victor Montgomery, AIA
Tim Walters
Pam Ricci, AICP
3765 South Higuera St., Ste. 102
San Luis Obispo, CA 93401

2.2 EXISTING SETTING

2.2.1 Project Site Boundaries

The 116.8-acre Project site is located southwest of the City at the base of the Irish Hills Natural Reserve.

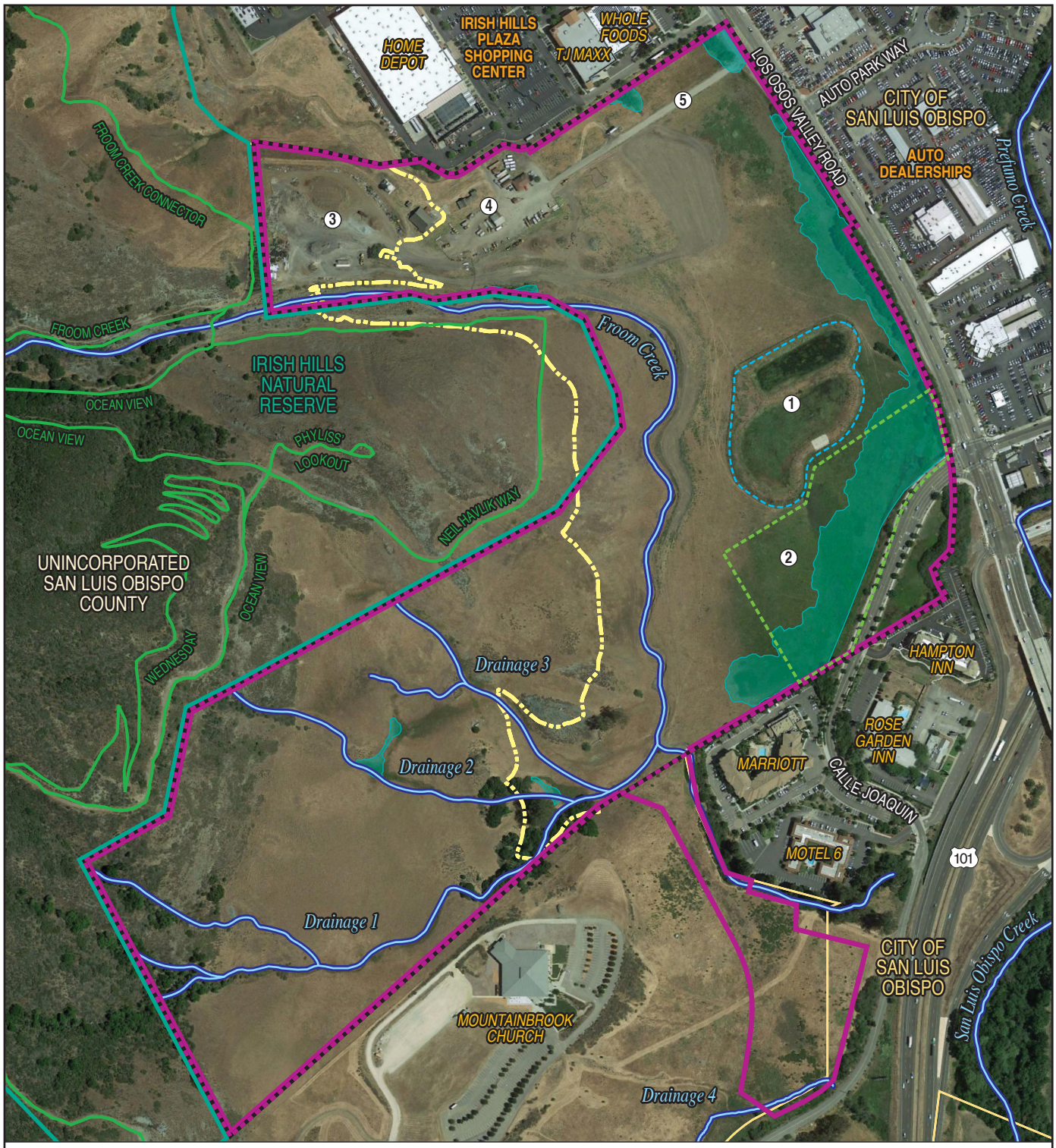
The Specific Plan area includes 109.7 acres located immediately southwest of the City limits (Figure 2-1). The Specific Plan area is generally bounded by LOVR to the east, Calle Joaquin and Mountainbrook Church to the south, Irish Hills Plaza to the north, and the City-owned Irish Hills Natural Reserve to the west. The Specific Plan area consists of two parcels, located at 12165 and 12193 LOVR (APNs 067-241-030 and 067-241-031), that are owned by the Applicant. The Specific Plan area is currently unincorporated in the County but lies within the City's adopted Sphere of Influence (Figure 2-2).



wood.

Regional Location

FIGURE 2-1



LEGEND

- Project Site
- Froom Ranch Specific Plan Area
- Irish Hills Natural Reserve
- Public Trail
- Federal and State Wetlands and Riparian Habitat
- 150-Foot Elevation Contour from Site Survey
- City of San Luis Obispo
- ① 3.2-Acre Existing Detention Basin for Irish Hills Plaza
- ② 7.1-Acre Existing Open Space and Agricultural Conservation Easement
- ③ Quarry and Construction Materials Storage
- ④ Historic Froom Ranch Dairy Complex
- ⑤ Paved Site Access Road

SCALE IN FEET

0 500

N

Aerial Source: Google 2018.

wood.

Project Site Existing Setting

FIGURE 2-2

The Project site encompasses both the Specific Plan area and 7.1 acres outside the Specific Plan area that would provide a new stormwater detention basin to serve the Project. The proposed stormwater detention basin area is located immediately south of the Specific Plan area on land owned by Mountainbrook Church. The proposed stormwater detention basin would overlie both incorporated and unincorporated land within APNs 067-241-021 (County) and 053-161-010 (City). Together with the Froom Ranch Specific Plan area, the Project site includes 116.8 acres (refer to Figure 2-2). The Project would also require offsite improvements to support the Project, including a new signalized intersection at LOVR/Auto Park Way at the proposed site entrance, sidewalk improvements along the western side of LOVR fronting the site, and a new emergency access road connection at the site's southern boundary with Mountainbrook Church property. The EIR has evaluated the potential environmental impacts of Project-related disturbances and operations both within the Project site and at all offsite improvement areas.

2.2.2 Project Vicinity

The Project site is located on the southwestern side of the Los Osos Valley at the base of the Irish Hills. The Irish Hills are a low mountain range that are part of the outer California Coast Ranges in the Central Coast region. Froom Creek and four local drainages flow from the Irish Hills through the Project site to San Luis Obispo Creek. The Irish Hills provide expansive open space and are highly visible from surrounding areas reaching a maximum elevation of 1,300 feet in the area west of the Project site. The western boundary of the Specific Plan area is adjacent to the Irish Hills Natural Reserve, which contains 14.9 miles of public trails. Access to the Froom Creek Trail and the Neil Havlik Trail is currently provided immediately west of the Project site (Figure 2-2).

Existing development in the Project vicinity includes primarily commercial land uses. To the north, the approximately 45-acre Irish Hills Plaza is a retail shopping center developed with approximately 500,000 sf of primarily one-story commercial and big-box retail uses, including Home Depot, T.J. Maxx, and Whole Foods Market immediately adjacent to the Project site. To the east across LOVR, commercial development primarily includes automobile dealerships and service centers, such as BMW, Nissan, Ford, Volkswagen, Toyota, and Honda, which are generally developed with one-story offices, showrooms, and service facilities. Visitor-serving uses are present to the south of the Project site adjacent to U.S. Highway 101 (U.S. 101) and Calle Joaquin. Commercial uses include a gas station, restaurant, and several hotels, including the Hampton Inn, Marriott, and Motel 6. The Project site is bordered to the south by the Mountainbrook Church property and one-story building, which is situated on the top of the hill south of the Specific Plan area. The Mountainbrook Church property extends from the church's hilltop location down to Calle Joaquin. Farther south, the KSBY television broadcasting studio, including a one-story building, surface parking lot, and several telecommunications structures are located on a hill adjacent to U.S. 101. There are no existing residential developments adjacent to the Project site; the closest residential neighborhoods are located 0.3 mile north, beyond Irish Hills Plaza, and 0.3 mile southeast across U.S. 101.

Roads immediately adjacent to the Project site include LOVR and Calle Joaquin. LOVR is a four-lane roadway with a center median turning lane and provides Class II bicycle lanes in both directions. The northbound side of LOVR is striped for parallel parking and provides a 10-foot-wide sidewalk. The southbound side of LOVR along the Project site frontage does not provide parking or a sidewalk and is curbed adjacent to an open vegetated drainage ditch running the length of the Project site. Calle Joaquin is a two-lane roadway that extends south

The Project site is bordered to the west by the Irish Hills Natural Reserve (left), which contains a public trail system with hiking and biking opportunities. Irish Hills Plaza (right) located north of the Specific Plan area contains retail and commercial businesses.

of the Specific Plan area from LOVR to KSBY within the City limits. From LOVR and along the segment adjacent to the hotels, Calle Joaquin is bordered with sidewalks and planter strips on both sides. From the hotels to KSBY, Calle Joaquin is a two-lane road with unimproved shoulders along either side of the road. Calle Joaquin does not provide access to the Project site, but is the main road to Mountainbrook Church, KSBY, and Filipponi Ranch. U.S. 101 is located approximately 0.15 mile east of the Specific Plan area and provides regional access to the Project vicinity via LOVR.

2.2.3 Existing Project Site Characteristics

The Project site encompasses highly varied topography. The southwest portion of the site is approximately 100 to 120 feet higher in elevation than the eastern portion of the site along lower Froom Creek adjacent to LOVR. Upper elevations of the site have steeper slopes and drainages that transition to the Irish Hills Natural Reserve in the hills above. Relatively flat grassland, disturbed areas, the Froom Creek channel, and wetlands occur in lower elevations of the Project site.

The Project site has highly varied topography ranging from low-lying wetlands along LOVR to the steep hillsides at the base of the Irish Hills. Froom Creek and four local drainages flow through the site.

The Specific Plan area is largely undeveloped and used for grazing. However, the northwestern portion of the site is developed with historic dairy ranch buildings and a permitted quarry used for storage of construction materials.

The Froom Creek watershed flows from the Irish Hills and the creek channel traverses the Specific Plan area from north to south. Three small tributaries also flow through the southwestern portion of the Specific Plan area to connect to Froom Creek and feed several wetlands onsite; a fourth drainage flows through the proposed stormwater detention basin area adjacent to Calle Joaquin to connect to Froom Creek and San Luis Obispo Creek (referred to as Drainages 1, 2, 3, and 4; Figure 2-2). These drainages are generally seasonally dry, but carry substantial flows during storm events and are the source of perennial fresh water seeps/springs at the base of the hillside and near the confluence with Froom Creek (see also, Section 3.4, *Biological Resources* and Section 3.8, *Hydrology and Water Quality*).

The Project site includes a wide variety of habitats, including annual and native grasslands, coast live oak/California bay woodland, and coastal scrub/chaparral habitats, primarily within the higher elevations of the Specific Plan area. About 5.8 acres of wetland habitat occurs in low-lying areas adjacent to LOVR and Calle Joaquin, referred to as the Calle

The Project site was historically used for agriculture and contains seven historic dairy farm structures within the northwestern portion of the site (left) and is currently used for periodic grazing. A 7.1-acre agricultural easement is located at the southeast corner of the Specific Plan area, adjacent to Calle Joaquin (right).

Joaquin wetlands. The Calle Joaquin wetlands lie within an area protected by an existing 7.1-acre open space and agricultural conservation easement recorded in 2010 on the Project site as a mitigation measure and development condition for the Prefumo Creek Commons project, which was located adjacent to the northeast corner of the Project site across LOVR to the north.

The Project site is largely undeveloped and is currently used as grazing land for horses. However, the northern side of the Project site is developed with buildings from the historic former Froom Ranch Dairy Farm. The Specific Plan area was used as a dairy farm from the 1850s to 1977 and an assemblage of remaining historical ranch and dairy structures occupy about 3 acres along the northern edge of the Specific Plan area adjacent to Irish Hills Plaza. These buildings include a round-nose dairy barn (dairy barn), creamery, granary, four-bedroom house (main residence), bunkhouse, shed, and an "old" barn, referred to as the Froom Ranch Dairy Farm complex. The Applicant currently uses the main residence building as an office and some of the historic structures for storage in support of a construction business. A portion of the northwestern corner of the Project site also contains an approximately 4-acre active permitted red rock quarry currently used for aggregate storage and operating under a Surface Mining and Reclamation Act (SMARA) permit.

An existing paved driveway off LOVR provides primary access to the Specific Plan area approximately 200 feet south of Irish Hills Plaza.

The Specific Plan area is accessed primarily from LOVR via an existing paved driveway located approximately 200 feet south of Irish Hills Plaza. The Specific Plan area includes this paved driveway and several internal unpaved/dirt access roads. A manmade earthen berm extends along the south side of Froom Creek, confining the existing creek channel to a perched elevation along the western edge of the Specific Plan area at the base of the Irish Hills. The site also includes stormwater detention facilities that capture runoff from a portion of Irish Hills Plaza. An approximately 3.2-acre detention basin located in the southeastern portion of the site receives surface runoff from the eastern side of Irish Hills Plaza via subsurface pipes traversing the Specific Plan area. Additionally, an existing drainage ditch extends from Irish Hills Plaza parallel to LOVR that collects and conveys surface runoff from the roadway and Irish Hills Plaza to culverts near Calle Joaquin. The

drainage ditch has established riparian vegetation and includes state and federal jurisdictional riparian areas.

2.3 PROJECT OBJECTIVES

Section 15124(b) of the California Environmental Quality Act (CEQA) Guidelines requires a statement of a project's objectives that includes the underlying purpose of the Project. Major objectives of the Project include:

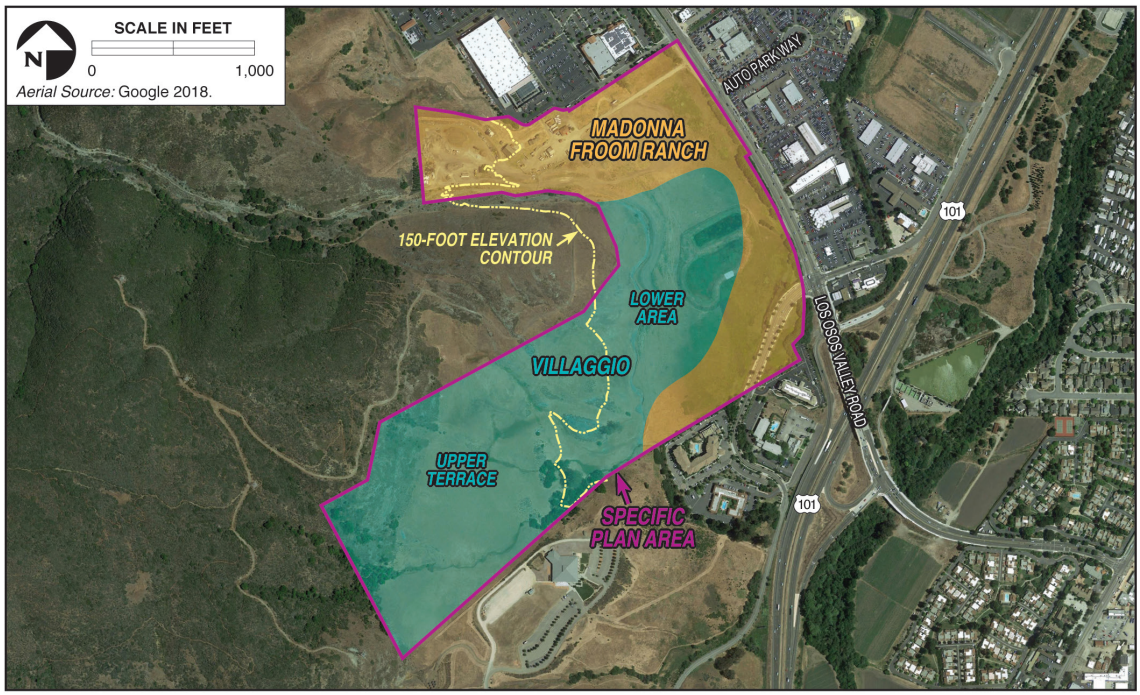
1. Development of a mix of uses while protecting sensitive environmental resources and maintaining public views of the Irish Hills.
2. Provision of a range of housing options, including workforce housing, senior housing, and inclusionary housing.
3. Development of an economically feasible, healthy, safe, and secure Life Plan Community that will serve residents 60 years of age and over.
4. Development of multi-family housing, including housing consistent with the adopted City Inclusionary Housing Requirements in effect at the time of the Specific Plan adoption.
5. Provision of commercial retail uses that complement residential uses and facilitate pedestrian and bicycle access.
6. Provide site hydrology design to improve stormwater conveyance and management, provide a restored riparian creek corridor, and enhance fishery habitat and biological resource value.
7. Development of a public park that includes access and connection to existing trails in the Irish Hills Natural Reserve and proposed trails within the Specific Plan area.
8. Reconstruction, rehabilitation, and adaptive reuse of architecturally significant historic structures within a public park, in a setting and configuration that retains historic integrity, while avoiding seismic impacts.
9. Establishment of a cohesive transportation and circulation network of collector and residential roads, bicycle lanes, transit opportunities, and pedestrian sidewalks that is integrated with and enhances the regional transportation system.
10. Incorporation of sustainability measures that exceed the requirements of the California Building Standards Code (Title 24) and California Energy Code (Part 6) in effect at the time of construction, as well as provide onsite renewable energy facilities and Electric Vehicle (EV) charging infrastructure in all land use types.
11. Avoidance of impacts to sensitive plant and wildlife species, such as the state and federally-endangered Chorro Creek bog thistle (*Cirsium fontinale var. obispoense)*.

2.4 PROJECT OVERVIEW

The Project would guide future land use and development within the Specific Plan area in conformance with the requirements of California Planning and Zoning Law (Government Code sections 65450 through 65457). The Project proposes a mix of residential, retail commercial, public facilities, and open space land uses along with onsite roadway, bicycle, and pedestrian circulation improvements (see Appendix C, Chapter 2, *Land Use, Zoning, and Development Standards*). Project development includes two major components within the Specific Plan area (Figure 2-3):

- **Villaggio Life Plan Community (Villaggio)** – a 70.4-acre gated senior residential community (residents must be 60+ years of age) in the central and southern portions of the Specific Plan area, providing up to 404 units of senior housing that would include independent and assisted living units, as well as health care facilities with 51 beds for memory care and skilled nursing. Villaggio includes two subareas. The **Upper Terrace** includes Villaggio areas above 150 feet in elevation. The **Lower Area** include Villaggio areas below 150 feet in elevation (refer to Figure 2-3).
- **Madonna Froom Ranch** – multi-family residential, retail commercial uses, and a public park within 39.3 acres of the northern and eastern portions of the Specific Plan area, providing up to 174 multi-family units and up to 100,000 sf of mixed commercial uses, including a potential 70,000-sf hotel and 30,000 sf of retail commercial. Madonna Froom Ranch includes areas outside Villaggio, including the proposed 2.9-acre public park and the Calle Joaquin wetlands, but does not include the proposed stormwater detention basin area.

The Project would develop 2.9 acres as a new public park within the Madonna Froom Ranch portion of the Project and would dedicate a total of 59.0 acres of open space within the Specific Plan area, as further described below.



wood.

Villaggio Life Plan Community and Madonna Froom Ranch

FIGURE 2-3

The Project would also include development of supporting infrastructure and adjustments to existing site features, including:

- Realignment and reconstruction of Froom Creek, including channel and bank improvements within the Project site and immediately downstream of the Project site;
- Development of a new stormwater detention basin with capacity to hold 22 acre-feet of stormwater within an existing 7.1-acre easement on the Mountainbrook Church property;
- Reconfiguration of an existing 7.1-acre agricultural conservation easement adjacent to Calle Joaquin;
- Installation of a new signalized intersection and transit stop at LOVR and Auto Park Way;
- Installation of sidewalks along a portion of LOVR to connect to Irish Hills Plaza;
- Development of an onsite circulation system with new collector and residential roads, bicycle facilities, transit improvements, and emergency access extending to Mountainbrook Church; and
- Extension of utility lines and infrastructure.

The following sections provide detailed descriptions of the Project components.

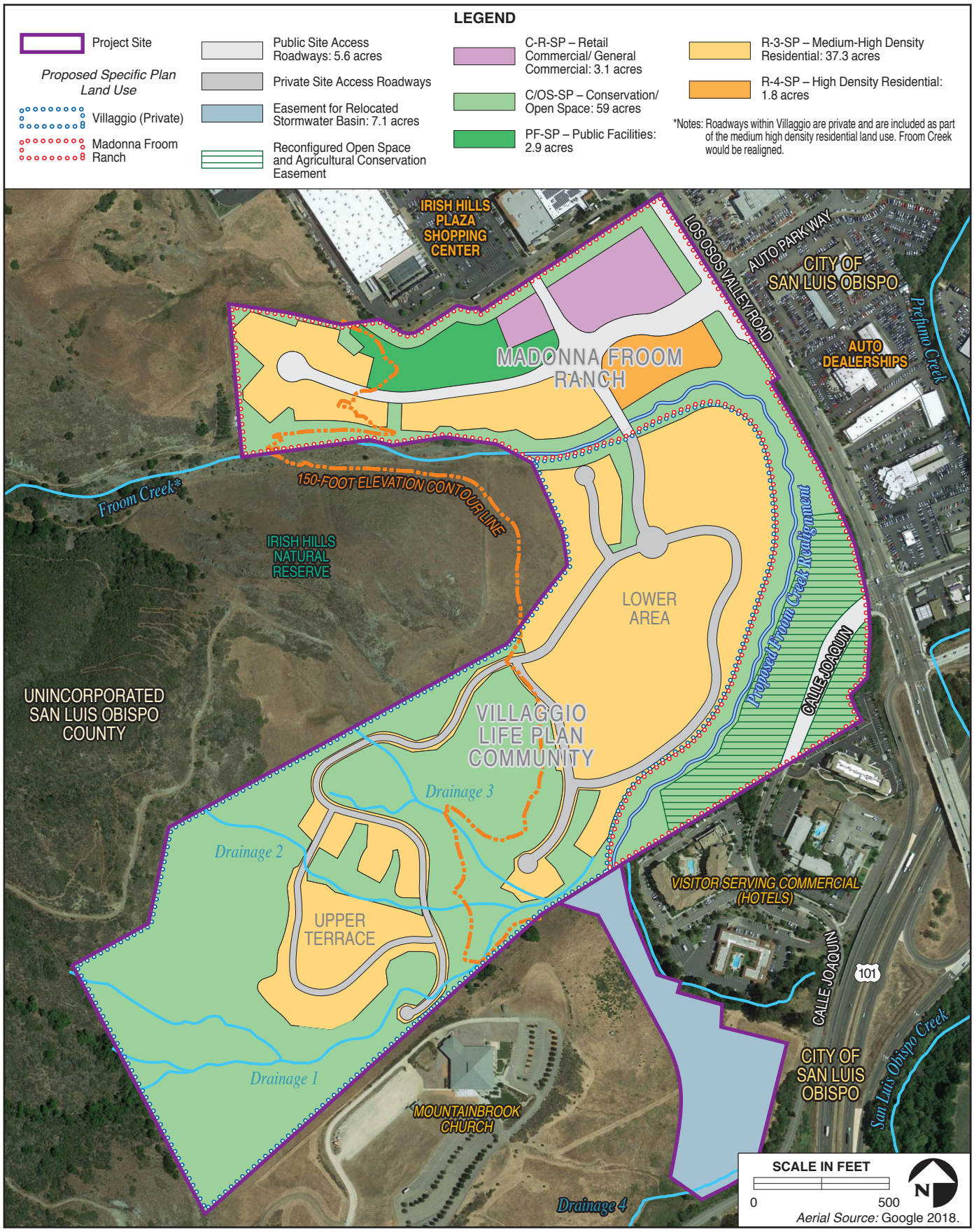
2.4.1 Proposed Land Use Plan

The Project involves a land use plan with a development program and guidelines for residential and commercial land uses along with public park and conservation/open space (C/OS) uses in the Specific Plan area (Figure 2-4). The Project would adopt specific zoning standards to govern development within the Specific Plan area. The Project's proposed land use plan is based on the City's zoning standards for medium-high residential (R-3), high density residential (R-4), retail-commercial (C-R), public facilities (PF), and C/OS uses, but proposed modifications are included to uniquely apply within the Specific Plan area for residential and commercial uses. Modified development standards for residential uses that deviate from the City's Municipal Code are proposed within the Specific Plan area for R-3 (R-3-SP) and R-4 (R-4-SP) zone districts, as described in Table 2-1. Modifications would accommodate envisioned conceptual development depicted in Figure 2-5.

Table 2-1. Proposed Development Standards for Residential Zones

Standard	Existing R-3 Standards	Proposed R-3-SP Standards	Existing R-4 Standards	Proposed R-4-SP Standards
Maximum Density (units/acre)	18 du/ac[6]	20 du/ac	24 du/ac	24 du/ac
Maximum Building Coverage	60%	60%	60%	60%
Maximum Building Height[1,2,3]	35 feet	35 feet for Madonna Froom Ranch; 45 feet for Villaggio	35 feet	35 feet
Minimum Street Yard Setback[4]	15 feet	15 feet	15 feet	15 feet
Minimum Other Yard Setback[4]	10 feet	0-5 feet	10 feet	0-5 feet
Minimum Lot Size[5]	5,000 sf	1,000 sf	5,000 sf	1,000 sf
Minimum Lot Width[5]	50 feet	20 feet	50 feet	20 feet
Minimum Lot Depth[5]	80 feet	50 feet	80 feet	50 feet

Note: du/ac = dwelling units per acre
[1] Building heights are measured from finished grades established at the time of completion of subdivision grading.
[2] Structures above the 150-foot elevation line would be limited to a maximum roof height of 238 feet above mean sea level.
[3] Components of solar energy systems, towers, and mechanical equipment screening may extend up to 10 feet above the maximum building height.
[4] Yard setbacks do not apply to development in Villaggio as all development is located along private streets.
[5] Lot area and dimensions standards do not apply to Villaggio as individual lots for housing units are not proposed.
[6] Density of 18 du/ac for properties within an Airport Safety Zone; 20 du/ac for all other properties.



wood.

Proposed Land Use Plan

FIGURE 2-4

Development within the proposed C-R zone district would be consistent with the City's Municipal Code for the C-R zone, except that several commercial uses would be prohibited due to potential land use conflicts or incompatible scale and intensity of development, such as service stations, warehouses, and automobile-related businesses. Otherwise, development standards would be consistent with the City's Zoning Regulations for the C-R zone, including a maximum building height limit of 45 feet, maximum site coverage of 100 percent, and a maximum floor-to-area ratio of 3.0. Further, the maximum individual building size would not exceed 60,000 sf. No modifications to development standards are proposed for PF zones and C/OS zones compared to the City's Municipal Code standards.

Table 2-2. Summary of Proposed Zoning and Land Uses

Proposed Zones	Acreage	Housing Units/ sf
VILLAGGIO		
R-3-SP Medium-High Density Residential	**31.6**	**404 units/ 51 beds**
Independent Living Units		*366 units*
Assisted Living Units		*38 units*
Health Care Units (Skilled Nursing & Memory Care)		*51 beds*
Health Care Administration Building		*85,670 sf*
Ancillary Uses (wellness center, restaurants, theater, etc.)		*84,078 sf*
MADONNA FROOM RANCH		
R-3-SP Medium-High Density Residential	**5.7**	**130 multi-family units**
R-4-SP High Density Residential	**1.8**	**44 multi-family units**
C-R-SP Retail-Commercial	**3.1**	**100,000 sf**
Hotel with Restaurant		*70,000 sf*
Other Commercial		*30,000 sf*
PF-SP Public Facilities	**2.9**	**N/A**
ADDITIONAL USES		
C/OS-SP Conservation/ Open Space	**59.0**	**N/A**
Designated Open Space	*51.9*	N/A
Reconfigured Agricultural Easement	*7.1*	N/A
Roadways	**5.6**	**N/A**
TOTAL	**109.7**	**578 units/51 beds 100,000 sf commercial**

Under the proposed land use plan, the Project would allow for the development 404 independent and assisted senior living units and 51 health care facility beds in Villaggio, and 174 multi-family units in Madonna Froom Ranch. Proposed senior living and residential uses would only be within medium-high and high density residential zones. The Project also proposes up to 100,000 sf of retail commercial uses (including a potential 70,000-sf hotel and 30,000 sf of commercial retail) within a retail-commercial zone, 59.0

acres of dedicated open space within a conservation/open space zone, and 2.9 acres of public park within a public facilities zone (Table 2-2 and Figure 2-4).

The design, layout, and function of Villaggio and Madonna Froom Ranch would be substantially different from one another. While Madonna Froom Ranch is proposed as a multi-family residential neighborhood with adjacent retail commercial uses and a public park, Villaggio is proposed as a private, gated senior residential community that provides different levels of accommodations and care depending on the needs of the residents, along with supporting private recreational uses and facilities. Residential units within Villaggio would not be independently owned; therefore, there would not be subdivisions within the Villaggio development area to create individual lots for residents to purchase. As such, the types of housing and other facilities differ greatly between Villaggio and Madonna Froom Ranch, as further described below.

2.4.1.1 Villaggio Life Plan Community

Villaggio is proposed as a private, gated, and age-restricted senior housing community for residents aged 60 years old or older. Villaggio would provide a variety of senior housing choices for independent or assisted living and would include private amenities for residents, such as indoor and outdoor recreational facilities, health care services, restaurants, a movie theater, and a network of private onsite trails. Development of Villaggio is proposed within two separate areas of the Specific Plan area, referred to as the "Lower Area" and "Upper Terrace," which would be connected by a private road. The development proposed in the Upper Terrace would be above the 150-foot elevation line (Figures 2-3 and 2-5).

Villaggio would include a 3-story community area with common area providing resident-serving amenities, such as retail uses, restaurants and a theater, designed as a Mediterranean promenade.

Villaggio Residential Development

The Project would designate 31.6 acres of R-3-SP zoning within Villaggio for planned senior residential use with independent living units and specialized residential facilities for

assisted living, skilled nursing, and memory care (Table 2-3). The independent living units would include:

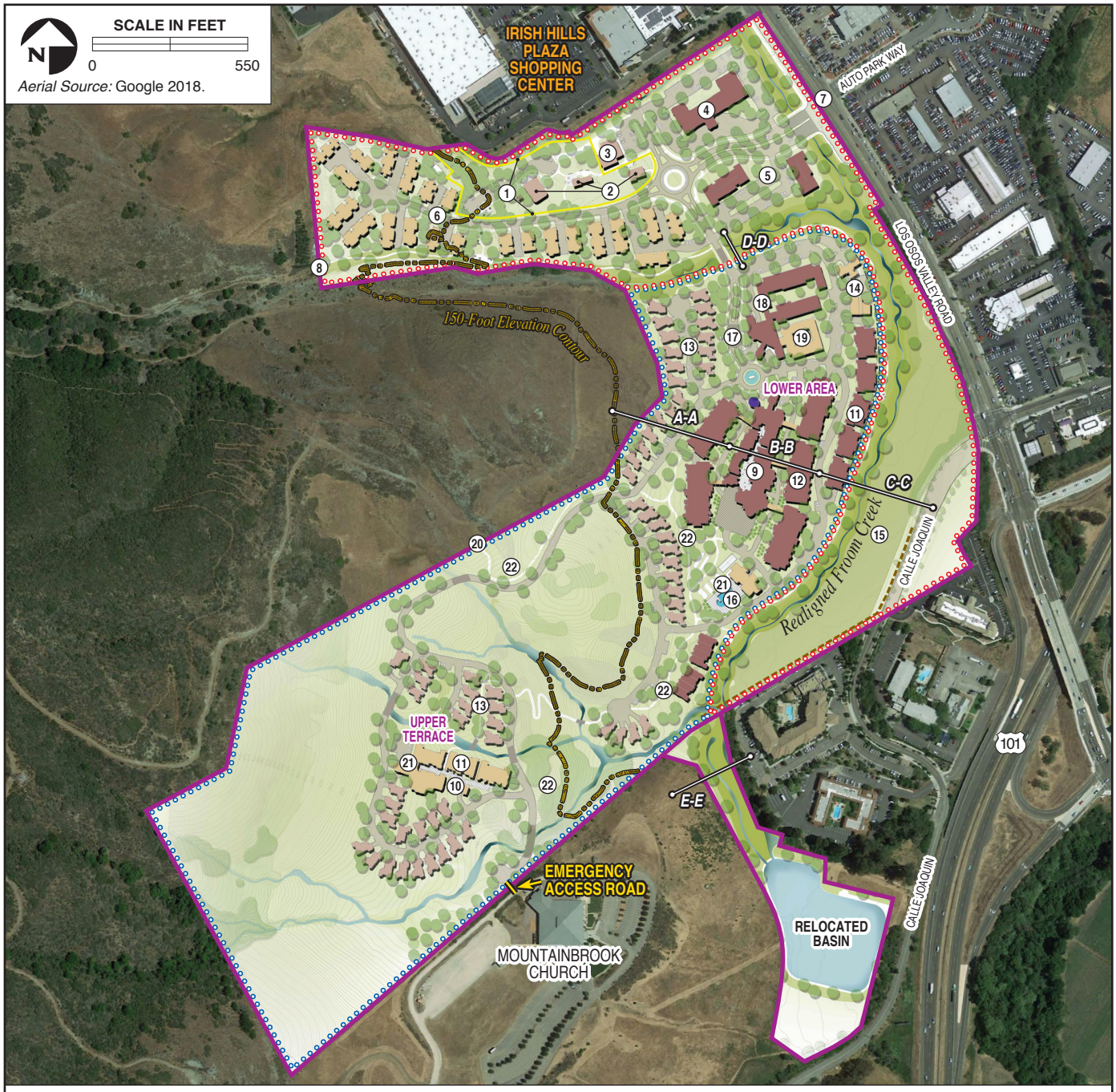
- Piazza Apartments and Village Suites – 197 total units within the upper floors of three-story multi-use buildings up to 45 feet in height;
- Garden Terrace Apartments – two- to three-story apartment buildings, containing a total of 108 two-bedroom units; and
- Villas – 61 detached one-story single-family homes with two bedrooms, up to 20 feet in height.

In addition, Villaggio would include a proposed Health Care Administration Building that would contain 38 assisted living units, 17 memory care beds, and 34 skilled nursing beds, along with supporting health care facilities available to Villaggio residents. The proposed density of units within the R-3-SP zone would allow up to 20 dwelling units per acre (du/acre) within the developed portions of the Lower Area and Upper Terrace, but as proposed, the effective density of the development would be approximately 13 to 15 du/acre within the R-3-SP zone in Villaggio. Building heights are proposed up to a maximum of 45 feet with allowance for certain appurtenances, towers, and utilities consistent with the City's Zoning Regulations, which allow an additional 10 feet for multi-story buildings (i.e., 55 feet in total height).

Table 2-3. Types of Senior Housing within Villaggio

Type of Senior Housing	Units	Size (sf)
Independent Living Units[1]	366 units	700-2,000 sf
Piazza Apartments	*150 units*	700-1,900 sf
Village Suites	*47 units*	700-1,900 sf
Garden Terrace Apartments	*108 units*	1,300-1,800 sf
Villas	*61 units*	1,700-2,000 sf
Assisted Living Units[2]	38 units	310-620 sf
Memory Care	17 beds	N/A
Skilled Nursing	34 beds	N/A

[1] Independent Living Units would be limited to dual occupancy.
[2] Assisted Living Units would be designed to be single occupancy, though a total of two units would be designed for dual occupancy.



LEGEND

- Project Site
- 1- to 2-Foot Berm
- E-E Cross Section Location (refer to Figures 2-6 and 2-15)

Proposed Building Heights

- 1 Story – 18'-20' High
- 2 Story – 24'-30' High
- 3 Story – 36'-45' High
- Tower – 45'-55' High

Madonna Froom Ranch

KEY

1. Trailhead Park Boundary
2. Relocated Historic Structures
3. Retail/Office – 30,000 sf
4. Commercial/Hotel – 70,000 sf
5. High-Density Multi-Family Housing – 44 units including 27 affordable units
6. Medium-High Density Attached Multi-Family Housing – 130 units
7. LOVR/Auto Park Way Signalized Intersection
8. Trail Access

Villaggio

9. Commons
10. Upper Commons
11. Garden Terraces – 108 total units
12. Piazza Apartments and VillageSuites – 197 total units
13. Villas – 61 total units
14. Health Center Support Buildings
15. Reconfigured Open Space and Agricultural Conservation Easement
16. Wellness Center
17. Security Gatehouse
18. Health Care Administration Building – 51 beds
19. Assisted Living – 38 units
20. Trail Access
21. Recreational Facility
22. Recreational Area

wood.

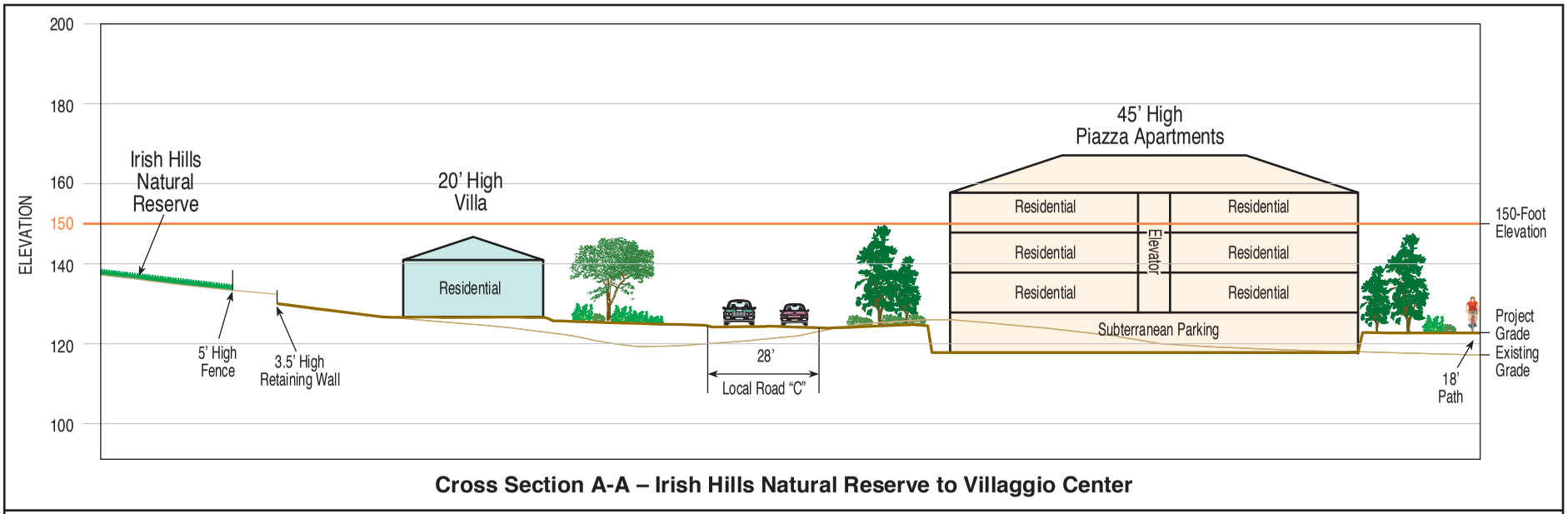
Conceptual Site Plan

FIGURE 2-5

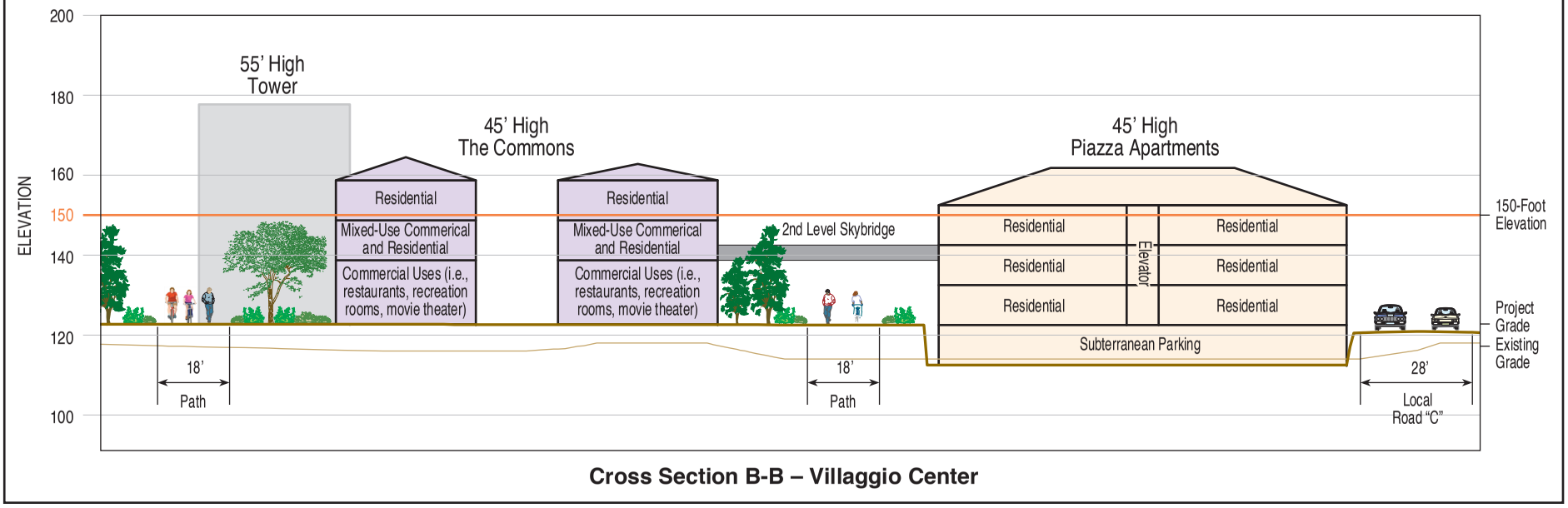
Non-Residential Development

The Project proposes non-residential development to serve future Villaggio residents, including health care facilities, ancillary restaurant and recreational uses, and other private amenities. These uses are proposed to serve onsite residents, guests, and staff only, and would not be open to the public or residents of Madonna Froom Ranch. Non-residential development within Villaggio would include:

- **Health Care Administration Building** – a three-story 85,670-sf building within the Lower Area near the Villaggio entrance gate. This building includes the assisted living units, as well as memory care and skilled nursing beds where residents require 24-hour care and supervision.
- **Wellness Center** – a 17,720-sf wellness center located within the Lower Area. This building would provide fitness facilities, including an outdoor swimming pool, restrooms, lockers, yoga area, exercise equipment, and physical therapy services.
- **Recreation Facilities** – approximately eight locations within the Villaggio area would provide private recreational areas, facilities, and/or community gathering areas, including an outdoor swimming pool, spa pool, gym, pickle ball and bocce ball courts, community gardens, resident gardening plots, and craft rooms. Private trails and connections to public trails within and adjacent to the Project site would also be provided.
- **Commons** –a three-story mixed-use building, known as "Commons", would serve as the community center and include ground-floor resident-serving uses, such as restaurants, craft areas, workshops, recreation rooms, and a movie theater. Commons would contain a central paseo with plaza areas and a pedestrian orientation.
- **Assembly Room** – a 5,688-sf room would accommodate a variety of functions and gatherings for residents.
- **Tower** – a 55-foot-tall tower is proposed within the Lower Area that would include a library on the first floor, a total of four guestrooms on the second and third floors, and an observation deck on the fourth floor.
- **Security Gatehouse** – an approximately 250-sf security gatehouse structure would be located at the main entrance to Villaggio to control access and entry of residents, and provide directions, parking passes, etc. for visitors, employees, and deliveries.



Cross Section A-A – Irish Hills Natural Reserve to Villaggio Center



Cross Section B-B – Villaggio Center

wood.

Villaggio Life Plan Community Conceptual Cross Sections

FIGURE 2-6

2.4.1.2 Madonna Froom Ranch

The Madonna Froom Ranch portion of the Specific Plan area would support a mix of uses, including multi-family housing, retail commercial development, a public park, designated open space, and non-restricted public access to roadways, recreational facilities, and commercial establishments. Adoption of the Specific Plan would result in adoption of the proposed land use plan; however, final design of the Madonna Froom Ranch development may change site layout while maintaining consistency with the proposed standards described below.

Medium-High Density Residential (R-3-SP)

Madonna Froom Ranch would contain 5.7 acres of medium-high density residential zoned land to allow up to 130 multi-family housing units. R-3-SP development within Madonna Froom Ranch would be developed at up to 20 du/acre in density, would have a minimum lot size of 1,000 sf, and a maximum building height of 35 feet (refer to Table 2-3). Minimum street setbacks would be 15 feet, while other yard setbacks would range from 0 feet to 5 feet.

High Density Residential (R-4-SP)

Madonna Froom Ranch would contain 1.8 acres of high density residential zoned land to allow up to 44 multi-family housing units. R-4-SP development would be up to 24 du/acre in density, would have a minimum lot size of 1,000 sf, and a maximum building height of 35 feet (refer to Table 2-3). Minimum street setbacks would be 15 feet, while other yard setbacks would range from 0 to 5 feet.

Approximately 27 deed-restricted affordable housing units would be provided within the R-4-SP zone. These units would be subject to resale and rental restrictions to meet the housing needs of low- and moderate-income households. Consistency of the Project with City Housing Element (HE) policies are discussed in detail in Section 3.11, *Population and Housing*.

Retail Commercial (C-R-SP)

Madonna Froom Ranch would include 3.1 acres zoned for retail and commercial uses located in the northeast portion of the Specific Plan area, adjacent to the Irish Hills Plaza and near the proposed entrance to the Specific Plan area from LOVR. The Project currently anticipates development of a three-story, 70,000-sf hotel up to 45 feet in height with ground

floor retail and restaurant uses. In addition, 30,000 sf of retail and office uses are proposed within a one-story building up to 24 feet in height (Figure 2-4 and 2-5).

Public Facilities (PF-SP)

Madonna Froom Ranch would include 2.9 acres zoned for public facilities to provide a public park; the park would serve as a trailhead, with recreational amenities, parking, and connections to existing public trails within Irish Hills Natural Reserve. While the Project would include development of the park, it would be owned and maintained by the City. The proposed park facilities would include four relocated and/or reconstructed/rehabilitated historically significant structures from the former Froom Ranch Dairy Farm, along with visitor signage and information, a playground area, picnic areas, 30 off-street parking spaces, and a trailhead plaza with bicycle parking. The proposed public park would link to the surrounding residential and retail uses and the regional pedestrian and bikeway system with connecting Class II and Class III bicycle lanes and sidewalks.

2.4.1.3 Proposed Open Space

The Project includes a total of 59.0 acres of discontinuous C/OS zones, including 38.9 acres within Villaggio and 20.1 acres within Madonna Froom Ranch (Table 2-4). The total of 59.0 acres includes 51.9 acres of dedicated open space and an existing 7.1-acre agricultural and open space easement. The Project would reconfigure the existing onsite 7.1-acre agricultural and open space easement to include lands on both sides of Calle Joaquin (Figure 2-4). While the boundary would change, the easement would have the same total area of 7.1 acres. Since the easement already protects 7.1 acres of land as open space, this easement area is not included in the Project's open space calculations for purposes of meeting General Plan requirements. Accordingly, the 51.9 acres of dedicated open space would meet the City's General Plan requirements for at least 50 percent of the Specific Plan area to be designated as Open Space.

All C/OS areas within the Project site would be owned and maintained by Villaggio and/or the future Madonna Froom Ranch management association, respectively, unless otherwise agreed to by the City. Proposed open space uses are based on guidance from the Land Use and Circulation Element (LUCE) Update, and would include open lands supporting existing wetlands, the realigned Froom Creek and associated setbacks and drainages, and the hillsides surrounding Villaggio, including those bordering the Irish Hills Natural Reserve (refer to Figure 2-4).

Table 2-4. Summary of Proposed Open Space

C/OS Zones	Acres
VILLAGGIO	
Conservation/Open Space	38.9
MADONNA FROOM RANCH	
Conservation/Open Space	20.1
Open Space	*13.0*
Proposed Reconfigured Open Space Easement	*7.1*
Total	**59.0**

2.4.2 Project Design

The Project proposes standards and guidelines that address building orientation, setbacks, visual quality of the streetscape, pedestrian activity areas, design of public parks and recreational facilities, access and parking, and architecture styles. The siting and design of proposed development is intended to consider site characteristics and constraints within the Specific Plan area, including natural features and access requirements. The proposed standards include actions or requirements that must be fulfilled by new development, while guidelines refer to methods and approaches used to achieve the desired outcome (Appendix C, Chapter 2, *Land Use, Zoning, and Development Standards*).

The Project provides a programmatic description of required actions within the Specific Plan area to direct physical design, land use design, circulation design, and infrastructure. Future development proposals to implement the approved FRSP would be subject to existing City review and permitting requirements, including design review (see also, Section 2.5, *Required Approvals*).

2.4.2.1 Architectural Design

Project architecture would comprise common styles found within the San Luis Obispo region, such as Ranch, Craftsman, California Mission, and Mediterranean. However, architectural design would differ between Villaggio and Madonna Froom Ranch. For example, the architectural style of Commons within Villaggio would be primarily Mediterranean while the retail commercial structures proposed within the Madonna Froom Ranch would include Ranch and Craftsman features with a form, massing, and architectural style that complements the existing historic buildings onsite.

Architectural style would differ also by proposed land uses. Design features of residential areas within Madonna Froom Ranch would include the following:

- Site design would include elements that facilitate neighborhood interaction, such as courtyards and entryways facing public walkways.
- Residential developments would provide small private outdoor use areas, such as patios, decks, and balconies.
- Varied roof designs would be encouraged, with earth-toned colors and details to minimize reflective glare and blend visually with the natural setting.
- Perimeter fencing would be an open picket or wire style in a dark or recessive color that does not wall-off the community from adjacent open space areas.
- Glare and light pollution would be controlled with outdoor lighting standards included in the FRSP's proposed design guidelines, consistent with the City's Night Sky Preservation Ordinance and Community Design Guidelines.

Commercial retail area design features within Madonna Froom Ranch would include the following:

- Site design would be oriented toward streets and enhance the pedestrian network with amenities, such as benches and shade trees.
- Architectural details would be used to add color, shadows, patterns, and interesting forms, such as wall surfaces constructed with varying patterns and changes in materials, and building pop-outs, columns, and recessed areas to create shadow patterns and depth on the wall surfaces.
- Roof design would be varied to minimize bulk and scale, including the screening of roof-mounted equipment from view from the base of adjacent properties.
- Wall signs would utilize raised, backlit metal letters, halo lighting, or external lighting.

2.4.2.2 Sustainability Initiatives

The Project would incorporate sustainability measures that exceed the requirements of the California Building Standards Code (Title 24) and California Energy Code (Part 6) in effect at the time of construction. A series of goals, policies, and regulations developed based on the City's Conservation and Open Space Element (COSE) and Climate Action Plan are required for development of the Specific Plan area, including:

- Building design shall maximize solar exposure to improve daylighting and energy efficiency, including compliance with the General Plan Solar Access Standards and conformance with the California Building Code (CBC) to be at Net Zero in 2020.
- Building placement shall provide opportunities for passive heating, cooling, and lighting systems, such as using sunlight for direct heating and illumination.
- Development of the Project site shall comply with the Cal Green mandatory requirements checklist for non-residential development (Major Commercial

Measures Green Building Code) administered by the City's Building and Safety Division.

- Photovoltaic solar collectors, wind, and/or geothermal systems shall be utilized where feasible to offset new energy demand.
- Garages shall be pre-wired to accept EV charging stations, if installed by future occupant, and commercial and hotel uses would provide EV charging stations for customers and guests.
- New development shall incorporate high-efficiency Energy Star compliant appliances and efficient types of lighting, such as light-emitting diodes (LEDs).
- The use of recycled building materials in new construction, including the harvesting of wood and other buildings from demolished or refurbished buildings for potential use elsewhere on the site would be encouraged.
- Landscaping plans shall use native and non-invasive drought tolerant plant materials to conserve water and would be designed to prevent runoff with low impact development (LID), such as using permeable pavers and other materials that maximize water infiltration.
- Recycled water shall be used to irrigate planting areas, the public park, landscaped parkways, and common outdoor areas in residential and retail commercial zones.
- The use of bioswales, rain gardens, and retention and detention basins shall be used in landscape design to manage stormwater onsite to the maximum extent possible (see also, Section 2.4.5, *Stormwater Management System and Froom Creek Realignment*).

2.4.2.3 Retaining Walls

The Project site would require at least five retaining walls. Up to three retaining walls would be located within the Upper Terrace. These retaining walls would be located on slopes above the 150-foot elevation line and would range from 300 to 500 feet in length. An additional retaining wall would be located along the border of the Irish Hills Natural Reserve and the Specific Plan area on the west side of the Lower Area, and would be approximately 300 feet long (refer to Cross Section A-A on Figure 2-6). Another 75-foot-long retaining wall would be located near the relocated historic dairy barn structure to support the eastern corner of the building in its new location. The footing depths for proposed retaining walls with sloping grade behind would be approximately one-third of the exposed height of the retaining wall. For instance, a 6-foot-tall retaining wall would require at least 2 feet of subsurface structural support. In areas where the grade behind the wall is level, the footing depth may vary based upon the actual soil conditions at the location of the retaining wall (i.e., more clay, less clay, presence of rock, etc.).

2.4.2.4 Relocation and Reconstruction of Historic Structures

The Specific Plan area currently includes seven historic structures constructed in the late 1800s to early 1900s as part of the former Froom Ranch Dairy Farm. These structures collectively contain features that contribute to an eligible historic district under the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR), as further described in Section 3.5, *Cultural and Tribal Cultural Resources*. The Project would relocate and adaptively reuse four of these structures within the proposed public park, including the main residence, creamery, dairy barn, and granary. The shed, bunkhouse, and old barn would be documented consistent with Secretary of Interior (SOI) standards, then demolished and removed.

In addition, there are three other existing structures that were determined to be non-contributing (non-historic) structures within the potential historic district, including a modern telecommunications tower that is camouflaged to look like a water tower. The telecommunications tower would remain in place while the other two structures would be removed (Table 2-5).

Table 2-5. Proposal for Existing Structures Onsite

#	Name	Year Built	Proposal
1	Main Residence	1915	Rehabilitate as building for public park:[1] Structurally reinforce Provide new foundation and relocate Install utilities to building
2	Old Barn	Unknown, est. 125 years old	Remove and document per SOI standards
3	Bunkhouse	1915	Remove and document per SOI standards
4	Round-nose Dairy Barn	1913	Reconstruct and relocate building out of fault setback consistent with SOI standards for adaptive reuse in public park
5	Creamery House	Unknown, est. prior to 1900	Relocate and reconstruct western portion of the building as public park restrooms. Repurpose eastern portion for use as covered area for picnics and events
6	Granary	1913	Relocate and reconstruct in public park
7	Shed Building	1913	Remove and document per SOI standards
8	Cell Tower	2013	Retain in place
9	Storage Building	2010	Remove
10	Outhouse	2000	Remove

[1] It is unknown at this time whether the City, Applicant, or future owner/association for Madonna Froom Ranch would maintain rehabilitated historic structures. See also, Section 3.5, *Cultural and Tribal Cultural Resources*.
Source: Appendix H

The Project would relocate and/or reconstruct four key contributing historic structures roughly 100 feet east of their current locations. A portion of the dairy barn is currently located on top of the Los Osos earthquake fault and, therefore, cannot be utilized for habitable purposes. The Project would relocate this structure to a new location outside of the required 50-foot setback of the fault line so that it could be reconstructed and used for public park purposes. In addition, the main residence, creamery, and granary structures would be relocated eastward and reconstructed on graded terrain to maintain the historic configuration and proportional relationship of the buildings to one another (Figure 2-7).

2.4.2.5 Security Features

The Project would include 5-foot-tall security fencing to enclose the Upper Terrace and the Lower Area of Villaggio and would surround R-3-SP zoned residential areas within Madonna Froom Ranch (Figure 2-8). Since Villaggio would be a private gated community, there would be six pedestrian access points controlled by coded gates in the perimeter fencing to allow resident access from Villaggio to the proposed Froom Creek Trail, Mountainbrook Church, and the public trail system within the Irish Hills Natural Preserve. Fencing around Madonna Froom Ranch would not be locked or gated. In addition, the Project would include new 5-foot-tall agricultural fencing along the Specific Plan area boundary to separate Madonna Froom Ranch from the Irish Hills in the northern portion of the Project site to expand existing agricultural fencing that currently surrounds the southwestern site boundary.

2.4.3 Circulation

The Project's proposed internal circulation system would connect to LOVR and existing sidewalks and bicycle facilities adjacent to the Project site. The proposed circulation system would include new roads, sidewalks, and bicycle facilities within Madonna Froom Ranch.[1] In addition, private roadways and pedestrian paths are proposed in Villaggio (Figure 2-9). Major components of the proposed circulation system are summarized below:

1. Proposed internal roadway network consisting of public and private roads;
2. Proposed bicycle and pedestrian facilities within the Specific Plan area;
3. Parking facilities to accommodate residents, employees, and visitors within the Specific Plan area;
4. Widening of LOVR along a portion of the Project site's frontage;

[1] At this time, it is unknown whether the developer or City would own/maintain the proposed public roads within Madonna Froom Ranch.

wood.

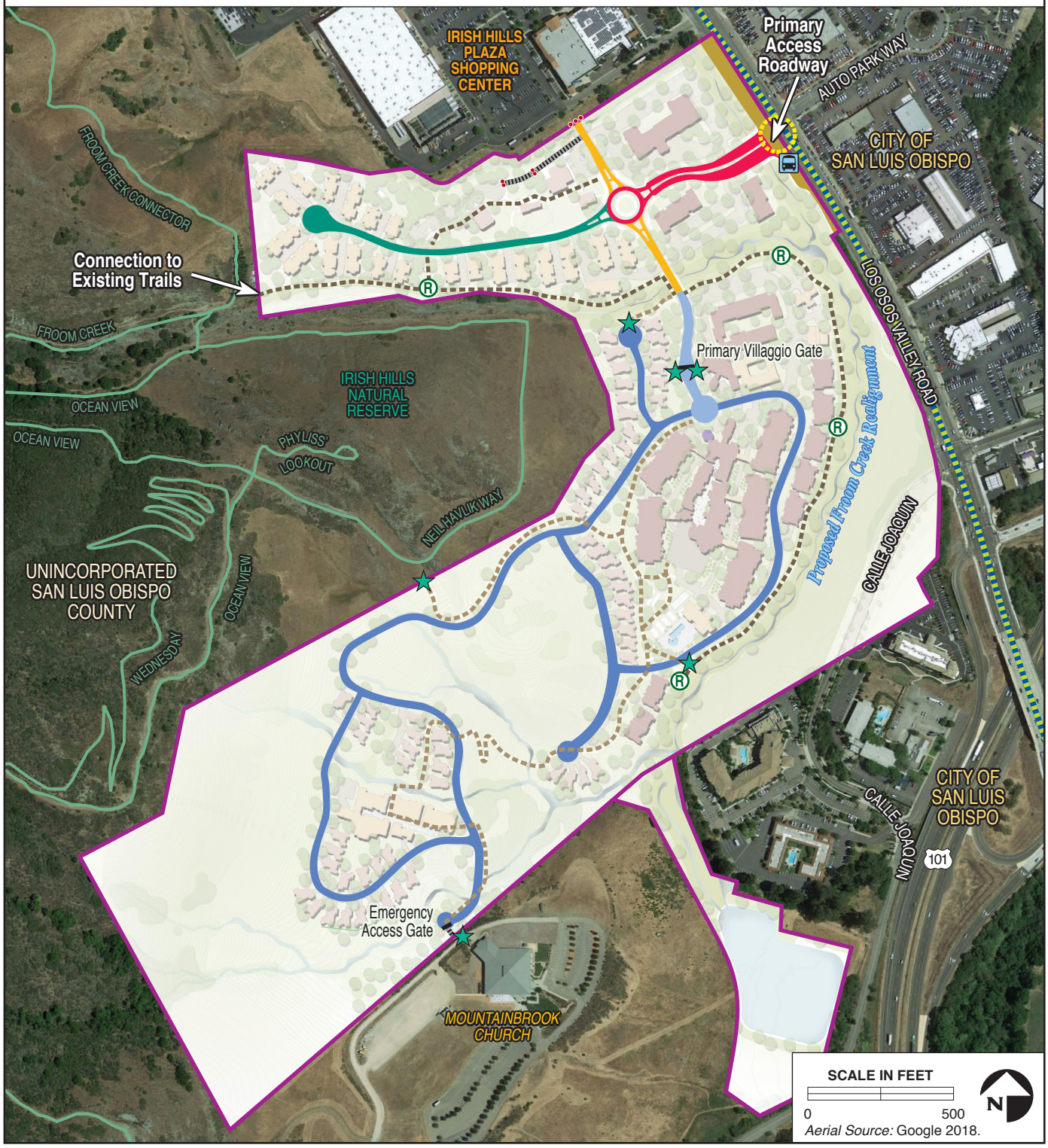
Proposed Plan for Historic Froom Ranch Structures

FIGURE 2-7

wood.

Fencing Plan

FIGURE 2-8



wood.

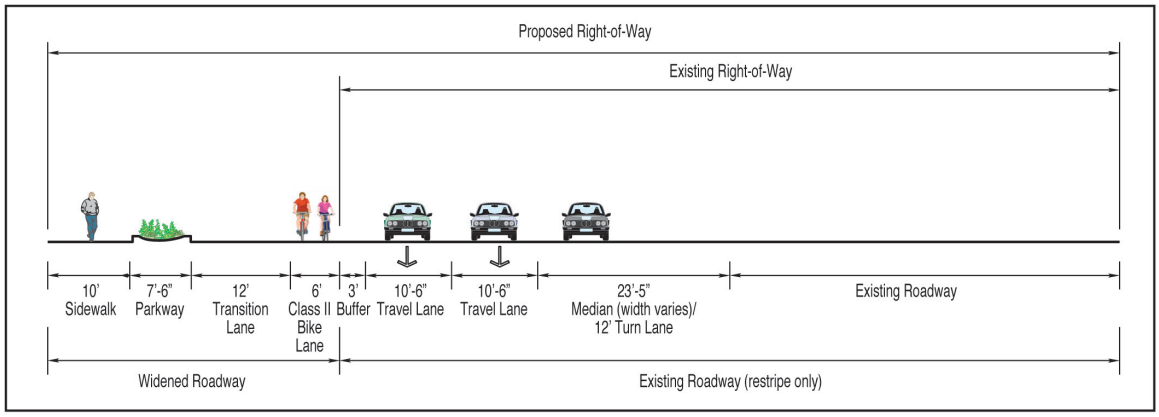
Proposed Circulation Plan

FIGURE 2-9

5. A new bus stop that would be integrated into the regional public transportation system;
6. Installation of sidewalks along an approximate 550-foot-long portion of LOVR from the new transit stop location north to Irish Hills Plaza; and
7. A proposed signalized intersection at LOVR and Auto Park Way to serve as the primary entrance to the Specific Plan area.

2.4.3.1 Los Osos Valley Road Improvements

The Project would include improvements to an approximately 813-foot-long segment of LOVR along the northeastern boundary of the Specific Plan area at the proposed intersection of Commercial Collector "A" and LOVR. LOVR would be widened along this segment by about 35 feet into the Specific Plan area to accommodate new left and right turn lanes into the Project site (Figure 2-10). The Project would restripe existing travel lanes, Class II bicycle lanes, and a center turn lane along this segment. A new sidewalk and parkway would also be installed along approximately 550 feet on the west side of LOVR to extend the existing sidewalk along Irish Hills Plaza to the Project site entrance.



wood. LOVR Improvements **FIGURE 2-10**

2.4.3.2 Primary Access

Primary access to the Specific Plan area would be via a new two-lane road Commercial Collector "A", which would intersect with LOVR at Auto Park Way. The new intersection would be located approximately 1,000 feet south of the intersection of LOVR and Froom Ranch Way. The proposed LOVR/Auto Park Way intersection would be signalized and would provide pedestrian crossings at each leg.

2.4.3.3 Project Roadway Network

The Project would include a roadway network comprising larger Commercial Collectors "A" and "B", smaller Local Roads "A", "B", and "C", and three emergency vehicle access points.

Public Roadways within Madonna Froom Ranch

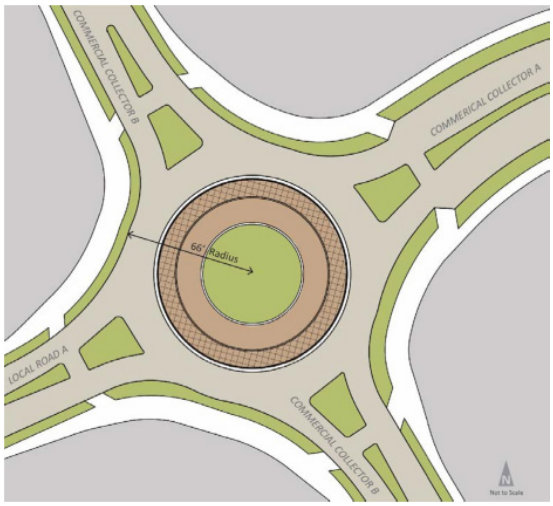
All roadways within Madonna Froom Ranch would be open to the public and accessible by motorists, bicyclists, and pedestrians from LOVR. The Project would include two public Commercial Collector roadways, "A" and "B" and one public Local Road "A" (Figure 2-11).

Commercial Collector "A" would connect LOVR to residential and commercial areas within Madonna Froom Ranch. Commercial Collector "A" would be a 73-foot-wide roadway with one 12-foot-wide travel lane in each direction, a planted median divider, 6-foot-wide Class II bicycle lanes, 8-foot-wide parkways, and 6-foot-wide sidewalks.

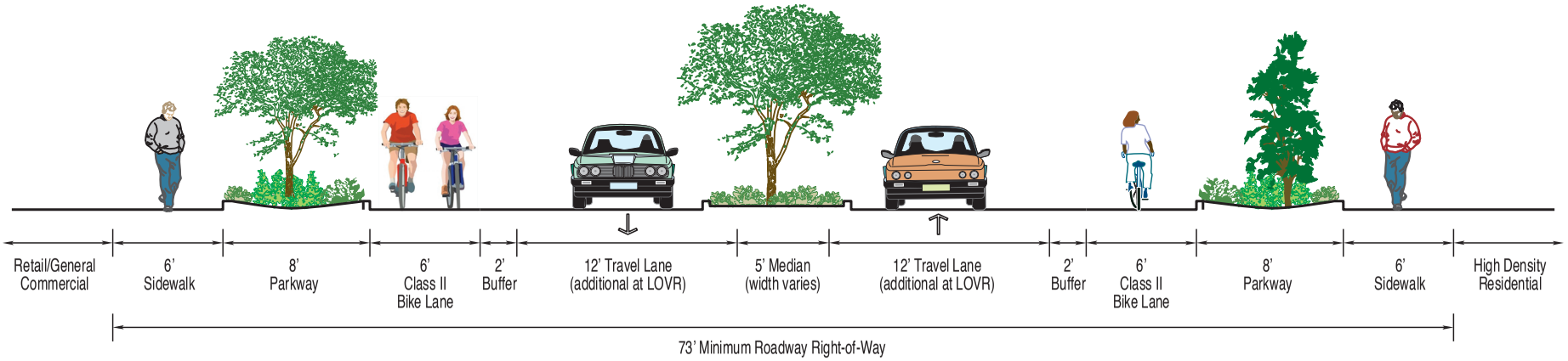
Commercial Collector "B" would connect the main entrance to Villaggio and terminate at the Project site's boundary with Irish Hills Plaza to the north. Commercial Collector "B" would be 44 feet wide with one 12-foot-wide travel lane in each direction, 5-foot-wide parkways, and 5-foot-wide sidewalks. Only pedestrian and bicycle access would be allowed to the adjacent Irish Hills Plaza using bollards or similar devices to restrict vehicular travel. This connection would allow for access by emergency vehicles.

Local Road "A" would be a public roadway that extends from the proposed roundabout to residential areas within Madonna Froom Ranch and to the proposed public park. Local Road "A" would be a 44-foot-wide roadway with 5-foot-wide parkways and 5-foot-wide sidewalks.

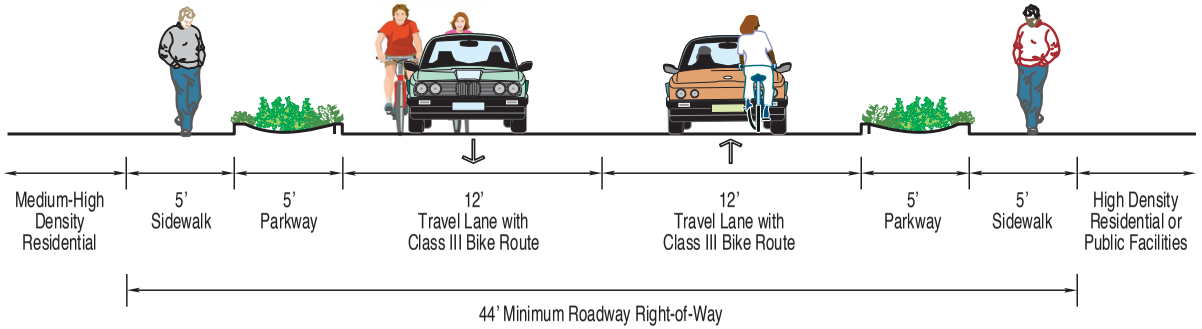
A roundabout intersection of Commercial Collectors "A" and "B" and Local Road "A" is proposed with one travel lane and a central island within landscaping, signage, and decorative features. The roundabout intersection would include designated pedestrian crossings.



The proposed roundabout would consist of a single lane roundabout with a 66-foot radius and landscaped center median with sidewalk and crosswalk facilities.



Commercial Collector "A"



Commercial Collector "B"/Public Local Road "A"

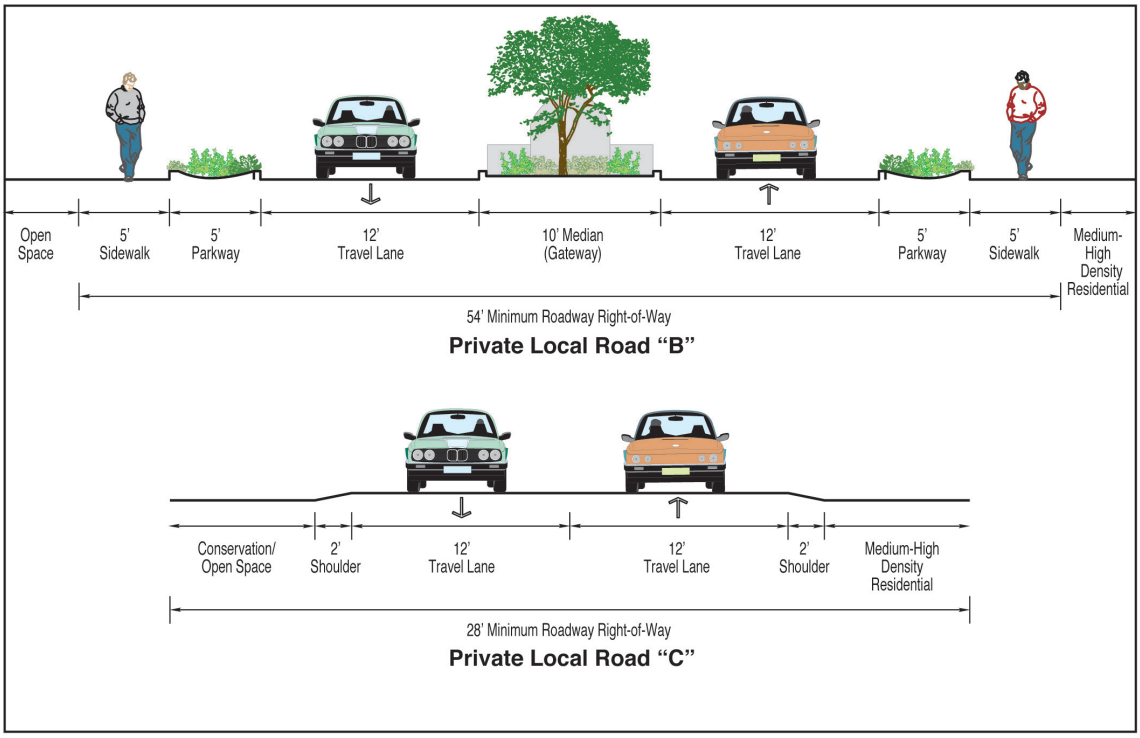
wood.

Public Roads Cross Sections

FIGURE 2-11

Private Roadways within Villaggio Life Plan Community

Local Roads "B" and "C" would be private roads within Villaggio (Figure 2-12). Local Road "B" would serve as the primary ingress/egress to Villaggio from Commercial Collector "B" past the Villaggio entrance gate to a central location in the Lower Area of Villaggio near the Commons. Local Road "B" would include one 12-foot-wide travel lane in each direction, a 10-foot-wide landscaped median, 5-foot-wide landscaped parkways, and 5-foot-wide sidewalks. Local Road "C" would provide private access throughout Villaggio and would connect the Upper Terrace and Lower Area. Local Road "C" would include two 12-foot-wide vehicle travel lanes with 2-foot-wide shoulders and no sidewalks.



wood.

Private Road Cross Sections

FIGURE 2-12

Emergency Vehicle Access

Emergency access roads would be 20 feet wide with 2-foot-wide shoulders, constructed of an all-weather surface, and built to approval of the City of San Luis Obispo Fire Department (SLOFD). Three emergency access points are proposed within the Specific Plan area (Figure 2-9), as follows:

- **Upper Terrace Emergency Access.** Emergency vehicle access to the Specific Plan area would be provided via a gated emergency access road extending from the Specific Plan area boundary to the Mountainbrook Church on the Upper Terrace. Emergency access is proposed as a paved at-grade surface road with a private gated entry that would connect to an existing decomposed granite road and parking area on the Mountainbrook Church property. The gate would be equipped with fire access security for emergency vehicle access, and a pedestrian gate with a key pad for Villaggio residents. This emergency access road would also provide pedestrian and bicycle access for Villaggio residents to Mountainbrook Church. Limited golf cart parking would be allowed within the Upper Terrace near the gated entry, though golf carts would not be permitted to pass through to Mountainbrook Church.
- **Trailhead Park Emergency Access.** A paved emergency access road would connect Commercial Collector "B" to the cul-de-sac of the proposed public park's parking lot and driveway, providing an alternate accessway to the park and the upper portions of Madonna Froom Ranch. Removable bollards at the park's cul-de-sac and the connection to Commercial Collector "B" would be installed to restrict vehicular access into the park via the emergency access road. The emergency access road would also provide a pedestrian connection, paved with colored and scored concrete, or drivable pavers (see also, Figure 2-7).
- **Irish Hills Plaza Emergency Access.** The northern terminus of Commercial Collector "B" at the Project site boundary would provide a paved connection meeting SLOFD requirements for passage of emergency vehicles and personnel via the parking lot of Irish Hills Plaza with removal of proposed bollards.

2.4.3.4 Bicycle and Pedestrian Facilities

Bicycle Network

The Project includes a proposed bicycle network within the Specific Plan area that would connect with existing bicycle lanes along LOVR. Proposed 6-foot-wide Class II striped bicycle lanes would be included along Commercial Collector "A". Class III bicycle routes are also proposed along Commercial Collector "B" and Local Road "A" to connect the proposed public park and residential areas within Madonna Froom Ranch (Figure 2-11). These roadways would be designed with shared lane markings ("sharrows") with on-street painted bicycle symbols to demarcate a preferred route for shared vehicular and bicycle

travel. Bicycle parking would be provided at commercial, recreational, and residential uses within Madonna Froom Ranch, consistent with City zoning requirements.

Sidewalks

Sidewalks are proposed along an approximate 550-foot-long portion of LOVR from the new transit stop location north to Irish Hills Plaza, along Commercial Collectors "A" and "B" and Local Roads "A" and "B". Sidewalks would range between 5 and 10 feet in width. Proposed sidewalks would facilitate pedestrian circulation between proposed residential neighborhoods, commercial, and recreational areas. The sidewalks would include lighting, paving, bulb-outs at intersections, and landscaping. Local Road "C" within Villaggio would not include sidewalks; however, a network of private walking trails separated from vehicle roadways would be provided for Villaggio residents (see Figures 2-9 and 2-12).

Pedestrian Trail System

The Project includes a public pedestrian trail that would generally follow the proposed realigned Froom Creek corridor through the Specific Plan area. The Froom Creek Trail would extend approximately 2,500 linear feet from the existing Froom Creek Connector Trail within the adjacent Irish Hills Natural Reserve and would terminate at a public viewing/rest area adjacent to onsite wetlands and the reconfigured agriculture and open space easement. The terminus of the trail would connect to a private Villaggio gated pedestrian access point (Figure 2-9). The proposed Froom Creek Trail would be accessible from Madonna Froom Ranch, Villaggio, and the existing Irish Hills Natural Reserve trails system. Froom Creek Trail would also be accessible via 6-foot-wide pedestrian trails that would extend through the Madonna Froom Ranch residential areas and the proposed public park. The proposed public Froom Creek Trail would be a 6-foot-wide, decomposed granite (or other stabilized natural surface) pedestrian trail and would not provide lighting. Potential trail amenities would include benches, signage, trash cans, landscaping, and dog waste stations. Portions of the trail would be located within the 35-foot-wide riparian setback of realigned Froom Creek.

2.4.3.5 Parking

Parking would be provided in accordance with City development standards consistent with the requirements of Chapter 17.16 of the City Municipal Code. No on-street parking is proposed along Commercial Collectors or Local Roads. Villaggio would provide an estimated 834 parking spaces. Subsurface parking garages would provide approximately 457 parking spaces located within the Lower Area and Upper Terrace of Villaggio.

Subterranean parking garages would descend up to 10 feet below finished ground surface within the Upper Terrace and would vary between 2 to 10 feet below finished ground surface within the Lower Area. Parking for detached villas would be provided in two car garages. Within Madonna Froom Ranch, residential and commercial areas would contain parking spaces based on the number of bedrooms proposed for development and the size of development. A public surface parking lot containing 30 spaces would be located within the public park.

2.4.3.6 Transit Improvements

A single new bus stop is proposed in the southbound direction of LOVR, just south of the proposed intersection of Commercial Collector "A" and LOVR at the Project's primary access. The Applicant would coordinate with the City Transit Division (SLO Transit) to integrate with existing SLO Transit routes 2A and 2B. Refer to Section 3.13, *Transportation,* for a more complete description of proposed transit operations.

2.4.4 Utilities and Services

Project development would require major extensions of several utilities to serve future development within the Specific Plan area, which is located at the edge of the existing urban area and supporting utility infrastructure within the City. Proposed utilities and services include potable and recycled water, wastewater, electrical, natural gas, telecommunications, solid waste, and recycling. All utility lines within the Specific Plan area would be installed underground. Water and sewer services would be provided by the City. Natural gas service would be provided by Southern California Gas Company (SoCal Gas). Pacific Gas & Electric (PG&E) would provide electrical service. Charter Communications would provide cable and television services. American Telephone and Telegraph Company (AT&T) would provide telephone services. The San Luis Garbage Company would provide solid waste and recycling hauling service within the Specific Plan area.

2.4.4.1 Water Supply Infrastructure

<u>Potable Water</u>

Potable water for the Project would be supplied from existing City infrastructure, which would be extended throughout the Specific Plan area to serve proposed development (Figure 2-13). Within Villaggio, private 8-inch water main lines would be installed beneath Local Roads "B" and "C" and the pedestrian trail linking the Upper Terrace and Lower

Area that would distribute potable water throughout the development. A 6-inch private water meter is proposed for Villaggio at the point of connection to the public main under Local Road "B" (Figure 2-13). Service connections to the various facilities and senior residential units would connect to the private 8-inch domestic main lines. The fire suppression water system would share the 8-inch water main line routed throughout Villaggio and connect to the proposed public mains within Madonna Froom Ranch and the public main along LOVR. Villaggio's private water main system would be protected at each connection to the public system with a double detector check assembly (DCDA).[2] Similar to Madonna Froom Ranch, fire hydrants would be located adjacent to private roadways and spacing would be no greater than 500 feet. Within Madonna Froom Ranch, an 8-inch public domestic water main line would extend under Commercial Collectors "A" and "B", and Local Road "A". From the main line, water lines would be routed to residences and commercial uses which would utilize standard City water services and meters. These 8-inch public water main lines would also provide fire suppression to Madonna Froom Ranch, including the installation of hydrants spaced no greater than 500 feet apart.

Recycled Water

Non-potable recycled water for landscaping would be provided through the City's Water Reuse Project. The point of connection to the City's recycled system would be at the Project's primary access with LOVR at Commercial Collector "A". Within Madonna Froom Ranch, a 6-inch recycled water main would run along proposed Commercial Collectors "A" and "B", and Local Road "A" to convey irrigation water to landscaped areas. Within Villaggio, a 6-inch private water meter would be located at the entrance to service the entire Villaggio development (Figure 2-13).

[2] A DCDA is primarily utilized in fire line installations. Its purpose is to protect the potable water supply line from possible contamination or pollution from the fire system, backpressure from fire line pumps, stagnant water that sits in fire lines over extended periods of time, the addition of non-potable water, and the detection of unauthorized use of water or leaks in the fire line system.

wood.

Water Supply System

FIGURE 2-13

2.4.4.2 Sanitary Sewer Infrastructure

Wastewater generated within the Specific Plan area would be conveyed to an existing City sewer main along LOVR. Site topography would allow for gravity flow of wastewater to the northeast, downhill from the Irish Hills towards LOVR. Within Madonna Froom Ranch, 8-inch public sewer mains would run along the proposed Commercial Collectors "A" and "B" to LOVR. Within Villaggio, 8-inch public sewer mains would run along proposed Local Road "C", the pedestrian trail linking the Upper Terrace and Lower Area, and within developed areas to connect to LOVR. These two sewer systems would be separate and would connect to the existing City sewer line along LOVR independently (Figure 2-14).

2.4.4.3 Electricity, Gas, Telephone, Cable, and Solid Waste Facilities

All new cable and telephone lines within the Specific Plan area would be placed underground along proposed roadways. Other broadcast or telecommunications services, including satellite, would be provided to the Project to the extent they are available.

Within Madonna Froom Ranch, enclosures for trash, recycling, and food waste materials would be installed to serve residential, commercial, and recreational uses. Villaggio would have a centralized trash compactor and would manage trash and recycling generated by the independent living housing units, assisted units, and other ancillary facilities within the development. Solid waste would be collected from the centralized facility at Villaggio and the shared enclosed facilities at Madonna Froom Ranch at minimum once per week.

wood.

Wastewater Collection System

FIGURE 2-14

2.4.4.4 Stormwater Management System and Froom Creek Realignment

The Project proposes a comprehensive onsite stormwater management system to control surface runoff within the Project site. Project development would realign Froom Creek through the Specific Plan area, reconstruct the drainage ditch onsite along LOVR, install a new drainage ditch along the northern site boundary adjacent to Irish Hills Plaza, replace the existing onsite detention basin with the proposed stormwater detention basin on Mountainbrook Church property, and fill the lower elevations of the site to raise site elevation to achieve a finished floor elevation of 1 foot above the 100-year flood elevation. Surface runoff flowing through the site would continue to originate from the Froom Creek watershed upstream within the Irish Hills Natural Reserve, from the impermeable developed areas of the Irish Hills Plaza, and from sheet flows from LOVR. Impervious surfaces proposed within the Specific Plan area would generate new runoff sources flowing to Froom Creek and San Luis Obispo Creek.

A key feature of the Project involves the relocation of Froom Creek from its existing perched location following the western edge of the Project site to a lower elevation to allow for development of Villaggio in areas outside of lower-elevation flood hazard areas. The proposed realigned Froom Creek would convey stormwater through the Project site to the southeast corner where it would reconnect to the segment of Froom Creek that conveys flows under U.S. 101. During storm events larger than two-year events, the proposed Froom Creek low-flow channel would convey a portion of the stormwater to San Luis Obispo Creek while excess stormwater would overflow the creek banks to the existing Calle Joaquin wetland area and a proposed stormwater detention basin on the adjacent Mountainbrook Church property. Detained stormwater would percolate, evaporate, and flow offsite at a controlled rate, as further described herein.

The Project would be subject to the LID standards of the Central Coast Regional Water Quality Control Board's (RWQCB's) Post Construction Requirements (PCRs) and the design and stage-storage requirements of the City's Drainage Design Manual (DDM) and the Waterways Management Plan (WMP), which sets forth criteria for drainage design for tributaries to San Luis Obispo Creek, including Froom Creek (see Section 3.8, *Hydrology and Water Quality*).

The Project's stormwater management system would have four primary components:

1. Realignment and modification of the Froom Creek channel to convey all stormwater sources through the Project site;

2. Point and non-point source water quality treatment (e.g., retention/treatment features);

3. Installation of headwalls and culverts for drainage crossings, unless free-span bridges are required; and

4. Development of a new stormwater detention basin downstream of the Specific Plan area on adjacent property owned by Mountainbrook Church.

2.4.4.5 Froom Creek Realignment and Reconstruction

The Project includes the removal of 2,145 linear feet of Froom Creek and relocation and reconstruction of a 3,745-foot-long realigned channel within lower elevations of the Project site, increasing the creek's length by approximately 1,600 feet. The realigned Froom Creek would flow east from the northwestern boundary of the Project site for approximately 775 feet in a channel of 44 to 80 feet in width, then turn in a southerly direction where the channel width would range from 80 to 330 feet for a length of approximately 2,970 feet generally parallel to Calle Joaquin and the adjacent Calle Joaquin wetlands. On average, the Froom Creek channel would be 65 feet in width and the bottom of the channel would be approximately 8 feet deep. The realigned creek would have 35-foot minimum setbacks between the top of bank and proposed development; however, portions of the proposed Froom Creek Trail would fall within the minimum riparian setback. The Project would also improve the offsite portions of the Froom Creek channel to provide a low-flow channel to the box culvert at U.S. 101 while maintaining existing flow capacity of this portion of the creek.

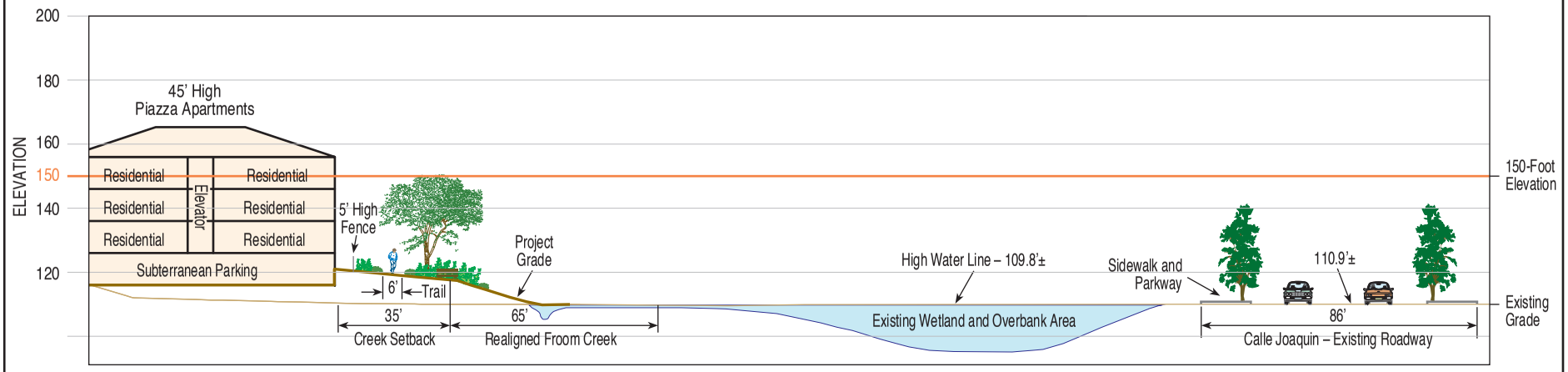
The realigned and improved Froom Creek would convey runoff and stormwater to an existing box culvert that conveys flows under U.S. 101 to San Luis Obispo Creek. The box culvert below U.S. 101 has limited capacity for 10-year storm events to flow through to San Luis Obispo Creek; therefore, stormwater flows exceeding a 10-year storm event would backup within the widened Froom Creek channel. In addition to increased channel capacity, two proposed onsite detention features would provide storage of excess stormwater, including the existing Calle Joaquin wetlands and a proposed stormwater detention basin located adjacent to the Specific Plan area on Mountainbrook Church property. During storm events larger than two-year events, the proposed Froom Creek channel would convey a portion of the stormwater to San Luis Obispo Creek while excess stormwater would flow to the proposed detention features (see also, Section 2.4.5.2, *Stormwater Detention Features*).

The realigned Froom Creek would be designed with a "low-flow" channel to convey runoff generated during any flow conditions below a two-year storm event through the Project site to the existing box culvert below U.S. 101. Stormwater would begin to flow through the channel's wider overbank area and to the Calle Joaquin wetlands and the proposed stormwater detention basin when flows exceed two-year storm events (see Cross Section C-C on Figure 2-15). The low-flow channel would be constructed to meander and to aid and control fish migration passage through a series of constructed stepped pools and terraces throughout the realigned segment.

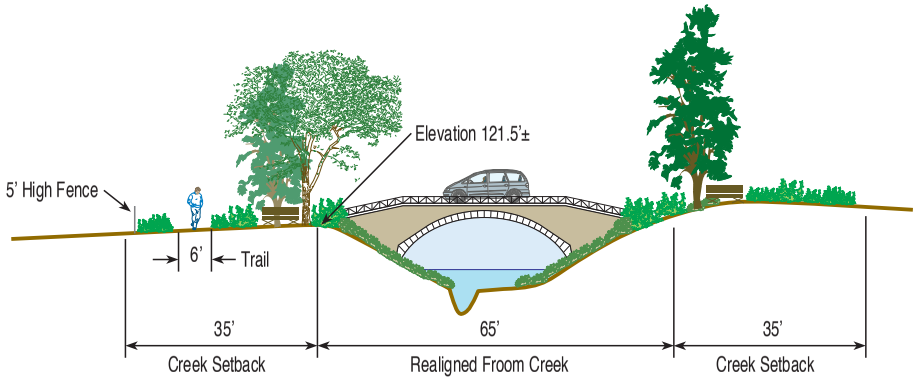
The realigned Froom Creek would be designed to manage flow velocities throughout the Project site by:

- Varying creek corridor meanders and is between approximately 45 to 65 feet wide on average, with a maximum width of 330 feet through the Calle Joaquin wetlands (include the width of the creek corridor and Calle Joaquin wetlands);
- Installing gradient controls with more level narrower segments and steeper wider segments;
- Varying the steepness of creek bank slopes from primarily 3:1 or less to a maximum slope of 2:1 to promote vegetative rooting along the creek banks;
- Installing boulders and vegetation that promote a riparian environment to reduce potential erosion; and
- Installing constructed ponds and terraces to create pooling areas where water would be slowed down to pond, provide habitat, and prevent erosion, scouring, and sediment transport.

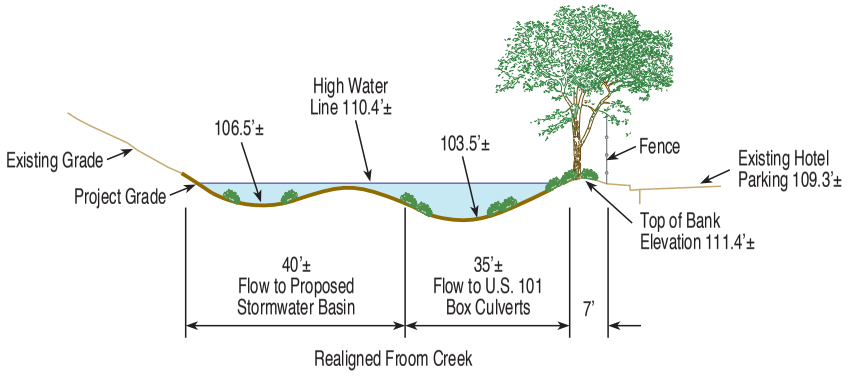
With proposed site hydrologic modifications, the Project aims to remove the proposed development areas from the Zone A floodplain designated onsite by the Federal Emergency Management Agency (FEMA). The Project would relocate Froom Creek and reconstruct the creek channel to convey and store stormwater flows, which would potentially remove existing FEMA flood hazards areas within the Project site. Further, the Project proposes to increase site elevation of proposed development with import and grading of soils to remove proposed developed areas from potential FEMA flood hazard areas. As a result, the Project would formalize the amendment of the FEMA floodplain through FEMA's formal map revision process.



Cross Section C-C – Mid-Creek



Cross Section D-D – Upper Creek Bridge Crossing



Cross Section E-E – Lower Creek

wood.

Conceptual Creek Cross Sections

FIGURE 2-15

2.4.4.6 Stormwater Detention Features

The Project would remove an existing 3.2-acre onsite detention basin that currently receives runoff from a portion of Irish Hills Plaza; a 1.08-acre retention basin was removed in 2017 and no longer controls runoff from Irish Hills Plaza. Via realigned Froom Creek, the Project would redirect stormwater flows either to the Calle Joaquin wetlands or to a new approximately 4.5-acre basin within a dedicated easement located outside the Specific Plan area on the adjacent Mountainbrook Church property. The Calle Joaquin wetland area and detention basin would store excess stormwater generated from the Froom Creek watershed, Irish Hills Plaza, LOVR, and the Project site; the detention basin would also capture a limited amount of runoff from Mountainbrook Church property. The new stormwater detention basin would assist in metering flows to the box culverts beneath U.S. 101, while expanding controlled storage volume within the Project site. The Calle Joaquin wetlands would be capable of storing approximately 11 acre-feet of stormwater and stormwater would percolate or evaporate.

The proposed stormwater detention basin would include construction of an approximate 4.5-acre infiltration basin located approximately 515 feet downstream from the Specific Plan area just north of Calle Joaquin with connections to the existing Froom Creek corridor. Construction of the basin would include excavation and removal of material to create storage capacity for up to 22 acre-feet of stormwater along with discharge controls to regulate the rate of outflow to the U.S. 101 box culvert.

The existing Froom Creek corridor downstream from the Specific Plan area would remain in place. Froom Creek adjacent to the proposed stormwater detention basin would be approximately 2 feet in depth beneath an overflow berm that would empty into the proposed basin. The basin would be approximately 7 feet deep from the top of the creek overflow berm and would be 8 feet beneath the anticipated 100-year water surface elevation (WSE). The proposed basin would include infiltration wells to enable groundwater recharge and subsurface drainage.

The proposed stormwater detention basin would be constructed downstream from the Specific Plan area within Mountainbrook Church property,

All stormwater detention basin components would be constructed and maintained by the Applicant. Access to

the basin would be provided via an unpaved, existing access road from Calle Joaquin. An access easement would be established to allow the City and Applicant access to the basin and road as needed. A basin access ramp would be provided into the bottom of the basin and a walkable graded bench at the top of the basin embankment would be provided to allow access around the perimeter of the basin.

2.4.4.7 Point- and Non-Point Source Water Quality Treatment

Development areas within the Project site would provide point-source water quality treatment of stormwater prior to discharge into the realigned Froom Creek corridor. Surface runoff from streets, parking lots, and sidewalks within the Specific Plan area would be conveyed via street gutters that connect to proposed water quality treatment areas. Water quality treatment areas would flow into Froom Creek via outlets of various pipe sizes.

Runoff entering the Project site from Irish Hills Plaza would be conveyed through vegetated channels, including the "LOVR ditch" located along LOVR and the "Home Depot ditch" located along the northern Project site boundary, to treat runoff through biofiltration prior to discharge into Froom Creek (Figure 2-16). The existing LOVR ditch would be removed and replaced with a relocated LOVR ditch within the Specific Plan area along the widened LOVR corridor. The LOVR ditch would consist of an average depth of approximately 4 feet beneath the 100-year WSE with swales and banks at least 1 foot higher than the 100-year WSE. Edges of the drainage would consist of a maximum 3:1 slope. Similarly, a new Home Depot ditch would be designed with an average 4 feet beneath the 100-year WSE with swales and banks at least 1 foot higher than the 100-year WSE and have a maximum slope of 3:1 around the edges.

Within proposed developed areas of Villaggio, five additional water quality treatment areas would capture and treat surface runoff using biofiltration with outlets to Froom Creek (see Figure 2-16). In total, water quality treatment areas within the Specific Plan area would comprise approximately 2.1 acres. The water quality treatment areas would be bordered with cobble or splash block and have a maximum slope of 3:1 around the edges. The bottom would be flat with varying depths. The bottom would contain a 24-inch-thick soil mixture covered by approximately 3 inches of mulch. This bioretention soil mixture would overlie a gravel storage component that would vary in thickness. Any overflow from these water quality treatment areas would be conveyed to Froom Creek through an overflow/outlet structure with a minimum 4-inch riser.

wood.

Stormwater Control Plan

FIGURE 2-16

2.4.4.8 Headwalls and Culverts for Drainage Crossings

The Project would include a total of seven roadway crossings over realigned Froom Creek and associated tributary drainages (see Table 2-6). This would include four natural bottom culverts beneath Local Road "C" to convey flows from existing tributary drainages that traverse the Upper Terrace of the Project site, and three crossings of realigned portions of Froom Creek. All crossings would comply with the City's DDM. Culverted crossings would be designed to accommodate 100-year storm events and may be reinforced at both the inlets and outlets to prevent erosion (Table 2-6).

Below are descriptions of the key proposed drainage crossings within the Specific Plan area:

- **LOVR and Home Depot Ditch Crossings.** The primary entrance road to the Specific Plan area would cross the approximately 30-foot-wide LOVR ditch. Two 45-foot-long headwalls would be constructed on both the upstream and downstream sides of proposed Commercial Collector "A". Four 24-inch storm drains would be constructed beneath the roadway to convey stormwater southeast towards the Calle Joaquin wetland area and realigned Froom Creek corridor. The Home Depot ditch crossing to the Irish Hills Plaza via Commercial Collector "B" would be similarly constructed, with three 24-inch storm drains routed beneath the roadway with similar headwalls.
- **Froom Creek Channel Crossing.** A proposed pre-fabricated natural bottom culvert with a bridge crossing is proposed for Commercial Collector "B" to cross Froom Creek. This crossing would involve a proposed arch culvert and headwalls between the roundabout and Villaggio along Commercial Collector "B". Rock energy dissipaters at the inlet and outlet are proposed. Portions of the headwall would extend beneath the 100-year WSE; however, the arch culvert bridge surface would be constructed at least 3 feet above the 100-year WSE (see Cross Section D-D on Figure 2-15).
- **Upper Terrace Drainage Crossings.** Four crossings of drainages to support Local Road "C" within the Upper Terrace of Villaggio are proposed, including headwalls and natural bottom culverts.

Table 2-6. Pipe Sizes at Drainage Crossings

Crossing Location	Design Storm	Pipe Size (inches)	Pipe Quantity	Apron Size (cubic feet)
Auto Park Way Intersection (LOVR ditch)	100-year	24	4	200
Irish Hills Plaza (Home Depot ditch)	100-year	24	3	200
Realigned Froom Creek	100-year	natural bottom (arched)	1	400
Upper Villaggio (4)	100-year	natural bottom (arched)	2 (each)	400

Note: Apron dimensions based on methods in Federal Highway Administration (FHWA) Hydraulic Engineering Circular (HEC). No 14.

2.5 REQUIRED APPROVALS

The following entitlements and approvals would be required to implement the Project:

- **General Plan Amendment and Pre-Zoning**. Approval of the Project would require a General Plan amendment to amend LUCE SP-3 performance standards to ensure consistency with the Specific Plan. Because the site is currently unincorporated, it would be pre-zoned based on the approved Project before annexation to the City could be approved. Specific amendments to the General Plan include:
  - Amend Section 6.4.7 Hillside Planning Areas of the City of San Luis Obispo General Plan to allow limited development above the 150-foot elevation within the Specific Plan area.
  - Amend LUE Section 8.1.5 – Performance Standards to allow a Life Plan Community senior housing land use and up to 404 senior housing residential units with 51 beds in health care facilities within the Specific Plan area.
- **Specific Plan.** The City's LUCE identifies Froom Ranch as a Specific Plan area (SP-3, Madonna on LOVR) that requires the adoption of a Specific Plan prior to any development. The proposed FRSP would require adoption by the City prior to implementation, including Planning Commission and City Council discretionary review proceedings.
- **Vesting Tentative Tract Map.** The Project would require a VTTM to implement the provisions of the adopted Specific Plan. The VTTM establishes the proposed lot lines to allow individual ownership of properties and to layout the required infrastructure and utilities.
- **Architectural Review.** Final architectural review of housing, commercial buildings, and some site facilities by the City's Architectural Review Commission (ARC) would be required. The ARC has conducted conceptual review of the Villaggio component of the Project and preliminary review of the design guidelines in the Draft FRSP and provided comments.

- **Annexation.** If the Project is approved, the City would initiate the annexation process with the San Luis Obispo County Local Agency Formation Commission (LAFCO). Annexation would depend on the City's ability to address key issues to LAFCO, including the ability to provide public services to the site (including water) and the nature of a tax-sharing arrangement with the County.

Other advisory bodies that would review the Project include the City's Parks & Recreation Commission reviewing park proposals, Cultural Heritage Committee (CHC) regarding the proposed use/treatment of historic structures, and the Active Transportation Committee advising on the proposed circulation improvements. In addition, the Project would need to be reviewed by the Airport Land Use Commission (ALUC) for consistency with the Airport Land Use Plan (ALUP).

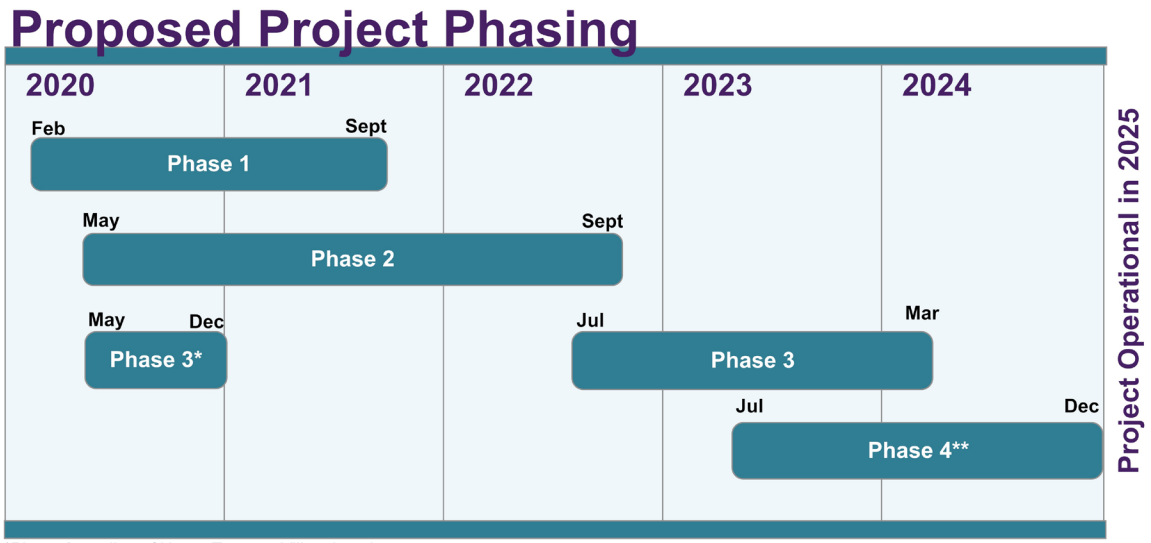
Other permits and required approvals or participation agreements from public agencies required to implement the Project include, but may not be limited to:

- U.S. Army Corps of Engineers (USACE) Nationwide or Individual Permit (depending on acreage of total disturbance within jurisdictional areas);
- California Department of Fish and Wildlife (CDFW) Streambed Alteration Agreement;
- RWQCB Section 401 Water Quality Certification, National Pollutant Discharge Elimination System (NPDES) Permit;
- U.S. Fish and Wildlife Service (USFWS) consultation, Biological Opinion, possible incidental take permit(s), and protocol surveys;
- National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) consultation and possible incidental take permit(s);
- FEMA – Conditional Letter of Map Revision (CLOMR)/Letter of Map Revision (LOMR);
- San Luis Obispo County Air Pollution Control District (APCD) – construction and/or operational permits, grading permits, and fugitive dust regulation compliance; and
- Encroachment permits, and approval of improvement plans by the County for portions of the Project's infrastructure to be developed outside of the City limits, namely the proposed stormwater detention basin and associated adjacent streambed alterations.
- California Department of Transportation (Caltrans) for any needed improvements within the Caltrans right of way;

2.6 PROJECT CONSTRUCTION

2.6.1 Construction Phasing and Implementation

The Project would be constructed in four phases. For the purposes of this analysis, the EIR assumes Project construction between 2020 and 2024 and full occupancy in 2025. Phases would be timed and ordered to provide services within the Project site to support development and eventual occupation. These phases would overlap periodically. For example, Phase 1 would include grading of areas for Phase 2 and Phase 3 to borrow soil needed for fill in Phases 2 and 3 (Table 2-7).



*Phase 3 grading of Upper Terrace -Villaggio only
**Phase 4 (Madonna Froom Ranch building construction) assumed to occur concurrent with Phase 3 for purposes of EIR analysis.

At the time of construction, each phase would be subject to permit review to ensure conformity with the approved FRSP and consistency with applicable regulations. Each phase would include specifications to address the development activities to be performed during the phase and define specific mitigation measures and best management practices (BMPs) that would apply.

Table 2-7. Project Construction Phases

Phase	Project Components
1	***Installation of Project Infrastructure and Stormwater Management System.*** • Rough grading for Madonna Froom Ranch and distribution of export material to Phase 2 (31,800 cubic yards [cy] stockpiled onsite). • Widen LOVR and install frontage improvements along LOVR, including bicycle lanes, sidewalks, bus stop, and signalized intersection. • Install onsite public roads (Commercial Collectors "A" and "B" and associated bicycle lanes and sidewalks). • Install public utility connections along Commercial Collectors "A" and "B". • Construct bridge across Froom Creek from Commercial Collector "B". • Realign Froom Creek and reconstruct creek corridor. • Modify Irish Hills Plaza drainage, including construction of the vegetated channels of the Home Depot ditch and the LOVR ditch prior to connection with the realigned Froom Creek. • Install stormwater management system, including removal of existing culverts and onsite stormwater basin, berm construction along Calle Joaquin, and development of the new stormwater detention basin with creek channel improvements. • Installation of Froom Creek Trail. • Begin site clearing of Lower Area in preparation for Phase 3.
2	***Development of Villaggio Lower Area.*** • Grading of the Lower Area of Villaggio and import fill materials (158,000 cy import). • Install onsite private roads (Local Roads "B" and part of "C") within the Lower Area. • Install emergency access road and gate between Villaggio and Mountainbrook Church (Upper Terrace). • Extend utility lines throughout the Lower Area. • Construct water quality treatment areas within Phase 2. • Install fencing and pedestrian access gates around the Lower Area. • Construct 150 piazza apartments, 84 garden terraces, 30 villas, and 47 village suites in Lower Area of Villaggio. • Construct the Villaggio Health Administration Building. • Construct the "Commons" buildings within the community village of the Lower Area. • Construct the Wellness Center. • Begin site clearing of Upper Terrace in preparation for Phase 3.
3	***Development of Villaggio Upper Terrace.*** • Grading of the Upper Terrace of Villaggio and import fill materials (93,000 cy) • Install onsite public road (Local Road "A") and private roads (Local Roads "C"). • Extend utility lines throughout the Upper Terrace and along Local Road "A" (in Madonna Froom Ranch). • Construct remaining water quality treatment areas in Specific Plan area. • Install fencing and pedestrian access gates around the Upper Terrace. • Construct 24 garden terraces and 31 villas in the Upper Terrace of Villaggio. • Construct non-residential ancillary uses within the village center of the Upper Terrace. • Relocate and reconstruct the historic Froom Ranch buildings at the public park. • Install the public park. • Construct emergency access road through the public park.

Table 2-7. Project Construction Phases (Continued)

Phase	Project Components
4	***Development of Madonna Froom Ranch.*** • Extend utility lines throughout Madonna Froom Ranch. • Construct 174 multi-family units within Madonna Froom Ranch. • Construct commercial retail buildings, including hotel, within Madonna Froom Ranch.

2.6.2 Construction Activities

Each phase of the Project would generally entail the following stages: pre-construction design and permitting; site preparation, demolition and grading; construction; architectural coatings/finishing; and final landscaping. Building construction, paving, and architectural coating activities would occur within each phase sequentially. A list of equipment anticipated to be used during these activities can be found in Table 2-8.

Table 2-8. List of Construction Equipment

Typical Construction Equipment	
Backhoe	Grader
Boom Lift	Loader
Compactor (Roller)	Miscellaneous Small Tools
Concrete Pump (Tow)	Office Trailers
Concrete Truck	Paving Machine
Crane	Scaffolding
Dozer	Scissor Lift
Dump Truck	Scraper
Electric Man Lift	Sheepsfoot
Excavator	Skip Loader
Flatbed Truck	Tractor
Forklift	Water truck

2.6.2.1 Site Preparation, Demolition and Grading

Site preparation for each phase would be performed through grading along proposed roadways, building pads, and installation of onsite utilities. Mobilization and staging of earth moving equipment would be required to bring the site and building pads to engineered elevations. During grading operations, standard dust control and construction runoff BMPs would be implemented. During mass grading activities, erosion control, sediment barriers and temporary sediment basins would be constructed to minimize the extent of construction site impacts to the Froom Creek corridor. Additional requirements would be specified in detail during the design of final engineered drawings prior to issuance of grading permits.

Cut and fill estimates for each phase are provided in Table 2-9. Activities would include but not be limited to:

- Removal of underground culverts and stormwater conveyance facilities;
- Full mobilization and set up of onsite construction temporary facilities;
- Movement, placement, and compaction of stockpiled soils;
- Over-excavation and recompaction of soils at building pads;
- Coordination of loading and trucking activities, truck routes, and import/export sites;
- Delivery, staging, and storing of materials;
- Trenching and installation of utilities (water, sewer, storm drain, natural gas, electric, telephone, cable television, and irrigation lines);
- Demolition of structures to be removed (i.e., outhouse, storage shed, etc.);
- Deconstruction and reconstruction of historic structures to be relocated within proposed public park (dairy barn, creamery, and granary);
- Relocation and restoration of main residence;
- Environmental monitoring, including fugitive dust control and implementation and monitoring of construction stormwater runoff; and
- Monitoring and recording of BMPs.

Approximately 220,000 cubic yards (cy) of imported fill would be needed for the Project to increase the elevation of portions of the Project site sufficiently to remove FEMA flood hazard areas (see Section 2.4.5, *Stormwater Management System and Froom Creek Realignment*). Therefore, stockpiling of soils would occur onsite. Further, import of 2,300 cy of rock and aggregate materials for reconstruction of the realigned Froom Creek would be required during the first phase of construction.

Table 2-9. Project Grading Estimates

Phase	Cut (cy)	Fill (cy)	Export/Import (cy)
1	65,800	34,000	31,000 (export)
2	27,500	185,000	158,000 (import)
3	66,700	159,700	93,000 (import)
4	0	0	0
GRADING TOTAL	**160,000**	**378,700**	**220,000 (net)**
+ Rock/Aggregate Import for Froom Creek Reconstruction			*2,300*
		Total Imported Material	**222,300**

2.6.2.2 Infrastructure Improvements

The construction of infrastructure would include installation of underground site utilities, precise site grading, and the paving of roads. Infrastructure improvements would occur along roadways fronting the Specific Plan area and within the proposed stormwater detention basin easement area. Adjacent roadway segments may experience partial closures during construction phases (e.g., LOVR and Calle Joaquin). All work would be subject to traffic control, pedestrian protection, and notification plans. Project traffic control and pedestrian re-routing plans would be revised to reflect the changing conditions during construction.

Underground site utilities would be connected to the existing utility infrastructure and precise grading, concrete, underground utility work, and paving would be performed offsite. Work would take place primarily along LOVR, with limited construction along Calle Joaquin. Activities would include, but not be limited to:

- Trenching for underground wet and dry utilities;
- Precise grading and compaction of soils for roadways;
- Precise grading for curb and gutter installation;
- Installation of concrete features (e.g., curbs, gutters);
- Installation of base and asphalt paving of interior streets, parking areas, and LOVR frontage;
- Trenching, installation, and roadway repair for underground wet and dry utilities along LOVR;
- Lighting and landscaping of roadways and medians;
- LOVR widening at the intersection of Auto Park Way;
- Traffic control and lane closures on an intermittent basis;
- Road striping and signage work;
- Intersection installation with signal; and
- Installation of the proposed stormwater detention basin southeast of the Specific Plan area adjacent to Calle Joaquin with associated improvement to the Froom Creek channel.

2.6.2.3 Building Construction

Project construction would occur in Phases 2, 3, and 4, including residential and non-residential uses. Construction would occur concurrently at multiple locations within the

Specific Plan area based on Project phasing (Table 2-7). Building construction would involve foundation, framing, roofing, interior and exterior finishes, architectural coatings, and landscaping. In addition, construction of the proposed public park, including relocation of historic buildings, would occur during Phase 3 with the Upper Terrace of Villaggio (note that for purposes of this EIR analysis, Phase 4 is also expected to occur concurrent with Phase 3).

3.0 ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION MEASURES

This chapter discusses the environmental impacts of implementing the Froom Ranch Specific Plan (Project) and identifies mitigation measures for impacts found to be potentially significant.

Consistent with the California Environmental Quality Act (CEQA) and State CEQA Guidelines, the Initial Study (IS), along with agency and public input received during the Notice of Preparation (NOP) comment period, and 2018 updates to the State CEQA Guidelines were used to determine the scope of the analysis for this Environmental Impact Report (EIR). Through this process, the City of San Luis Obispo (City) determined that the EIR analysis would focus on the following resource areas:

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Hazards, Hazardous Materials, and Wildfire
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation and Traffic
- Utilities and Energy Conservation
- Mineral Resources

This chapter of the EIR addresses the potentially significant environmental impacts of the Project for the resources listed above. Since preparation of the IS, the State CEQA Guidelines have been updated to include resource areas that are addressed specifically in this EIR, as follows. Issues related to Energy and Energy Conservation as required by CEQA are discussed within Section 3.14, *Utilities and Energy Conservation,* and issues related to Wildfire are discussed in Section 3.7, *Hazards, Hazardous Materials, and Wildfire.* Analysis of related CEQA issues is provided in Chapter 4, *Other CEQA Sections*, and analysis of Project alternatives is provided in Chapter 5, *Alternatives*.

3.0.1 Impact Classification

For each impact identified in this EIR, a statement of the level of significance of the impact is provided. Impacts are categorized into one of the following categories:

- A *beneficial* impact would result when the proposed project would have a positive effect on the natural or human environment and no mitigation would be required.

- *No impact* would result when no change in the environment would occur; no mitigation would be required.
- A *less than significant* impact is an adverse impact that does not meet or exceed the applicable significance criteria thresholds for a particular resource. Generally, no mitigation measures are required for less than significant impacts; only compliance with standard regulatory conditions would be required. However, mitigation may still be recommended should the lead or responsible agency deem it appropriate to reduce the impact to the maximum extent feasible, as long as there is rough proportionality between the environmental impacts caused by the project and the mitigation measures imposed on the project.
- A *less than significant impact with mitigation* is an adverse impact that would cause a substantial adverse effect that meets or exceeds the applicable significance criteria thresholds for a particular resource, but which can be reduced to a less than significant level through successful implementation of identified mitigation measures.
- A *significant and unavoidable* impact would cause a substantial adverse effect on the environment that meets or exceeds the applicable significance criteria thresholds for a particular resource, and no feasible mitigation measures would be available to reduce the impact to a less than significant level.

Determinations of significance levels in the EIR are made based on impact significance criteria and State CEQA Guidelines for each environmental resource. The findings of this EIR, per Section 15126 of the State CEQA Guidelines, include a discussion of significant environmental effects of the Project, significant environmental effects that cannot be avoided if the Project is implemented, significant irreversible environmental changes that would occur should the Project be implemented, growth-inducing impacts of the Project, mitigation measures proposed to minimize the significant effects, and alternatives to the Project.

3.0.2 Mitigation Measures

Per State CEQA Guidelines Section 15126.4, where potentially significant environmental impacts have been identified in the EIR, feasible mitigation measures that could avoid or minimize the severity of those impacts are identified. The mitigation measures are identified as part of the analysis of each impact topic in Sections 3.1 through 3.15 of this EIR.

3.0.3 Cumulative Impact Analysis

State CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects that, when considered together, are considerable, or which compound or increase other environmental impacts." Section 15355 of the State CEQA Guidelines

further states that the individual effects can be various changes related to a single project or a number of separate projects. The cumulative impact from several projects is 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 future projects. The State CEQA Guidelines prescribe two different methods to determine the scope of projects for the cumulative impact analysis:

- List method - A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (State CEQA Guidelines Section 15130).
- General Plan projection method - A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, which described or evaluated conditions contributing to the cumulative impact (State CEQA Guidelines Section 15130). In accordance with State CEQA Guidelines Section 15130, the scope of projects for cumulative impact analysis can include a summary of projections contained in an adopted General Plan or related planning document, or in a certified prior environmental document for such a plan.

To assess cumulative impacts, this EIR uses a combination of the two approaches that includes specific projects that are reasonably foreseeable, as well as the General Plan projection method when applicable, which considers projects and programs included in the City's Land Use and Circulation Elements (LUCE) Update. A list of planned projects is used to assess cumulative project impacts (Table 3.0-1; Figure 3.0-1). In addition, the General Plan projection method utilized in this EIR provides updated Citywide cumulative projections anticipated to occur in the long-term associated with buildout of land uses under the General Plan, including:

- Existing adopted specific plans identified in the City's General Plan Land Use Element (LUE) that contain specific guidelines for future development capacity, including the Airport Area Specific Plan, Orcutt Area Specific Plan, and the Margarita Area Specific Plan. Special focus areas identified within the LUCE Update where planning efforts have been completed are treated as projects included within Table 3.0-1 (e.g., San Luis Ranch Specific Plan, Avila Ranch Specific Plan, etc.).
- Buildout of areas within existing City boundaries and planning sphere of influence.
- Capital improvements anticipated to occur under the City's LUCE Update.

Table 3.0-1. Cumulative Projects List

	Project	Description	Project Status
	CITY PROJECTS		
1.	Perry Ford & VW Dealership	Development of an addition to an existing commercial building consisting of an additional 7,895 square feet (sf).	Approved
2.	BMW Dealership	Development of a car dealership consisting of approximately 23,945 sf of commercial space.	Recently in operation
3.	Town Place Suites	Development of a 4-story hotel consisting of 114 rooms.	Under construction
4.	San Luis Ranch Specific Plan	Development of up to 500 residential units, 350,000 sf of commercial/office space, 200 hotel rooms, and approximately 5.8 acres of parks, while preserving 50% of the site for agriculture and open space.	Approved; portions under construction
5.	Long Bonetti Public Market	Development of a public market consisting of eight separate buildings; approximately 47,000 sf of commercial space.	Under construction; subject to phasing
6.	Tribune Work/Live	Development of a 3-story project that includes 43 Work/Live Units in conjunction with a remodel of the existing Tribune Production Building.	Building Review
7.	Tank Farm Commerce Park	Development of three commercial warehouse buildings totaling 29,000 sf.	Approved
8.	Avila Ranch Specific Plan	Development Plan consisting of 720 residential units and approximately 20,000 sf of commercial space. This project additionally involves construction of a fifth City fire station. In addition, the Buckley Road Extension would connect Buckley Road to South Higuera Street.	Approved
9.	Water Resources Recovery Facility (WRRF)	Expansion of the City's WRRF that includes approximately 17,704 sf of office/industrial space.	Building Review
10.	Homeless Service Center	Development of a homeless services facility consisting of approximately 20,000 sf of commercial space.	In operation
11.	Madonna Plaza	Development of a commercial project consisting of approximately 56,257 sf.	Under construction
12.	Ellsworth Tract	Subdivision and development of a property into 35 commercial lots.	Approved
13.	Victoria & Caudill Mixed Use	Development of two 3-story structures consisting of three Live/Work Units and five residential units.	Approved
14.	Broad St. Collection	Development of a mixed-use development consisting of 10 Live/Work Units and a small boutique hotel with six rooms and a caretaker's quarter.	Building Review

Table 3.0-1. Cumulative Projects List (Continued)

Project		Description	Project Status
15.	San Luis Square	Mixed-use development with 48 housing units and 21,000 sf of commercial space.	Approved
16.	Monterey Place	Mixed-use project with 23 housing units and 24,000 sf of office and retail space.	Approved
17.	Vesper Hotel at the Creamery	Development of a 4-story mixed-use project consisting of a hotel with 47 rooms, and approximately 6,698 sf of commercial space.	Approved
18.	Palm Parking Garage	Develop of a new public parking garage with approximately 5,000 sf of commercial space.	Planning Review
19.	Twin Creeks	Mixed-use project that includes 3-story structures with approximately 4,100 sf of commercial space and 102 residential units.	Approved
20.	Taylor Ranch	Development of 53 residential units as phase 1 of an approved subdivision, which in total has been approved for 142 residential units.	Building Review; subject to phasing
21.	Los Padres Inn	Development of a hotel consisting of 36 rooms.	Approved
22.	Fernwood Apartments	Development of a 3-story structure consisting of five residential units.	Under construction
23.	Pratt Ranch Phase 1	Subdivision and development of a property to provide for 30 residential units, four Live/Work Units, and approximately 1,500 sf of commercial space.	Approved
24.	790 Foothill Mixed Use	Development of a 4-story mixed-use project consisting of 78 residential units and approximately 6,805 sf of commercial space.	Building Review
25.	950 Orcutt Mixed Use	Development of a 4-story mixed-use project consisting of 75 residential units and approximately 6,800 sf of commercial space.	Approved
26.	Rockview Moderns	Subdivision and development of eight residential units.	Approved
27.	207 Higuera Mixed Use	Development of a 2-story mixed-use project consisting of six residential units and approximately 1,097 sf of commercial space.	Approved
28.	Broad Street Place	Mixed-use project that includes 40 residential units and 1,250 sf of commercial space.	Planning Review
29.	Marsh & Carmel Mixed Use	Mixed-use project that consists of a 4-story structure with approximately 1,100 sf of commercial space and eight residential units.	Approved
30.	1101 Monterey	Mixed-use project that includes a 3-story structure with approximately 27,079 sf of commercial/office space.	Approved
31.	Bridge St. Project	Development of a mixed-use project that consists of 18 residential units and approximately 10,621 of commercial space.	Planning Review

Table 3.0-1. Cumulative Projects List (Continued)

	Project	Description	Project Status
32.	71 Palomar Avenue	Development of a 33-unit multi-family residential project.	Approved
33.	West Creek Development	Subdivision and development of a property to provide for 172 residential units.	Approved; subject to phasing
34.	Serra Meadows Prado Frontage	Development of 31 residential units as part of the Serra Meadows Development.	Building Review
35.	Imel Ranch Subdivision	Subdivision and development of a property to provide for 18 single-family residential units.	Building Review
36.	Olive Mixed Use	Development of a 4-story mixed-use project consisting of an extended stay hotel with 17 rooms and approximately 3,500 sf of commercial space.	Approved
37.	1185 Monterey	Mixed-use project that includes a 4-story structure with approximately 2,558 sf of commercial space and 44 hotel rooms.	Planning Review
38.	Righetti Ranch	Development of 304 lots including 272 single-family units, 32 inclusionary units, a neighborhood park, and open space.	Building Review
39.	Digital West	Development of a 77,500-sf storage building.	Pending
40.	French Hospital	Development of the expansion of French Hospital in accordance with the Master Plan for the property.	Portions under construction; major expansion in Planning Review
41.	Motel Inn	Development project consisting of 55 hotel rooms, 13 recreational vehicle spaces, and 10 airstream spaces.	Building Review
42.	The Junction	Development of a mixed-use project consisting of 69 residential units and approximately 3,000 sf of commercial space.	Approved
43.	Jones Subdivision	Subdivision and development of a property to provide for 65 residential units and approximately 15,000 sf of commercial space.	Phase 1 Approved; Phase 2 in Planning Review
44.	Granada Hotel Expansion	Development of a 4-story addition to the existing hotel to provide an additional 22 rooms.	Building Review
45.	Aerovista Place	Development of an office project consisting of approximately 35,908 sf.	Planning Review
46.	South Town 18	Development of a 4-story mixed-use project consisting of 18 residential units and approximately 70 sf of commercial space.	Planning Review
47.	McCarthy Steel	Development of an industrial/warehouse project totaling approximately 9,840 sf.	Pending
48.	The Yard	Development of 43 residential units throughout eight new buildings, which includes the expansion of Victoria Avenue.	Approved; subject to phasing

Table 3.0-1. Cumulative Projects List (Continued)

	Project	Description	Project Status
49.	Victoria Crossing	Mixed-use project that includes a 4-story structure with approximately 3,150 sf of retail space and 33 residential units.	Building Review
50.	Laurel Lane Mixed Use	Development of a mixed-use project consisting of 18 residential units and approximately 2,300 sf of commercial space that also includes redevelopment of an existing parking lot.	Building Review
51.	Broad St. Mixed Use	Development of a mixed-use project that consists of 12 residential units and approximately 2,788 sf of commercial space.	Building Review
52.	Shell Station Development	Development of two commercial buildings totaling 10,000 sf.	Pending
53.	The Courtyard of Serra Meadows	Development of affordable housing project that includes 36 residential units as part of the Serra Meadows Development Lot 108.	Approved
54.	Bishop Street Studios	Development of 34 residential units.	Under Construction
55.	Ferrini Apartments	Development of five residential units.	Under Construction
56.	Poly Performance	Development of a 30,000-sf industrial building.	Under Construction
57.	22 North Chorro	Development of a mixed-use project consisting of 27 residential units and approximately 2,000 sf of commercial space.	In operation
58.	Higuera Brew	Reuse of an existing building for a brewery/restaurant use totaling 15,500 sf of commercial space.	Under Construction
59.	Iron Works	Development of a mixed-use project consisting of 46 residential units and approximately 4,400 sf of commercial space.	Under Construction
60.	Monterey Hotel	Development of a hotel consisting of 102 rooms.	In operation
61.	Toscano Moresco	Subdivision and development of a property to provide for 161 residential units.	Under Construction
62.	625 Toro	Development of 14 attached residential units.	Under Construction
63.	Hotel Cerro (Garden Street Terraces)	Development of a 4-story mixed-use project consisting of eight residential units, a hotel of 64 rooms, and approximately 25,000 sf of commercial space.	Under Construction
64.	Bullock Ranch	Development of 192 single family residential units.	Planning Review
65.	NWC Broad Street Mixed Use	Development of a mixed-use project consisting of 111 residential units and approximately 45,269 sf of commercial space.	Approved

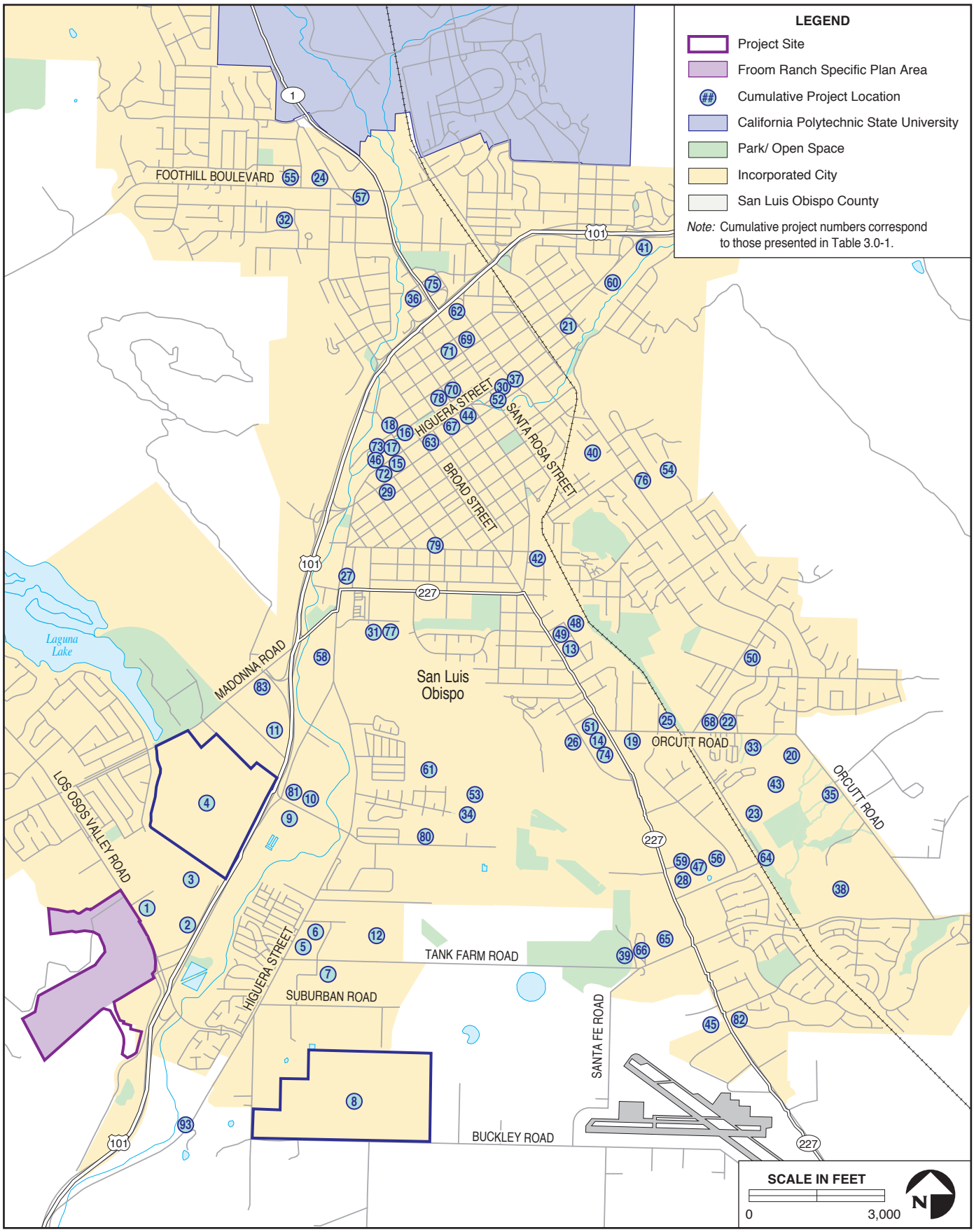
Table 3.0-1. Cumulative Projects List (Continued)

	Project	Description	Project Status
66.	650 Tank Farm	Development of 249 residential units and approximately 17,500 sf of commercial space.	Approved
67.	Marsh & Chorro Mixed Use	Development of a mixed-use project consisting of 50 residential units and approximately 30,000 sf of commercial space.	Planning Review
68.	Orcutt Road Apartments	Development of approximately 15 residential units.	Planning Review
69.	Peach Street	Development of approximately 5 single-family residential units.	Planning Review
70.	956 Monterey Mixed Use	Development of a mixed-use project consisting of 20 residential units and approximately 4,000 sf of commercial space.	Planning Review
71.	Mill Street Commons	Development of 5 residential units.	Planning Review
72.	545 Higuera Mixed Use	Development of a mixed-use project consisting of 56 residential units and approximately 5,000 sf of commercial space.	Planning Review
73.	Lofts at the Creamery	Development of 36 residential units and approximately 70 sf of commercial space.	Planning Review
74.	Mail Pouch South	Development of 10 residential units.	Approved
75.	Montalban Mixed Use	Development of a mixed-use project consisting of 15 residential units and approximately 430 sf of commercial space.	Building Review
76.	Fixlini Tract	Development of 3 single-family residential units.	Building Review
77.	Bridge Street (Terraza)	Development of 26 residential units.	Approved; subject to phasing
78.	Chinatown Hotel (Hotel SLO)	Development of a 78-room hotel with approximately 5,900 sf of commercial space.	Under construction
79.	HASLO Headquarters	Development of approximately 13,118 sf of commercial space.	Planning Review
80.	301 Prado	Development of approximately 160,000 sf of commercial/industrial space.	Planning Review
81.	RTA Maintenance Facility	Development of approximately 23,270 sf of commercial/industrial space.	Approved
82.	Airport Business Center	Development of approximately 6,830 sf of commercial space.	Approved
83.	Madonna Plaza Remodel	Remodel of approximately 12,508 sf of commercial space.	Approved

Table 3.0-1. Cumulative Projects List (Continued)

	Project	Description	Project Status
	COUNTY OF SAN LUIS OBISPO (COUNTY) PROJECTS		
84.	Animal Shelter Facility	New animal shelter facility to be constructed at the County Operations Center off Highway 1.	Tentative
85.	Avila Beach Drive at U.S. Highway 101 (U.S. 101) Interchange	Reconfiguration of the U.S. 101 and Avila Beach Drive Interchange in the community of Avila.	Planning Review
86.	Avila Beach Parking Management	A Parking Management Plan for Port San Luis, which includes the Harbor/Pier area, Avila Beach Drive, and the Town of Avila.	Tentative
87.	Los Osos Wastewater Project	Evaluation and development of a wastewater treatment system for Los Osos, California.	Complete
88.	Oak Shores Wastewater Treatment Facility Upgrade	Proposed upgrades and improvements to the County Service Area No. 7A (CSA-7A) Wastewater Treatment Facility in the community of Oak Shores.	Approved
89.	Price Canyon Road Widening	Widening of Price Canyon Road between Ormonde Road and Highway 227 near Edna, California.	Tentative
90.	Tefft Street at U.S. 101 Interchange	Reconfiguration of the U.S. 101 and Tefft Street interchange to reduce back up on the U.S. 101 off-ramps, improve capacity on Tefft Street, and improve intersection operations.	Planning Review
91.	Templeton Main Street at U.S. 101 Interchange	Reconfiguration of the U.S. 101 and Main Street Interchange in the community of Templeton.	Planning Review
	STATE PROJECTS		
92.	Cal Poly Master Plan	Implementation of planned facilities and improvements phased over a timeline of 20 years.	Planning Review
93.	Caltrans Headquarters	Construction of new Caltrans District 5 Headquarters building and yard along the Buckley Road Extension.	Planning Review

Note: Cumulative projects 1-83 and 92-93 located within the City and/or the vicinity of the Project site are shown in Figure 3.0-1. While cumulative projects 84-91 are not located in the vicinity of the Project site, these projects are identified as having the potential to contribute towards cumulative effects.



wood.

Cumulative Projects

FIGURE 3.0-1

3.1 AESTHETICS AND VISUAL RESOURCES

This section describes the existing aesthetic setting of the Project site and vicinity and analyzes the potential impacts to aesthetics that could result with development of the Project. Aesthetic and visual resources are principally defined by how viewers perceive the visual attractiveness of an area. Based on this subjective perception, the key elements and features that create or enhance an area's visual quality are definable. Most communities recognize scenic resources as important assets, although specific valued scenic resources may vary depending on the community and context. In general, visual resources are features of urban (built) or natural environments with a high aesthetic or scenic value. In the City, regional natural environmental features contribute to the community's aesthetic character and visual quality and include views of open space, wildlife habitats/corridors, and vegetation; natural site features such as landforms, valleys, and creeks; undeveloped hillsides; and agricultural landscapes. In a suburban setting, like the Project site, aesthetic and visual resources typically consist of a combination of natural features (e.g., Irish Hills) and high-valued built features that contribute to a community's inherent character and overall identity and can include historic structures, buildings, or landscapes; designated scenic routes; and scenic public vistas. Public views are those that are experienced from a publicly accessible vantage point.

3.1.1 Existing Setting

3.1.1.1 General Visual Character

The City is set at the base of several hills and ridges that visually define the edges of urban development and provide a natural backdrop to most view corridors. The hills, ridges, and outcroppings, including the Irish Hills, Cerro San Luis Obispo, and Bishop Peak, provide recognizable physical landmarks within the City and visually frame the City in its natural context. The topography of the hillsides has also constrained development to lower elevations, creating a defined edge to the City.

Visual resources in the City are derived from its natural setting against hillsides and open space areas, including the Irish Hills along the southern edge of the City, as well as the City's rich history embodied in historic structures and settings. Source: hikespeak.com

Outside the urban edge of the City, unincorporated areas are agricultural in nature, providing grazing land and natural vegetation.

The City's built environment is defined by its historic downtown with a compact urban form centered on a street grid that extends out to less dense suburban neighborhoods and shopping centers on the City edges. Historic structures and districts within the City demarcate a rich history of habitation and development, including agricultural development such as the historic Froom Ranch Dairy Farm (see also, Section 3.5, *Cultural and Tribal Cultural Resources*). The City maintains a small-town character as a quintessential Central Coast town while also providing a wide array of neighborhood styles and designs, from historic bungalows to mid-century ranch neighborhoods. Consistent with the City's General Plan, development has focused on infill opportunities and been limited to low-lying areas of the City to maintain undeveloped hillsides, which has created a contiguous urbanized area with defined natural edges.

3.1.1.2 Visual Character of the Project Vicinity

The Project site consists of mostly undeveloped land located in the unincorporated County, directly adjacent to the southwestern City boundary and within the City's Sphere of Influence (SOI). The site is surrounded to the north, east, and south with urban development. To the south, four multi-story hotels and surface parking lots are clustered amongst sparse ornamental landscaping. To the east, several low-lying automobile dealerships and service centers are connected by surface parking lots and Los Osos Valley Road (LOVR). To the north, the Irish Hills Plaza is a regional-serving retail plaza anchored

The Project site (foreground) is characterized by grazing land in the lower elevations against a backdrop of dramatic hillsides within the Irish Hills Natural Reserve.

by large retail stores (e.g., Home Depot, Costco, Whole Foods, TJ Maxx) and connected with surface parking lots. The Project site is effectively surrounded on three sides by urban development. However, the vicinity to the west and southwest is largely undeveloped. Development in this area is limited primarily to Mountainbrook Church, a single-story complex atop a small rise to the southwest of the site. This mixture of developed land and natural and/or agricultural areas is characteristic of the City's interface with unincorporated areas when urban development transitions into rural settings.

The Irish Hills Natural Reserve is located immediately west of the Project site and provides a dramatic natural backdrop to open space and agricultural lands in the County and urban development in the City. The Irish Hills rise over 1,000 feet above the Project site to the north and west. The mountainous topography is covered with extensive chaparral habitat, oak woodland, and native grasslands and can be seen from area roadways, residential communities, and other parks and open space within the City and County. The Irish Hills are highly visible from the Project site and adjacent areas, including from roadways providing local and regional access.

The Project site is bordered to the east by LOVR and U.S. 101. LOVR in the Project vicinity is a four-lane road with on-road bike lanes on both sides and sidewalks on the east side only. LOVR is designated as having medium to high scenic value in the City's General Plan (City of San Luis Obispo 2006; 2017). The LOVR Overpass interchange extends over U.S. 101 for approximately 1,000 feet. The City General Plan Circulation Element (CE) designates this portion of the roadway as having a high scenic value. Substantial views of the Project site and Irish Hills, as well as surrounding mountains to the north and northwest, are available from the elevated roadway. The southeastern portion of the site is bordered

Views of the Irish Hills and the undeveloped areas of the Project site are available from the LOVR Overpass, with foreground views of riparian willow woodland associated with the Calle Joaquin wetlands and the LOVR ditch. The Project site visually transitions the City's urban edge to the natural setting of the Irish Hills Natural Reserve and unincorporated agricultural lands.

by Calle Joaquin, a two-lane road running generally north-south from LOVR and parallel to U.S. 101. Calle Joaquin provides sidewalks with median landscaping along both sides of the roadway, but no bicycle facilities are provided. This roadway is not designated as having scenic value by the General Plan CE, though views of the Irish Hills and surrounding undeveloped agricultural land are available across the Project site.

3.1.1.3 Visual Condition of the Project Site

There are several important visual resources that contribute to the scenic quality of the Project site. The 116.8-acre Project site is largely undeveloped and visually transitions the urban development of the City to the undeveloped, natural settings in the unincorporated area and the Irish Hills. The Project site has three distinct visual characters depending on location, including lower elevations, upper elevations, and the Froom Ranch Dairy complex.

The site's lower undeveloped elevations are characterized by low rolling slopes. The site is gently sloping from the base of the Irish Hills to LOVR. This area provides grazing land for horses and also contains the 3.2-acre stormwater detention basin, which is a low-lying earthen structure and frequently vegetated with wetland plants (see also, Section 3.4, *Biological Resources*). Otherwise, vegetation onsite is sparse within the lower elevations and consists primarily of grasslands; however, portions of these grasslands have been recently graded. Based on visual observations and review of aerial photography in 2018 and 2019 by the EIR consultant, approximately 8 acres of the site is routinely graded and shaped into a berm on the downslope side of Froom Creek. Grasslands appear to reemerge

Froom Creek flows from the Irish Hills through the Project site. Most of the creek is a seasonally dry channel lined with rock and cobble with earthen banks and no riparian vegetation. The lower elevations of the Project site support grassland and the Calle Joaquin wetlands, which provide broad natural views within the Project site.

when no grading occurs, but these construction activities periodically degrade the natural visual setting of this portion of the site.

At the site's southeast corner, the Calle Joaquin wetlands provide rich vegetation and ponding for surface waters at the site's lowest elevations. Along LOVR, intermittent willow woodlands along the LOVR ditch generally screen and block views of the site from LOVR and the commercial areas to the east. The lower elevations of the site are generally separated from the upper elevations by Froom Creek, which cuts across the site at the base of the Irish Hills, forming a natural boundary between the hillside areas to the west and the lowland grazing areas to the east. Froom Creek is a seasonally dry channel lined with rocks and cobble with earthen banks and no riparian vegetation within the Specific Plan area. Outside of the Specific Plan area in the proposed stormwater detention basin area, Froom Creek transitions into a dense riparian corridor that flows downslope of open grasslands downslope of Mountainbrook Church.

Approximately 7.5 acres in the northwestern area of the site is developed with the Froom Ranch Dairy complex (an onsite historic district) and a 5.5-acre permitted quarry with a construction storage yard. The historic Froom Ranch Dairy complex comprises seven buildings remaining from the former dairy operations onsite, four of which have been determined to be individually eligible as significant historic resources. The buildings are one-story, wooden structures, and only two are painted with neutral tones. Other non-historic structures associated with the complex include an outhouse, a shed, and a cellular service tower disguised like a turn-of-the-century water tower (see Section 3.5, *Cultural and Tribal Cultural Resources*). The complex is clearly visible from within the Project site, from the adjacent Irish Hills Plaza parking lots, and from trails within the Irish Hills Natural Reserve, including the Froom Creek Connector Trail. The complex is only partially visible from LOVR near the entrance to the Project site where views are less obstructed by riparian vegetation and development within the Irish Hills Plaza, and is also visible from atop the LOVR Overpass. Immediately behind the complex, the gravel extraction quarry and equipment/materials storage areas lie adjacent to Froom Creek at

The northwestern area of the Project site is developed with the Froom Ranch Dairy complex and existing quarry and construction storage area, which is visible from public trails in the Irish Hills Natural Reserve.

the base of the Irish Hills. While there are no permanent structures in the quarry, stockpiles of soil, gravel, and construction debris/rubble are commonly seen onsite along with uncovered construction materials (e.g., pipe, conduit). The quarry is set on a level terrace tucked near Froom Creek and is less visible from within the site and from the Irish Hills Plaza; however, trail users have clear views of the quarry from the Froom Creek Connector Trail and the trailhead to the Irish Hills Natural Reserve trail system, which lies immediately behind the Project site to the west.

The southwestern area of the Project site contains diverse natural communities within drainages and woodland areas in the Upper Terrace of the Project site. This area is highly visible to trail users within the Irish Hills Natural Reserve.

The Upper Terrace has varied topography and rock outcroppings that provide visual interest. Vegetation in the Upper Terrace is richer and more varied, providing mature trees, riparian corridors, natural drainages, and often wildflower-filled open grasslands. The Upper Terrace's visual qualities blend seamlessly with those of the Irish Hills. The Irish Hills topographic forms are a dominant background view to the west. The Upper Terrace is also highly visible to trail users within the Irish Hills Natural Reserve trail system, including Neil Havlik Way and the Johnson Ranch Trail.

3.1.1.4 Scenic Resources

Scenic Vistas

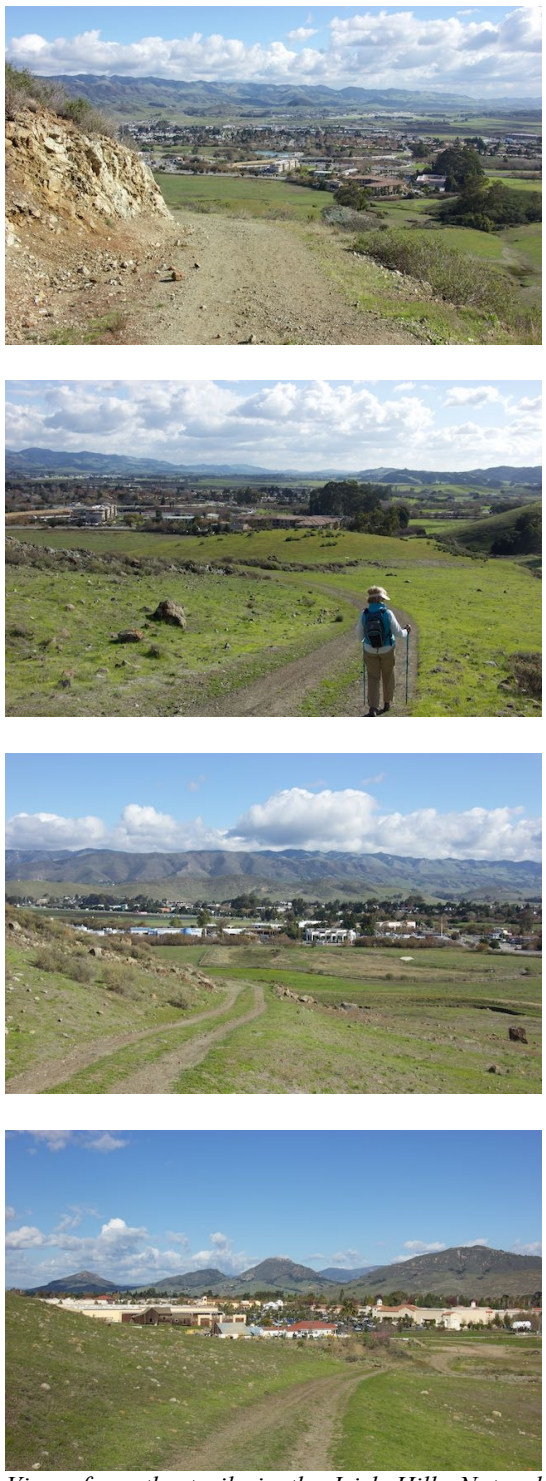
A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. The term "vista" generally implies an expansive view, usually from an elevated point or open area. The City General Plan Conservation and Open Space Element (COSE) has designated a scenic vista overlooking the Upper Terrace of the Project site (City of San Luis Obispo 2006).[1] This

The City's COSE of the General Plan designates a scenic vista overlooking the Project site from the Filipponi Ranch and Johnson Ranch Trail in the Irish Hills Natural Reserve. Source: hikespeak.com

[1] The COSE identifies cones of view in Figure 11: Scenic Roadways and Vistas.

designated vista is located 0.35 mile southwest of the Project site near Filipponi Ranch, uphill from the Upper Terrace and behind Mountainbrook Church. This public vista is accessible from the Froom Ranch-to-Johnson Ranch Trail Connector Trail and the Filipponi Ranch Trail in the Irish Hills Natural Reserve and affords sweeping views over the City to the east and northeast, including background views of Cerro San Luis and Bishop Peak. In the foreground, the Upper Terrace is visible from this vista with mid-range views of the lower elevations of the site, including the proposed stormwater detention basin area. The Project site is not visible from any other City-designated scenic vista.

The Project site is visible from other public areas and overlooks, including the Irish Hills Natural Reserve. Over 10 miles of public trails within the Irish Hills Natural Reserve offer broad public views across the Project site to the east. Existing foreground views from the Irish Hills Natural Reserve trail system include undeveloped lands of the Project site as well as adjacent developed areas (e.g., Irish Hills Plaza, Mountainbrook Church). Background views include the hills and mountain ranges in the greater San Luis Obispo area. The most clear and persistent views of the Project site are available along nearly 2 miles of the following public trails; these trails comprise a popular intermediate



Views from the trails in the Irish Hills Natural Reserve provide sweeping views across the Project site to the east. Pictured here, Neil Havlik Way and the Froom Creek Connector Trail provide a public scenic vista east toward mountains, hillsides, and open space intermittently interrupted by low density development. Source: hikespeak.com

hiking-only loop in the Irish Hills with a trailhead immediately adjacent to the existing onsite quarry:

- ***Froom Creek Connector Trail*** is a 0.5-mile trail that provides clear views of the Project site's northwestern corner, including existing views of the Froom Ranch Dairy complex and quarry in the foreground and lower elevation grazing lands in the background. Mid-range views include low-lying commercial development along LOVR against a background of distant mountains and open sky.
- ***Neil Havlik Way*** is a 0.5-mile trail that circumvents the hillside above the Project site. Over 180-degree views are available from this trail segment capturing most of the Project site in the foreground. Irish Hills Plaza is plainly visible to the northeast. Views to the east and southeast include a band of commercial development and roadways, but is otherwise largely undeveloped and natural with background views of mountains and open sky.
- ***Ocean View Trail*** is a 2.9-mile trail that runs above the Upper Terrace of the Project site and affords users clear views of the upper and lower elevations of the Project site with views of Mountainbrook Church in the mid-range view. Views from this trail are largely undeveloped and natural with background views of mountains and open sky.
- ***Filipponi Ranch Trail*** is a 1.0-mile trail connecting Calle Joaquin to the Johnson Ranch Trail in the Irish Hills Natural Reserve, providing the southernmost entry point to the Reserve. This trail also provides access to the City's designated scenic vista overlooking the southern area of the City, including the Project site. This trail provides scenic views of the Project vicinity and surrounding area, including Mountainbrook Church, the Project site, and ample views of the surrounding mountains and open space to the east and south. U.S. 101 and commercial and residential areas are also visible from this trail, although they comprise a minor portion of the viewshed.

Regionally, the Project site is marginally visible from elevated locations, such as upper elevation trails in Laguna Lake Park Open Space and Bishop Peak, but clear views are highly limited by distance and intervening topography, vegetation, and development in the region. Views of the Project site from identified key viewing areas are further described below in Section 3.1.3.2, *Impact Assessment Methodology*.

Scenic Roadways and Highways

The Project site is visible from local public roads, including clear views from LOVR and Calle Joaquin adjacent to the site. Distant and intermittent views are also available from U.S. 101 primarily for southbound travelers. As further described below, U.S. 101 is eligible for designation as a State Scenic Highway in this area and identified as having high scenic value in the General Plan COSE. LOVR is locally designated as a roadway with moderate to high scenic value adjacent to the Project site. Calle Joaquin is not designated as a scenic roadway.

Local Roadways

LOVR is a public roadway that carries vehicles, bicyclists, and pedestrians along the eastern edge of the Project site for approximately 2,000 feet. Views of the Irish Hills Natural Reserve to the west from LOVR are contrasted against urban development, including commercial land uses and roadway infrastructure to the east. While the Irish Hills are visible in the background, views toward the Project site from LOVR are mostly obstructed by thick willow riparian vegetation in the LOVR ditch that runs along the roadway. Unobstructed views of the Project site from LOVR are available for a 250-foot-long break in this vegetation from Auto Park Way to the site's existing driveway. This view captures a wide expanse of the site, including low-lying grasslands in the foreground, the Froom Ranch Dairy complex and Froom Creek in the mid-range view, and a background view of the natural hillsides of the Irish Hills Natural Reserve. To the north, the loading areas of Irish Hills Plaza are also visible. Another 100-foot-long break in the roadside vegetation exists closer to Calle Joaquin across from the Toyota of San Luis Obispo dealership. Limited views are available at this point toward the Irish Hills Natural Reserve, but the scenic quality is limited and obstructed by onsite vegetation (e.g., palm tree cluster). LOVR is designated by the City as having moderate scenic values along the 2,000 feet of frontage with the Project site. The visual qualities of the Project site are most visible for southbound travelers looking west toward the site through breaks in roadside vegetation. High quality views are therefore intermittent and varying along the Project frontages.

Views along LOVR (southbound) afford a combination of low-lying urban development to the east and natural open views to the west across the Project site. Source: Google 2019.

Approximately 300 feet south of the Project site, the LOVR Overpass (over U.S. 101) provides elevated views over the Project site. The LOVR Overpass is designated by the City as having high scenic value. The visual qualities of the Project site are most available from the LOVR Overpass for northbound travelers looking west. While most views to the Project site from the LOVR Overpass are obstructed by existing multi-story hotels on Calle Joaquin, including the four-story Hampton Suites, a clear view of the Project site, including the Upper Terrace and the Irish Hills Natural Reserve, is available for approximately 300 feet as the LOVR Overpass descends to LOVR. This view captures the Upper Terrace, lower elevation grasslands, and distant views of the Froom Ranch Dairy complex. Northbound travelers on this portion of the LOVR Overpass experience panoramic views of the Project site. Given a speed limit of 35 miles per hour (mph) and assuming average roadway speeds of 20 mph, drivers along this roadway experience views of the Project site for less than one minute. Pedestrians traveling across the overpass at 3 mph would experience these views for approximately four minutes.

Calle Joaquin is not a designated scenic roadway, but clear views of the Project site are available for westbound travelers. Substantially unobstructed foreground views of adjacent wetlands and grazing lands with a backdrop of natural hillsides and ridgelines are available from this roadway.

State Highways

The California Scenic Highway Program, maintained by the California Department of Transportation (Caltrans), protects State Scenic Highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. According to the California State Scenic Highway Program, the section of U.S. 101 in the Project vicinity is eligible for State Scenic Highway designation but is not officially designated (Caltrans 2017). The City's General Plan CE identifies this segment of U.S. 101 as having high scenic value (City of San Luis Obispo 2014).

U.S. 101 runs northeast-southwest, passing to the south of the Project site before continuing north into the City and south into the County. Partial views of hillsides within the Project site and Irish Hills mountainous ridgelines are available in the distance from southbound U.S. 101 along an approximate 0.5-mile segment. Passing the Project site from the north, drivers experience broad views of open space near the Project site as they leave the City, although direct views of the Project site are nominal due to existing development, vegetation, and surrounding topography.

3.1.1.5 Light and Glare

The Project site does not currently contain sources of light or glare that affect nighttime views in the area. Existing operations of the construction business operations are not illuminated at night and onsite lighting is limited to minor interior light sources. The Project site and Irish Hills to the west do not contribute to nighttime lighting or daytime glare. In contrast, nighttime lighting from businesses and roadways in the Project vicinity is substantial and characteristic of the commercial urban area. Nighttime lighting conditions to the north, east, and south of the Project site including outdoor security lights, lighted signage, and interior lights that spill outdoors through large commercial windows. The site is surrounded on three sides by commercial development, including highly illuminated hotels to the south, Irish Hills Plaza to the north, and automobile dealerships to the east. LOVR and Calle Joaquin are not illuminated with street lights.

3.1.2 Regulatory Setting

There are no federal regulations that pertain to aesthetic or visual resources related to the Project. State and local regulations that are directly relevant to the Project are summarized below.

3.1.2.1 State

Caltrans Scenic Highway Program

Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Suitability for designation as a State Scenic Highway is based on vividness, intactness, and unity. As discussed previously, U.S. 101, located approximately 0.45 mile west of the Project site, is eligible for State Scenic Highway designation; however, it is not currently designated as a State Scenic Highway. The City's General Plan CE designates U.S. 101 as having high scenic value.

3.1.2.2 Local

City of San Luis Obispo General Plan

The City's General Plan Land Use Element (LUE) contains policies to ensure that new development is compatible with existing surrounding visual character. The General Plan CE contains policies to ensure new development does not obstruct views from scenic roads or highways. The COSE includes policies to protect open space and minimize visual impacts on surrounding natural landscape and to protect views and scenic vistas. Pertinent policies from these elements are listed below.

Land Use Element

Policy LU 1.4 Urban Edges Character. The City shall maintain a clear boundary between San Luis Obispo's urban development and surrounding open land. Development just inside the boundary shall provide measures to avoid a stark-appearing edge between buildings in the City and adjacent open land. Such measures may include: using new or existing groves or windrows of trees, or hills or other landforms, to set the edge of development; increasing the required side-yard and rear-yard setbacks; and providing open space or agricultural transition buffers.

Policy LU 1.8.1 Open Space Protection. Within the City's planning area and outside the Urban Reserve Line (URL), undeveloped land should be kept open. Prime agricultural land, productive agricultural land, and potentially productive agricultural land shall be protected for farming. Scenic lands, sensitive wildlife habitat, and undeveloped prime agricultural land shall be permanently protected as open space.

Policy LU 2.3.7 Natural Features. The City shall require residential developments to preserve and incorporate as amenities natural site features, such as land forms, views, creeks, wetlands, wildlife habitats, wildlife corridors, and plants.

Policy LU 2.3.8 Parking. The City shall discourage the development of large parking lots and require parking lots be screened from street views. In general, parking should not be located between buildings and public streets.

Policy LU 2.3.10 Site Constraints. The City shall require new residential developments to respect site constraints such as property size and shape, ground slope, access, creeks and wetlands, wildlife habitats, wildlife corridors, native vegetation, and significant trees.

Policy LU 2.3.11 Residential Project Objectives. Residential projects should provide:

A Privacy, for occupants and neighbors of the project;

B Adequate usable outdoor area, sheltered from noise and prevailing winds, and oriented to receive light and sunshine;

C Use of natural ventilation, sunlight, and shade to make indoor and outdoor spaces comfortable with minimum mechanical support;

D Pleasant views from and toward the project;

E Security and safety;

F Bicycle facilities consistent with the City's Bicycle Plan;

G Adequate parking and storage space;

H Noise and visual separation from adjacent roads and commercial uses (Barrier walls, isolating a project, are not desirable. Noise mitigation walls may be used only when there is no practicable alternative. Where walls are used, they should help create an attractive pedestrian, residential setting through features such as setbacks, changes in alignment, detail and texture, places for people to walk through them at regular intervals, and planting.)

I Design elements that facilitate neighborhood interaction, such as front porches, front yards along streets, and entryways facing public walkways;

J Buffers from hazardous materials transport routes, as recommended by the City Fire Department.

Policy LU 6.4 Hillside Policies. As noted in the Open Space section of the COSE, San Luis Obispo wants to keep open its steeper, higher, and most visible hillsides. Some of the lower and less steep hillside areas, however, are seen as suitable for development, particularly where development is coupled with permanent open space protection of the more sensitive areas.

> **Policy LU 6.4.7 Hillside Planning Areas.** The City shall urge the County to implement the following hillside policies. Specific policies to address particular concerns for the areas as shown in LUE Figure 7 are listed below. For each of these areas, land above the development limit line should be secured as permanent open space.
>
> > **H. The Irish Hills area** should be secured permanent open space with no building sites above the 150-foot elevation, in conjunction with any subdivision or development of the lower areas.

Policy LU 8.1.1 Specific Plan/General Plan Amendment. The City shall require the completion and approval of a specific plan and associated General Plan Amendment prior to annexation (if applicable) and development of land within an area designated as a

Specific Plan Area on LUE Figure 10. The required General Plan Amendment will modify the General Plan Land Use Diagram to reflect the land use diagram from the approved specific plan, based on the land uses listed under "Performance Standards" for each site.

The Project site is designated on LUE Figure 10 as a designated Specific Plan site, SP-3 Madonna on LOVR.

Circulation Element

Policy 15.1.2 Development along Scenic Routes. The City will preserve and improve views of important scenic resources form streets and roads. Development along scenic roadways should not block views or detract from the quality of views.

- **A** Projects, including signs, in the viewshed of a scenic roadway should be considered as "sensitive" and require architectural review.
- **B** Development projects should not wall-off scenic roadways and block views.
- **C** As part of the City's environmental review process, blocking of views along scenic roadways should be considered a significant environmental impact.
- **D** Signs along scenic roadways should not clutter vistas or views.
- **E** Street lights should be low scale and focus light at intersections where it is most needed. Tall light standards should be avoided. Street lighting should be integrated with other street furniture at locations where views are least disturbed. However, safety priorities should remain superior to scenic concerns.
- **F** Lighting along scenic roadways should not degrade the nighttime visual environment and night sky per the City's Night Sky Preservation Ordinance.

Policy 15.1.3 Public Equipment and Facilities. The City and other agencies should be encouraged to avoid cluttering scenic roadways with utility and circulation-related equipment and facilities.

- **A** Whenever possible, signs in the public right-of-way should be consolidated on a single low-profile standard;
- **B** Public utilities along scenic highways should be installed underground;
- **C** The placement of landscaping and street trees should not block views from Scenic Routes. Clustering of street trees along scenic roadways should be considered as an alternative to uniform spacing; and
- **D** Traffic signals with long mast arms should be discouraged along scenic roadways.

Conservation and Open Space Element

Policy COS 8.3.2 Open Space Buffers. Buffers shall be required in the following situations:

A Between urban development -- including parks and public facilities -- and natural habitats such as creeks, wetlands, hillsides and ridgelines, Morros, scenic rock outcrops and other significant geological features, and grassland communities, to address noise, lighting, storm runoff, spread of invasive, non-native species, and access by people and pets.

B Between urban development and agricultural operations, to address dust, noise, odors, chemical use, and access by people and pets.

C Between new development and scenic resources or the greenbelt, to address view blockage, lighting and noise, and visual transition from urban character to rural character.

D Urban development or uses located adjacent to the Urban Reserve Line to provide a transition to open space or greenbelt areas. Transition areas should add to the preservation of open space lands or resources. At a minimum, a 50-foot transition area (preserved in essentially a natural state) shall be provided within the project along the project boundary with the Urban Reserve Line, unless the transition area is defined elsewhere in this Element.

Policy COS 9.1.1 Preserve Natural and Agricultural Landscapes - B. Any development that is permitted in natural or agricultural landscapes shall be visually subordinate to and compatible with the landscape features. Such development shall:

1) Avoid visually prominent locations such as ridgelines, and slopes exceeding 20 percent.
2) Avoid unnecessary grading, vegetation removal, and site lighting.
3) Incorporate building forms, architectural materials, and landscaping that respect the setting, including the historical pattern of development in similar settings, and avoid stark contrasts with its setting.
4) Preserve scenic or unique landforms, significant trees in terms of size, age, species or rarity, and rock outcroppings.

Policy COS 9.1.2 Urban Development. Urban development should reflect its architectural context. This does not necessarily prescribe a specific style, but requires deliberate design choices that acknowledge human scale, natural site features, and

neighboring urban development, and that are compatible with historical and architectural resources. Plans for sub-areas of the City may require certain architectural styles.

Policy COS 9.1.3 Utilities and Signs. In and near public streets, plazas and parks, features that clutter, degrade, intrude on, or obstruct views should be avoided. Necessary features, such as utility and communication equipment, and traffic equipment and signs should be designed and placed so as to not impinge upon or degrade scenic views of the Morros or surrounding hillsides, or farmland, consistent with the primary objective of safety. New billboard signs shall not be allowed, and existing billboard signs shall be removed as soon as practicable, as provided in the Sign Regulations.

Policy COS 9.1.4 Streetscapes and Major Roadways. In the acquisition, design, construction or significant modification of major roadways (highways/regional routes and arterial streets), the City will promote the creation of "streetscapes" and linear scenic parkways or corridors that promote the City's visual quality and character, enhance adjacent uses and integrate roadways with surrounding districts.

Policy COS 9.1.5 View Protection in New Development. The City will include in all environmental review and carefully consider effects of new development, streets, and road construction on views and visual quality by applying the Community Design Guidelines, height restrictions, hillside standards, Historical Preservation Program Guidelines, and the California Environmental Quality Act and Guidelines.

Policy COS 9.2.1 Views To and From Public Places, Including Scenic Roadways. The City will preserve and improve views of important scenic resources from public places and encourage other agencies with jurisdiction to do so. Public places include parks, plazas, the grounds of civic buildings, streets and roads, and publicly accessible open space.

1) Development projects shall not wall-off scenic roadways and block views.
2) Utilities, traffic signals, and public and private signs and lights shall not intrude on or clutter views, consistent with safety needs.
3) Where important vistas of distant landscape features occur along streets, street trees shall be clustered to facilitate viewing of the distant features.
4) Development projects, including signs, in the viewshed of a scenic roadway shall be considered "sensitive" and require architectural review.

Policy COS 9.2.2 Views To and From Private Development. Projects should incorporate as amenities views from and within private development sites. Private development designs

should cause the least view blockage for neighboring property that allows project objectives to be met.

Policy COS 9.2.3 Outdoor Lighting. Outdoor lighting shall avoid: operating at unnecessary locations, levels, and times; spillage to areas not needing or wanting illumination; glare (intense line-of-site contrast); and frequencies (colors) that interfere with astronomical viewing.

Policy COS 9.3.6 View blockage Along Scenic Highways. Determine that view blockage along scenic roadways is a significant impact.

City of San Luis Obispo Zoning Ordinance

The Zoning Ordinance of the City's Municipal Code was developed in conformance with the General Plan(City of San Luis Obispo 2019). Zoning is intended to promote and enforce broad General Plan policies related to land use, physical development, and construction. The following Zoning Ordinance policies are related to the visual impact of lighting.

17.70.100 Lighting and Night Sky Preservation. Establishes lighting regulations that encourage lighting practices and systems that will:

a. Permit reasonable uses of outdoor lighting for nighttime safety, utility, security, and enjoyment while preserving the ambience of night;
b. Curtail and reverse any degradation of the nighttime visual environment and the night sky;
c. Minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary;
d. Help protect the natural environment from the damaging effects of night lighting; and
e. Meet the minimum requirements of the California Code of Regulations for Outdoor Lighting and Signs (Title 24, Chapter 6).

City of San Luis Obispo Community Design Guidelines

The City's Community Design Guidelines were developed to communicate the City's expectations relating to the quality and character of site and building design. Many of the guidelines specifically target the reduction of visual impacts and the promotion of visual harmony with surrounding context (City of San Luis Obispo 2010). The following subjects are relevant to this Project analysis.

Chapter 3 – Commercial and Industrial Project Designs

Chapter 3 includes guidelines relating to the massing, scale, form, style, and design of commercial and industrial use buildings to promote the visual and architectural compatibility of new development with existing and proposed surrounding structures.

Chapter 5 – Residential Project Design

Chapter 5 includes guidelines relating to the goals for residential project design, subdivision design and general residential project principles, infill development, multi-family and clustered housing design, and single-family housing design, all of which apply to this Project. Qualities examined include protection of scenic roadways; visually pleasing parking design and location; consideration of neighboring development; quality landscaping and lighting; and site-specific building design.

Chapter 6 – Site Planning and Other Design Details

Chapter 6 details qualities such as energy and resource conservation, lighting, storage, trash/recycling enclosures, landscaping, parking, and public art, among other items.

Chapter 7 – Special Design Considerations

This section of the City's Design Guidelines focuses on creekside and hillside development, as well as preservation of historic resources. Guidelines for creekside development outline the City's expectations concerning necessary setbacks from creek banks and the maintenance of public visual access to scenic creeks and corridors. Guidelines for hillside development outline the importance of preserving the natural character of hillsides through expectations concerning the height of buildings, grading and development on steep slopes, installation of fencing and landscaping, and exterior lighting. Requirements for the preservation of historic and cultural resources are administered by the City's Cultural Heritage Committee (CHC) and the guidelines adopted in the City Municipal Code for architectural review.

3.1.3 Environmental Impact Analysis

3.1.3.1 Thresholds of Significance

As specified in the CEQA Guidelines, the Project would result in a significant impact to aesthetics if it would:

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

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, open space, and historic buildings within a designated scenic local or State Scenic Highway;

c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings; or

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

3.1.3.2 Impact Assessment Methodology

The City's General Plan policies provide definitions of physical attributes that are considered potential important visual resources. These include:

- Open space, (LUE Policy 1.13.8 Open Space);
- Natural site features such as landforms, views, creeks (LUE Policy 2.3.7 Natural Features;
- Scenic hillside areas and natural features such as the volcanic Morros, ridge lines, plant communities, rock outcroppings and steep slope areas that function as landscape backdrops for the community (LUE Policy 6.4.1 Hillside Policies);
- Hillside planning areas that contribute to the City's scenic setting (LUE Policy 6.4.2 Development Limits);
- Preserve natural and agricultural landscapes (COSE Policy 9.1.1);
- Preserve nighttime views and prevent light pollution (COSE Policy 9.1.6 Night-sky preservation)

Adopted City General Plan policies require that the Project must consider potential loss of open space, minimize aesthetic impacts, and remain compatible with nearby visual resources.

Analysis of visual impacts of the Project includes fieldwork and visual reconnaissance of the Project site, notes and photographs of existing visual resources (e.g., trees, buildings, and view corridors), analysis of the Project site's relationship to the surrounding community, and the City's existing policy framework for protecting visual resources. Visual reconnaissance of the Project site and surrounding areas was conducted by Wood Environment & Infrastructure Solutions on December 19, 2017, January 9, 2018, January 18, 2018, and April 25, 2019. Field notes and photographs of existing visual resources of the Project site and vicinity are used to support this analysis. This information was utilized to identify important visual resources present on the Project site and in the vicinity.

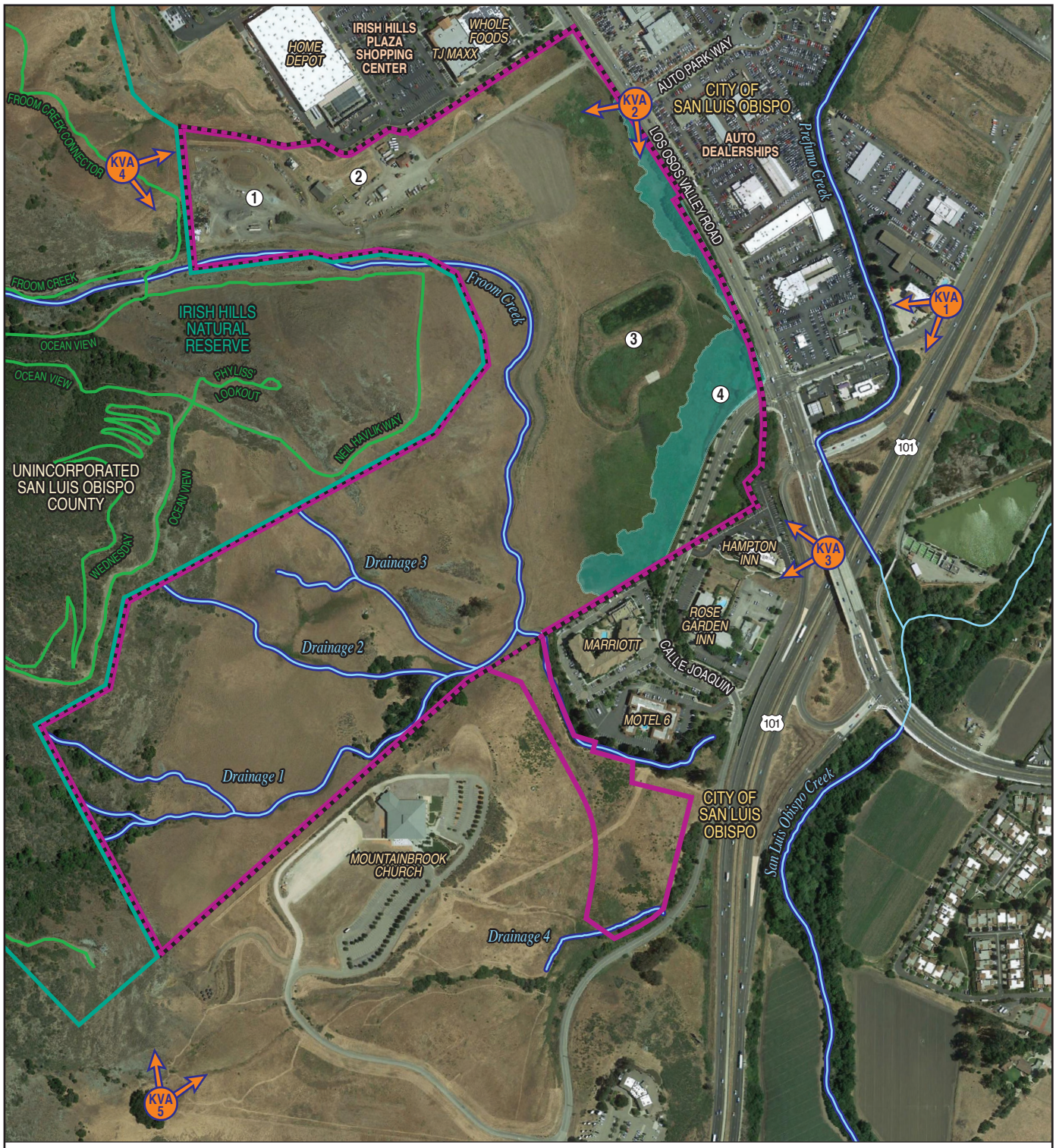
Scenic Vistas and Scenic Resources

The view impact assessment depends upon the sensitivity of the resource, as supported by public testimony, viewer susceptibility, viewing conditions (e.g., angle of view, distance, and primary viewing directions), degree of change and visual contrasts to surroundings. These could include a change to existing features that no longer appear characteristic of the area or development that substantially or entirely blocks public scenic views or removes key aesthetic features. This analysis focuses on changes to public views. Impacts to private views are not considered under CEQA (Pub. Res. Code Section 21082.2). Public views include local- and state-designated scenic roadways or highways and public vantages, including LOVR, U.S. 101, and the public open space within the Irish Hills Natural Reserve. This analysis considers the field of view for different viewers; drivers and cyclists on local roadways are generally forward-facing in the direction of the traffic flow, whereas pedestrians and hikers are able to perceive views in any direction. This analysis also considers the different expectations of viewers; drivers and cyclists on roadways may be occupied with travel mechanics, other vehicles, and the immediate vicinity, whereas pedestrians, hikers, and mountain bikers may seek aesthetic relief as part of recreational activity.

Visual Character

The analysis of visual character and quality focuses on whether development of the Project would substantially degrade the existing visual character of the Project site or vicinity. Considerations include potential visual contrast and/or the compatibility of scale and character of future development to existing visual conditions.

Because assessment of aesthetics is inherently subjective, concerns raised by the public during the scoping process were considered. To evaluate potential Project-related impacts to visual resources, Key Viewing Areas (KVAs) were identified and factors such as overall changes to visual character were considered. KVAs were selected based on representative locations from which the Project would be clearly seen from public locations in the Project vicinity (Figure 3.1-1). The KVA analysis focuses on changes from existing conditions as they would be experienced by motorists, bicyclists, and pedestrians from the public realm. KVAs are then reviewed in the context of the Draft FRSP, architectural renderings, a 3D model of the Project and elevations which are used for visual simulations of the Project for each KVA to determine whether the Project may substantially degrade or conflict with the existing visual character of the site and Project vicinity. The KVA existing setting photographs are compared to Project visual simulations prepared by the EIR consultant.



LEGEND

- Project Site
- Froom Ranch Specific Plan Area
- Irish Hills Natural Reserve
- Public Trail
- ① Quarry
- ② Froom Ranch Dairy Complex
- ③ 3.2-Acre Existing Detention Basin for Irish Hills Plaza
- ④ Calle Joaquin Wetlands
- KVA # — KVA Viewing Location and Number

N

SCALE IN FEET

0 600

Aerial Source: Google 2018.

wood.

KVA Locations

FIGURE 3.1-1

The KVA visual simulations include topographic changes based on proposed grading plans, structures location, and parameters based on the Draft FRSP (Appendix C) and the draft Vesting Tentative Tract Map (VTTM), and landscaping based on conceptual landscape plans. As detailed architectural design and landscaping details are not available at this time, the visual simulations are conceptual and subject to change; however, the depiction of bulk, scale, and size of the Project is considered accurate for the purposes of impact analysis. Existing KVA visual characteristics are compared to computer-based visual simulations of the Project in Section 3.1.3.3, *Project Impacts and Mitigation Measures*.

The following KVAs were selected for analysis (refer to Figure 3.1-1 for KVA locations). The analysis focuses on changes from existing conditions as they would be experienced by viewers from adjacent public locations, including roadways and the Irish Hills Natural Reserve. To the extent feasible, this assessment quantifies the potential changes to visual resources (i.e., building heights, setbacks, and distances). However, aesthetic impacts are also addressed qualitatively where quantification was determined to be unavailable and/or inaccurate. The changes to visual character are also discussed in the context of major pending public and private developments within the Project vicinity.

KVA 1: U.S. 101 southbound looking southwest

This KVA represents one of the only views of the Project site looking southwest from a southbound lane of the U.S. 101. This KVA was selected because it provides a channelized view of the Project site, including open space located above the 150-foot elevation line. Additionally, this KVA depicts the natural habitat present on the foothills of the Irish Hills. Views of the Project site from U.S. 101 are generally blocked by intervening development and vegetation. This segment of U.S. 101 is identified as having high scenic value in the General Plan COSE.

The Project site is generally not visible from U.S. 101. Intervening development and vegetation obscure views toward the site for both southbound (left) and northbound (right) drivers. One channelized view along Calle Joaquin affords a clear view of the site for southbound drivers looking southwest and this view is the basis of KVA 1. Source: Google Earth 2019.

KVA 2: LOVR looking west

This KVA represents views of the eastern boundary of the Project site from LOVR. This KVA was selected because it provides a view of the existing onsite open space and the Irish Hills to the west of the Project site. This KVA is identified as having high or moderate scenic value in the General Plan COSE and affords views of the existing roadside vegetation that currently limits views of the Project site from this location.

KVA 3: LOVR Overpass looking northwest

This KVA represents views of the Project site looking northwest from the LOVR Overpass. This KVA was selected because it is highly traveled and provides a view of the Project site and Irish Hills backdrop. The LOVR Overpass is identified as having high scenic value in the General Plan COSE. Additionally, this KVA depicts screening resulting from existing roadway vegetation.

KVA 4: Froom Creek Connector Trail looking east

This KVA represents east-facing views of the Project site from the Froom Creek Connector Trail. This KVA was selected because it provides a clear view of the existing historic buildings, construction company operations, and open space currently located on the Project site, along with distant views of mountains and ridgelines.

KVA 5: Mountainbrook Trail looking northeast

This KVA represents views looking northeast from the Irish Hills over the Upper Terrace toward the lower elevations of the site along LOVR. This KVA was selected because it provides a view of the existing open space and adjacent land uses experienced from upper elevation trails in the Irish Hills Natural Reserve. This KVA also represents the view from a location identified in the General Plan COSE as a scenic vista.

Light and Glare

The analysis of light/glare impacts reviews the new light/glare sources that would be introduced under the Project and determines whether light/glare would substantially affect views in the Project vicinity. A key element in this assessment methodology involves consideration of the existing light/glare standards in the City's Zoning Ordinance.

3.1.3.3 Project Impacts and Mitigation Measures

The Project would result in the following visual impacts. Table 3.1-1 below provides a summary of these impacts.

Table 3.1-1. Summary of Project Impacts

Aesthetics and Visual Resources Impacts	Mitigation Measures	Residual Significance
VIS-1. Project implementation would change views of scenic resources, including hillsides, rock outcroppings, open space, and historic buildings, from a State Scenic Highway or local scenic roadway.	MM VIS-1	Less than Significant with Mitigation
VIS-2. The Project would significantly impact the existing visual character of the site by changing a rural setting to a commercial and residential setting, particularly as viewed from the Irish Hills Natural Reserve trail system.	MM VIS-1	Significant and Unavoidable
VIS-3. The Project would introduce a new source of nighttime light, impacting the quality of the nighttime sky and increasing ambient light.	None	Less than Significant

Impact VIS-1 Project implementation would change views of scenic resources, including hillsides, rock outcroppings, open space, and historic buildings, from a State Scenic Highway or local scenic roadway (Less than Significant with Mitigation).

The Project site is visible from several public roadways in the Project vicinity, including U.S. 101, LOVR, and Calle Joaquin. There are no designated State Scenic Highways in the Project vicinity; however, U.S. 101 through the City has been identified as eligible for designation as a State Scenic Highway. U.S. 101 and LOVR are designated scenic roadways by the City's COSE. Development of the Project may change, degrade, eliminate, or block public views of visual resources onsite and in the Irish Hills, including hillsides, rock outcroppings, the historic Froom Ranch Dairy complex, and vegetation, for drivers, pedestrians, and bicyclists, as further analyzed below.

U.S. 101

The segment of U.S. 101 in the Project vicinity is eligible for State Scenic Highway designation, but not currently designated (Caltrans 2017). The City's COSE identifies this segment of U.S. 101 as having high scenic value (City of San Luis Obispo 2014). Views toward the Project site are generally blocked by commercial development, vegetation, distance, and topography, but the quality of views change depending on the driver's travel

direction, as described below. The Froom Ranch Dairy complex is not substantially visible from U.S. 101 (refer to KVA 1).

The Project site is not clearly visible for northbound drivers as U.S. 101 is angled eastward away from the Project along this segment and northbound views toward the site are blocked by topography, vegetation, and existing commercial development (e.g., four multi-story

***KVA 1**: Fleeting distant views of the Project site are available from U.S. 101, including the Upper Terrace channelized along Calle Joaquin (pictured). This KVA affords direct views to the Irish Hills, including ridgelines, outcroppings, and natural vegetation, but is obstructed by commercial development and street trees up to approximately 20 to 30 feet high, as well as telephone poles and wiring. The Project would result in the loss or obstruction of these scenic resources in the mid-range view with development of multi-story development, but would not obstruct existing background views of the Irish Hills ridgelines and hillsides and would be consistent with adjacent multi-story development in the vicinity that is also visible from U.S. 101.*

hotels on Calle Joaquin, mature eucalyptus trees). Northbound drivers may catch glimpses of the Upper Terrace for a moment near the LOVR exit ramp, but the view corridor would pass quickly given high vehicle speeds on U.S. 101 and would be behind the forward-facing viewers. Therefore, changes to views from northbound U.S. 101 would not be substantial. The Project would also not eliminate or change northbound views of scenic resources, such as Irish Hills ridgelines, outcroppings, and vegetation. Therefore, development of the Project site would not substantially change visible scenic resources for northbound drivers on U.S. 101.

Views of the Project site for southbound drivers are also largely obstructed by intervening development, vegetation, and topography; however, the angle of U.S. 101 directs southbound drivers toward the southern portions of the Project, which increases the availability of channelized views that would change under the Project. There are no clear, open, and/or long-lasting views of the Project site for southbound drivers. KVA 1 was selected for analysis as it is one of the only views of the Project site available from U.S. 101. Otherwise, the Project would not be substantially visible to southbound drivers on U.S. 101. KVA 1 models the potential change to a channelized view from U.S. 101. This KVA affords southbound drivers a momentary glimpse of the Upper Terrace of the Project site from southbound U.S. 101. From this KVA, the Project would result in development of the Upper Terrace with dense, multi-story development, including a centrally located building with substantial bulk. This development would be elevated above other existing proximate development within the City (i.e., above 150 feet in elevation). The Project would eliminate open space and vegetation within the Upper Terrace and would partially block existing views of open hillsides in the Irish Hills from KVA 1. However, this visual change would not be substantial for drivers on U.S. 101 considering the high speed of traffic and the lower sensitivity of the driver to visual change. Pedestrians and cyclists are not allowed on U.S. 101 and would not be affected by Project changes to the visual setting on the site. Since there are no open or long-lasting views that would be affected by the Project and visible impacts would be limited to momentary glimpses of the Project in the mid-range along a channelized view lined with trees and existing development and utility infrastructure, the impact on views from southbound U.S. 101 would not be substantial. The Project would not eliminate or change southbound views of scenic resources, such as Irish Hills ridgelines, outcroppings, and vegetation. Therefore, development of the Project site would not substantially change visible scenic resources for southbound drivers on U.S. 101.

Understanding that the U.S. 101 is designated as having a high scenic value, the Project would not substantially affect scenic resources visible for southbound or northbound drivers on U.S. 101.

LOVR and LOVR Overpass

As discussed in Section 3.1.1.2, *Visual Character of the Project Vicinity,* the City's COSE designates LOVR as having moderate to high scenic value and the LOVR Overpass as having high scenic value. The Project would be visible to travelers along LOVR, but the impact of development onsite would vary along the LOVR corridor.

Views from LOVR along the 2,000-foot-long Project site frontage have moderate visual resource value due to the developed nature of this corridor. The four-lane-wide roadway is lined to the east by commercial development, including automobile dealerships and service

KVA 2*: The Project site is visually obscured behind dense willow riparian vegetation of 15 to 20 feet in height along most of the LOVR frontage (see left side of photo). Intermittent breaks in the vegetation provide brief views of onsite visual resources including open space and grazing lands in the middle ground and the Irish Hills in the background. Clear views of the site are available at Auto Park Way (pictured), where the proposed main entrance of the Project would be constructed, and capture distant views of Irish Hills Plaza and the Froom Ranch Dairy complex. Motorists, cyclists, and pedestrians along this roadway experience views of scenic resources, though the duration of this view is limited by traffic speed and volumes that require focusing on roadway activities. While background views of the Irish Hills would remain following construction, multi-story development would eliminate onsite scenic resources. However, in context of surrounding commercial development, the Project would be consistent in character, size, and scale. Further, the Project would remove the thick vegetation in the LOVR ditch currently providing visual screening of the Project site.*

centers that include expansive surface parking lots, security lighting, bulky low-lying buildings, and highly visible signage with little to no landscaping or streetscape. To the west, views of the Project site capture upper elevations of the Irish Hills, including ridgelines, outcroppings, and vegetation, as well as distant glimpses of the Froom Ranch Dairy complex, but most of the foreground and mid-range views of the site are block by thick willow riparian vegetation along the roadside in the LOVR ditch, as depicted by KVA 2 below. Clear views across the site toward scenic resources are only available through two limited breaks in this vegetation: a 250-foot-long break at Auto Park Way, and a 100-foot-long break at the base of the LOVR Overpass. Views of the Upper Terrace are not clearly available from LOVR. With this segment of LOVR lined by vegetation to the west and commercial development to the east, views to the north and south are channelized along the roadway.

Views of the Project site from the LOVR Overpass are available for northbound drivers, pedestrians, and cyclists, as depicted in KVA 3 below. Because the LOVR Overpass is elevated, views overlook the lower elevations of the Project site, including open grasslands and the Froom Ranch Dairy complex in the mid-range view. The view has a clear backdrop of the Irish Hills ridgelines, outcroppings, and vegetation. However, the view is limited to a view corridor between existing development, including multi-story hotel buildings and commercial development along LOVR, and is currently obstructed by thick willow riparian vegetation lining the Project site along Calle Joaquin.

Project implementation would change the view from LOVR and the LOVR Overpass by developing the Project site, which would be visible during construction and operation. Construction would occur over a five-year period and involve grading and structural development. During this time, viewers would see construction equipment, materials, and activities, as well as loss of onsite vegetation, including the existing willow riparian vegetation sustained in the LOVR ditch and potentially along Calle Joaquin.[2] The loss of this existing visual shielding would expose viewers to areas of the site not currently visible from LOVR. As the loss of the vegetation in the LOVR ditch would occur early in the Project (Phase 1) during site grading and relocation of Froom Creek, construction activities would be visible for the full construction duration from both LOVR and the LOVR Overpass.

[2] It appears the existing vegetation along the Project site boundary would be removed to facilitate installation of the proposed stormwater management system. See Section 2.0, *Project Description* for details. The Draft FRSP does not include a detailed landscaping plan but this EIR presumes a combination of native and ornamental plantings along the site boundary.

Once occupied, the Project would result in the permanent loss of the open space and grasslands currently visible from limited portions of LOVR and the LOVR Overpass, as modeled by KVA 2 and KVA 3. Existing mid-range open space views would be converted to dense multi-story development that would also extend up to the base of the Irish Hills Natural Reserve hillside. Project buildout would remove riparian vegetation in the foreground along LOVR while structures up to 55 feet in height would replace open space and agricultural grazing land in the mid-range view. The Draft FRSP ([Section 5.7.2[d]) identifies conceptual ornamental landscaping "where practical" and streetscape landscaping would include street and parkway trees to form "the canopy, provide shade, introduce seasonal color, and define the street edge (Section 6.7.4[f]). None of these

***KVA 3**: Views of the Project site from the LOVR Overpass are mostly blocked by vegetation and the existing multi-story hotels in the foreground. This KVA affords an open view of the Project, including distant views of the Irish Hills, the Froom Ranch Dairy complex, and Irish Hills Plaza. The Project would also reduce access to mid-range and distant visual resources, but would not obstruct existing views to the Irish Hills and would be consistent with multi-story development in the vicinity.*

conceptual landscaping design standards specifically address screening of proposed structures to reduce the visual impact of massing as experienced by the viewer on LOVR and the LOVR Overpass. Further, two-story structures would obstruct background views of the base of Irish Hills but would maintain views of ridgelines and outcroppings. Distant views of the Froom Ranch Dairy complex would be blocked by new development, though these buildings are not highly visible from the KVAs and most public viewing locations. While views of key scenic resources, including ridgelines, outcroppings, and vegetated open space, would remain, there would be a permanent loss of views toward the Froom Ranch Dairy complex both in its current location and in its proposed new location lower in elevation within the proposed onsite public park. Based on KVA 2 and KVA 3 analysis, the Project would be a dominant feature within these public views and loss of vegetation along the Project site boundary would expose viewers to substantial changes to scenic resources within the site.

As most of the existing views of the Project site from LOVR and the LOVR Overpass are currently obstructed by multi-story development or thick vegetation, the Project would only result in a substantial change to existing views from LOVR and the LOVR Overpass in limited places, including KVA 2 and KVA 3. With the loss of vegetation, mid-range views of the Project site would become urbanized similar to adjacent development in Irish Hills Plaza or the existing hotels on Calle Joaquin. However, while mid-range views would change, views of scenic resources, including the Irish Hills ridgelines and outcroppings, would remain. Further, considering different travel speeds, drivers along the stretch of LOVR would experience views of the developed Project site for approximately one minute and pedestrians traveling across the overpass would experience these views for approximately four minutes.

The Project would not eliminate or change views of scenic resources, such as Irish Hills ridgelines, outcroppings, and vegetation, and the loss of views of the Froom Ranch Dairy complex in the background would not be substantially perceptible. Even though the Project's impacts would be limited to development in the mid-range that would not obscure important scenic resources, the impact on views from LOVR and the LOVR Overpass would be substantial due to the potential loss of vegetation currently providing visual shielding for the Project site, as well as the loss of distant views of the Froom Ranch Dairy complex. Because LOVR and the LOVR Overpass are considered scenic roadways by the City and the Project would expose viewers to a replacement of open space and vegetation with urban development, the impact to scenic resources would be *potentially significant*.

Calle Joaquin

The portion of Calle Joaquin extending to the west of LOVR towards the Project site is a small, two-lane road that leads to adjacent hotels, Mountainbrook Church, a television broadcasting station, and the Filipponi Ranch. This 1-mile long roadway experiences low levels of traffic and is visually impeded for a long portion of the roadway by one- to four-story hotel buildings. While views of scenic resources may be affected by Project implementation from Calle Joaquin, Calle Joaquin is not a designated scenic roadway and receives little use compared to LOVR and U.S. 101; therefore, the potential for the Project to adversely affect a substantial number of public viewers is low and impacts to views of scenic resources from Calle Joaquin would be *less than significant.*

Mitigation Measures

MM VIS-1 *The Draft Froom Ranch Specific Plan shall be revised to include the following Landscape Screening Guidelines to provide effective screening of proposed structural massing as experienced from public views along LOVR and the LOVR Overpass. The Project landscape plan shall be prepared by a qualified landscape architect and include the following:*

1. *Maximize protection of existing vegetation along the Project site boundary to provide visual screening during Project construction and operation.*
2. *Specify a plant palette and landscape plan that ensure a vegetated site boundary of sufficient height and density to provide visual screening of the proposed development from public views.*
3. *Native tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures shall be planted along Project site boundaries visible from public views.*
4. *Screening planting specimen selection and location shall emphasize the ability to interrupt the contiguous massing of structures as experienced from area roadways and scenic vistas. Spacing shall be sufficient to minimize views of structures within the Project site.*
5. *Screening planting specimen selection shall emphasize the ability of planting species to effectively establish and thrive over the life of the Project, such that smaller sizes shall be considered rather than exclusively larger box sizes. Planting establishment rates shall be considered but shall*

not preclude the use of slower-growing species, such as coast valley oak and willows.

6. *Native tree specimens capable of reaching or exceeding the heights of adjacent structures shall be planted adjacent to multi-family and commercial structures located within the interior of the Specific Plan area consistent with the specifications above.*

7. *A bond for screening landscaping and irrigation shall be provided to ensure establishment of plantings. The bond shall be revoked upon satisfactory establishment of screen planting vegetation according to the plan.*

   Requirements and Timing. The Specific Plan Landscape Screening Guidelines and landscape bond shall be reviewed and approved by the City Community Development Department prior to vesting tract map recordation. Landscape plantings, including irrigation, shall be in place prior to issuance of building permits for each phase of the Project. A landscape architect approved by the City shall provide verification of landscaping establishment pursuant to the Screening Plan to the City's Community Development Department for review and approval prior to relinquishment of the bond.

   Monitoring. The City Community Development Department shall review and approve the Specific Plan Landscape Screening Guidelines. The Applicant shall ensure that all landscape planting and irrigation are in place and shall prepare a memo verifying condition compliance. The City Community Development Department shall review and approve the landscaping establishment bond letter.

Residual Impacts

Implementation of MM VIS-1 would reduce scenic resource impacts caused by the proposed development's structural massing as experienced from adjacent public roadways and ensure that affected views retain vegetation that provides a similar level of screening to the existing setting. As views of scenic resources would be maintained from adjacent public roads and the proposed development would be sufficiently shielded by proposed vegetation, impacts to scenic resources would be *less than significant with mitigation*.

Impact VIS-2 The Project would significantly impact the existing visual character of the site by changing a rural setting to a commercial and residential setting, particularly as viewed from the Irish Hills Natural Reserve trail system (Significant and Unavoidable).

The Project would facilitate development of up to 174multi-family residences, 404 senior housing units and assisted living facilities and amenities in association with the Villaggio Life Plan Community, commercial development, developed urban parks, roads, bicycle paths, and other urban infrastructure. The Project would conserve 59 acres of open space primarily in the Upper Terrace of the Project site within the Irish Hills and would relocate and rehabilitate four historic structures in the Froom Ranch Dairy complex. The proposed development would transition the Project site from predominantly open space and grazing uses to dense multi-story development creating a continuous swath of urban development at the base of the Irish Hills Natural Reserve. While the scale and style of the Project would be generally visually compatible with surrounding commercial development to the south, east, and north, development of the 116.8-acre site would substantially change the visual character of the area from the loss of open space and vegetation, particularly as viewed from hillsides in the Irish Hills. The Project would also transition the Froom Ranch Dairy complex to a public park setting surrounded by multi-family residential development. This change in character would be substantial and development would be highly visible from several public trails within the Irish Hills Natural Reserve, including the Froom Creek Connector, Neil Havlik Way, and Ocean View trails, as well as the existing designated vista located 0.35 mile southwest of the Project site near Filipponi Ranch, uphill from the Upper Terrace and behind Mountainbrook Church. Development of the Upper Terrace of Villaggio and upper elevations of Madonna Froom Ranch would cause the most dramatic change to site character on the Project site's highly visible hillsides.

The visual character of the Project, including the architectural style, height, bulk, scale, and landscaping would be generally consistent with architectural styles and scale of adjacent commercial development in the Irish Hills Plaza to the north, the four multi-story hotels to the south, and the automobile dealerships and service centers to the east. The Draft FRSP includes conceptual architectural styles and requires architectural character of future development to be compatible with the setting of the Project site. The Project design guidelines establish standards to allow for the modern interpretation of common San Luis Obispo styles, including Ranch, Craftsman, Mediterranean, and California Mission. Each area of the Project would have a mix of styles, with one or two dominant, to provide architectural interest that contributes to the respective community character. The design

guidelines also provide standards for scale, mass, color, and other features to maintain an appropriate balance between variability and consistency within neighborhoods. Building facades would be fully articulated, and architecturally compatible treatments would be used throughout development to ensure transitions between different areas of the Project.

The Project Design Guidelines for residential and commercial architectural design aim to adhere to the policies in the City's LUCE Update. Such policies include Policy LU 1.4, Urban Edges, which requires development to maintain a clear boundary between urban development and undeveloped open space; and Policy COS 2.3.7, Natural Features, which requires residential developments to preserve natural site features such as vegetation and ridgelines, as described in Impact VIS-1. The Lower Area of Villaggio is an infill area surrounded on three sides by fully developed urban areas and does not extend up the hillside above 150 feet in elevation. Senior residences, health care facilities, and the Commons in the Lower Area would be as tall as 45 feet and feature a 55-foot tower providing for a library, guest rooms, and observation deck. Non-habitable space appurtenances, towers, and utilities would be allowed to extend an additional 10 feet above the maximum building height. While development of the Lower Area would eliminate open grazing lands that are also highly visible from the Irish Hills Natural Reserve, the development would occur in visual context with the Irish Hills Plaza, the four multi-story hotels, and automobile dealerships and service centers. In this context, development of the Lower Area would be visually compatible with surrounding development and would not substantially change the character of the area, including for viewers within the Irish Hills Natural Reserve. Development within the Lower Area would also be set back from LOVR and Calle Joaquin by approximately 300 feet to accommodate the Calle Joaquin wetlands and realigned Froom Creek channel, which would maintain a portion of the site with existing vegetation and open space as a visual buffer. The proposed architectural and landscape design guidelines would help ensure Project development integrates with the natural setting of the site against the Irish Hills, including limiting the height of structures to 55 feet and providing vegetation to screen new development.

However, the Project's proposed land use plan and conceptual design (refer to Figures 2-3 and 2-4) indicate that development is not contained wholly within infill areas. The Project would include substantial development above 150 feet in elevation within the Upper Terrace and portions of Madonna Froom Ranch and place urban development in visual context with the undeveloped Irish Hills Natural Reserve. The Upper Terrace would contain 108 total units within several three-story buildings and up to 31 single-story villas. Within Madonna Froom Ranch, approximately 3 acres of multi-family residential

development would occur above 150 feet in elevation within the site. These structures would be built above the 150-foot elevation line and would further extend in height above 150 feet in elevation. While open space maintained in the Upper Terrace would buffer proposed development from the Project site boundary with the Irish Hills Natural Reserve, the visual result of this development would intrude into or obstruct views of the Irish Hills Natural Reserve natural open spaces. The Upper Terrace and the upper elevations of Madonna Froom Ranch are highly visible from public trails in the Irish Hills Natural Reserve and the Project would eliminate onsite natural features (e.g., grasslands, trees) that contribute to the visual quality of these hillsides.

The Project site is highly visible from public trails along the southeastern edge of the Irish Hills Natural Reserve. This includes Project site visibility along the entirety of Neil Havlik

***KVA 4**: Views of existing historic structures, business operations, and open space within the Project site are unobstructed. Adjacent commercial land uses are also clearly visible from this KVA. The Project would be highly visible from this portion of the Froom Creek Connector Trail, though development would not directly impede views of surrounding landscapes.*

Way, the Ocean View Trail and a majority of the Froom Creek Connector Trail. The Irish Hills Natural Reserve offers premier hiking trails and scenic vistas in the region, as well as trails for equestrians and mountain bikers. These visitors would be exposed to the Project for substantial durations, with hikers being exposed for over 20 minutes traversing the ridgelines above the Project site on foot. Given several popular trail segments would be exposed to the Project, and that recreationalists are visiting the Reserve for a natural setting, viewer exposure and sensitivity is high. Project development would substantially change views experienced by visitors on trails within the adjacent Irish Hills Natural Reserve. High quality views of visual resources within the Project site, a high level of exposure of viewers on trails, and high viewer expectations characterize the Project site as highly susceptible to visual impacts. The visual impacts of the Project from the Irish Hills Natural Reserve are represented in KVA 4 and KVA 5.

As depicted by KVA 4, the Madonna Froom Ranch development would be highly visible from the Froom Creek Connector Trail, which is a key multi-use trail to the Froom Creek Trailhead, which lies directly west of the Project site. Residential and commercial buildings would replace the existing quarry with dense development and would reach a maximum height of 35 and 45 feet, respectively. Development would also relocate and encase the Froom Ranch Dairy complex, which is highly visible from this KVA, in residential development. The current background of open lands and Froom Creek in its current location would be replaced with urban development. Froom Creek would also be realigned to flow east through the proposed development and would not be clearly visible from the Froom Creek Trail. The proposed buildings would dominate southeastern mid-range views for approximately 1,700 feet along this trail. Assuming a hiking rate of 2 mph, hikers would experience sustained views of the Project for at least 10 minutes. The obstruction of view corridors over the Project site and modification of existing structures would be considered a significant impact on visual resources.

KVA 5 captures a view of the Upper Terrace of the Project site and, as such, demonstrates visual impacts of Project development for trail segments overlooking the Upper Terrace, including the Ocean View Trail, the Mountainbrook Trail, and Neil Havlik Way. Development of the Upper Terrace would be highly visible to hikers looking northeast from this KVA. Project buildout would remove extensive open space and natural habitat area and permanently interrupt the visual continuity of the Irish Hills in this area. Impacts to these important visual resources as experienced from these trails would be significant.

Although adherence to City policies and regulation, as well as the architectural and landscape design guidelines, would ensure compatibility of the Project with surrounding commercial development, the Project would be a stark contrast to the agricultural pasture and historic structures currently onsite. Additionally, the Upper Terrace area and portions of the Madonna Froom Ranch area would be developed above the 150-foot elevation line and would be the only development above this line in the vicinity besides Mountainbrook

***KVA 5**: Views of the open space currently existing onsite are provided from this location, as well as adjacent land uses. Views also include the Santa Lucia Mountains to the north, South Hills to the east, as well as expansive views of agricultural developments in the region. Development of the Project would be highly visible from this KVA, though it would not directly impede views of the Irish Hills Natural Reserve or surrounding hillsides from this trail.*

Church. Further, analysis of both visual susceptibility and visual severity of Project impacts indicates a high potential for substantial impacts to the visual character of the site, including public perception from the Irish Hills Natural Reserve. As depicted by KVA 4 and KVA 5, the Project site would be extremely visible and would replace existing scenic views of grazing land and riparian habitat. Recreationalists currently expect scenic views of high-quality natural habitats, and development of the Project would negatively impact these resources. The Project design and style would be compatible with adjacent development in the Lower Area, but because the Project would substantially degrade the visual quality of the site's hillsides and upper elevations, aesthetic impacts would be considered *potentially significant.*

Mitigation Measures

MM VIS-1 would apply.

Residual Impacts

MM VIS-1 would interrupt the contiguous massing of proposed multi-family and commercial structures by requiring onsite native tree screening plantings. No additional feasible mitigation measures are available to minimize the conversion of the Project site's rural setting to a commercial and residential setting. While MM VIS-1 would reduce aesthetic impacts of the proposed structural massing as experienced from public trails, this measure would not sufficiently reduce the substantial adverse effect on scenic resources resulting from loss of open space and natural visual setting as experienced from these trails. As no other feasible measures are available, impacts to visual resources would be *significant and unavoidable*.

Impact VIS-3 The Project would introduce a new source of nighttime light, impacting the quality of the nighttime sky and increasing ambient light (Less than Significant).

Development of the Project site would alter current lighting conditions by increasing the amount of exterior lighting fixtures and light produced on the Project site. These new sources of light may be visible from public areas, including the Irish Hills Natural Reserve and LOVR. However, light from surrounding land uses already dominates the night sky and the Project would not substantially contribute to an increase in this existing condition. Therefore, the Project would not result in substantial impacts to nighttime views of the area for viewers to the north, south, and east. Nighttime views for recreationalists along the Irish Hills Natural Reserve trail system could potentially be impacted by the increase in lighting

sources resulting from the Project, though the Reserve closes at sunset each day and, therefore, effects would be limited. Any views from the Irish Hills that would be affected by Project night lighting would also be affected by existing commercial and security lights from adjacent automobile dealerships, the Irish Hills Plaza, and the four multi-story hotels. Further, light pollution from the Project would be regulated by outdoor lighting standards consistent with the City's Night Sky Preservation Ordinance and Community Design Guidelines (see Section 2.4.2, *Project Design)*.

The Project would also increase non-stationary source lighting resulting from increases in local vehicle trips and traffic volumes. As discussed in Section 3.13, *Transportation and Traffic,* the Project would result in a notable increase in PM trips or traffic, which would increase the amount of headlight glare along local roadways, particularly along LOVR. However, LOVR and other local roadways already carry nighttime traffic and Project contributions would not be substantial from a lighting perspective. Additionally, there are no immediately adjacent residential uses that may be affected by increased nighttime light or glare. Commercial uses generally close in the evening and are less sensitive to nighttime lighting. Existing vegetative screens or physical barriers also exist along many adjacent arterials that reduce nighttime glare from adjacent roadways, reducing potential adverse impacts on visual resources from increased headlight glare. Because the Project's night lighting would comply with the City's Night Sky Preservation Ordinance and Community Design Guidelines and would not affect substantial residential or recreational viewers, Project impacts would be *less than significant*.

3.1.3.4 Cumulative Impacts

The Project, in combination with approved, pending, and proposed development in the City, would contribute toward creating a defined transition from the rural environment towards the south of the City to the urban environment to the north of the City. Consistent with long-term buildout under the General Plan, the Project and cumulative projects would be required to adhere to the design standards of the City General Plan, Community Design Guidelines, and City Building Standards and would be subject to discretionary review by the Community Development Director, Architectural Review Commission (ARC), and Planning Commission. As concluded by the LUCE Update EIR, all development that adheres to the LUCE policies would result in less than significant impacts. However, the Project would require development above the 150-foot elevation line and would require a General Plan Amendment of Policy LU 6.4, Hillside Policies (see also, Section 3.9, *Land Use and Planning*), and would obstruct scenic views of open spaces from the City and Irish

Hills Natural Reserve. The Project, in conjunction with other cumulative development occurring within the City and URL on or adjacent to undeveloped lands would have significant cumulative impacts on visual resources and the natural and open space visual character along the City's urban-rural fringe. MM VIS-1 would not be sufficient to reduce the Project's long-term contribution to cumulative impacts on aesthetic resources; therefore, impacts would be *significant and unavoidable.*

3.2 AGRICULTURAL RESOURCES

The Project site contains a 7.1-acre open space and agricultural conservation easement and supports soils classified as prime, if irrigated, by the Natural Resources Conservation Service (NRCS). See page 3.2-12 for further discussion.

This section describes agricultural resources and evaluates the potential impacts of the Project on site-specific and regional agricultural resources. Agricultural resources consist of any farmland with potential for agricultural productivity based on soil and farmland characteristics. Prime soils are superior or unique soils as identified by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). As identified by the State of California, Important Farmlands contain soils best suited for producing food and forage, particularly for producing high-yield crops as defined by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP). The FMMP classifies Important Farmland based on agricultural soil quality and current land use into four categories of important farmlands: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.[1]

Other important agricultural land may be defined and protected by agricultural zoning or Williamson Act contracts to prevent conversion to non-agricultural use. A Williamson Act contract is an agreement between private landowners and the government to restrict specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments (see also, Section 3.2.2, *Regulatory Setting*). Further, agricultural resources can include non-irrigated grazing lands where the prevalence of steep slopes, less fertile soils, and lack of irrigation source may limit their use for cultivation or other agricultural product production.

3.2.1 Environmental Setting

3.2.1.1 Regional Setting

Agricultural activity in the region includes mainly rotational row crops, vineyards in level or gently sloping areas, and livestock grazing in foothill areas. Agriculture is a major

[1] The FMMP also assesses the location, quality, and quantity of agricultural lands and monitors the conversion of these lands to non-agricultural uses.

production industry in the County with a gross production value of $1.035 billion in 2018. Top crops by value in 2018 included: wine grapes ($276 million), strawberries ($268 million), broccoli ($48 million), avocados ($46 million), cattle and calves ($43 million), vegetable transplants ($35 million), cauliflower ($30 million), cut flowers ($26 million), head lettuce ($25 million), and lemons ($24 million) (County of San Luis Obispo 2019). Agricultural production generates both direct revenues and indirect value through job creation and economic output in other sectors of the local economy, including tourism, industrial, retail, and commercial services.

Agricultural areas within the City limits are primarily located northeast of the Project site, within a large swath of cultivated land adjacent to U.S. 101 (commonly known as Dalidio Ranch or San Luis Ranch); however, a Specific Plan and proposed development on this site has been recently approved and is under construction. Following development of the San Luis Ranch project, 52.7 acres of the existing 131-acre site would remain as agricultural land (refer also to Section 3.2.3.4, *Cumulative Impacts*). Additional agricultural lands in the Project vicinity are located to the southeast in unincorporated areas of the County, adjacent to the City limit. Several unincorporated parcels southeast of the City are also subject to Williamson Act contracts. These agricultural lands generally support rotational row crops, oat fields, and vineyards (City of San Luis Obispo 2014). There are no lands in active agricultural production or lands under a Williamson Act contract immediately adjacent to the Project site.

3.2.1.2 Project Site

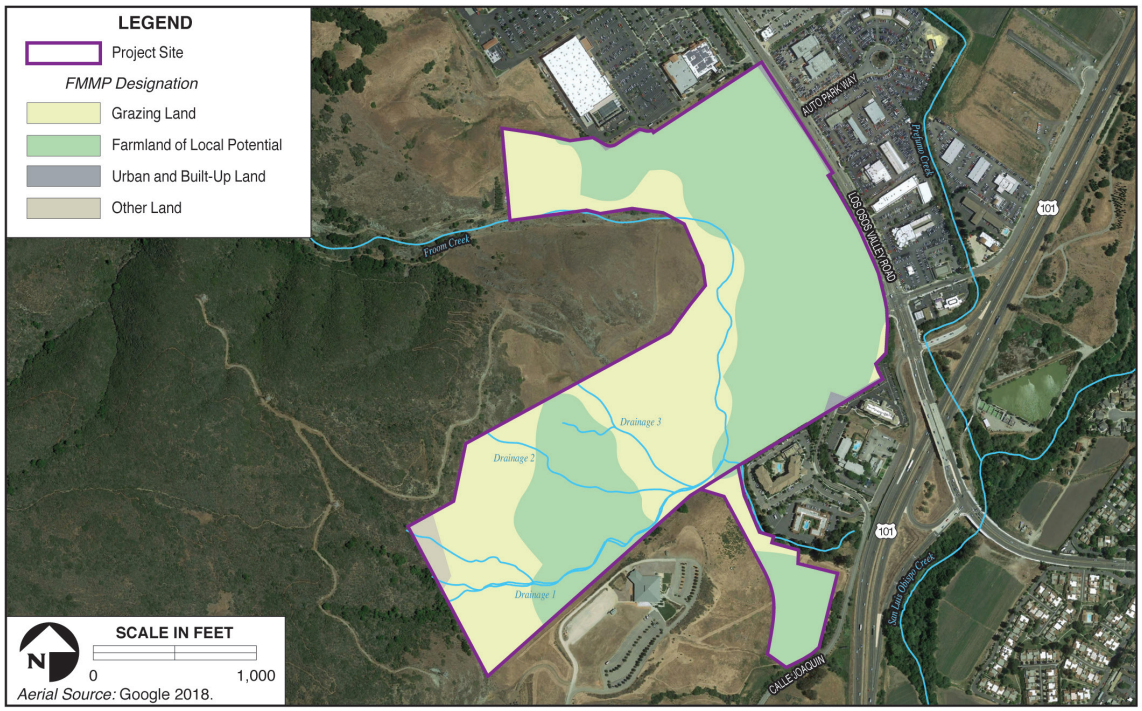
Farmland within the Project Site

The Specific Plan area is currently used for grazing horses. Historically, the Specific Plan area has been used for grazing operations associated with the former Froom Ranch Dairy since at least 1844 (Appendix F). The proposed stormwater detention basin area is undeveloped and there is no record of agricultural operations on this portion of the Project site.

The Project site has historically been used for grazing, currently for horses. Portions of the site are also identified as Farmland of Local Potential by the FMMP. While the site formerly served as grazing for the historic Froom Ranch Dairy, there is no record of cultivation on the site.

According to the FMMP, the Project site contains approximately 67.6 acres of Farmland of Local Potential, which are lands having prime or

statewide farmland characteristics, but that are not cultivated; 46.2 acres of grazing land; and 2.3 acres of other and urban/built-up land (California Department of Conservation 2016; Figure 3.2-1 and Table 3.2-1). There is no Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance within the Project site. The Project site is not under a Williamson Act contract.



wood.

Agricultural Resources within the Project Site

FIGURE 3.2-1

Table 3.2-1. Project Site FMMP Resources

FMMP Designation	Specific Plan Area (acres)	Proposed Stormwater Detention Basin Area (acres)	Project Site (Total)	Percentage[1]
Farmland of Local Potential	62.4	5.2	67.6	58.3%
Grazing	44.5	1.7	46.2	39.8%
Urban/Built-Up and Other	2.2	0.1	2.3	2.0%

[1]Totals do not add to 100 percent due to rounding.

Agricultural Soils within the Project Site

The NRCS assesses the potential agricultural productivity and limitations of different soils by utilizing 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 Code of Federal Regulations [CFR] Chapter 7 Part 657). The LCC 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. LCC sub-classes are utilized 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 NRCS identifies prime soils as those with an LCC of Class I or II. Many soils are assigned Class I or II only when irrigated, but otherwise receive a lower rating without irrigation.

Soils at the Project site consist of approximately 47.6 acres of prime agricultural soils if irrigated, and approximately 67.2 acres of non-prime soils based on NRCS soil classifications. The prime if irrigated agricultural soils consists of Cropley clay and Salinas silty clay loam (NRCS 2018; see Tables 3.2-2 and 3.2-3, and Figure 3.2-2). Cropley clay is a very deep, moderately well-drained, nearly level soil with slow permeability and slow surface runoff. The hazard of water erosion is slight, and the shrink swell potential of this soil is high. This soil is suited for vegetable crops, dryland farming, and pasture. If used for urban development, foundations and footings should be designed to compensate for the high shrink swell potential and low strength. Cropley clay constitutes approximately 43.9 acres of the Project site and is rated with an LCC of Class IIs with irrigation and Class IIIs without irrigation. Salinas silty clay loam constitutes approximately 3.7 acres of the Project within the proposed stormwater detention basin area and is rated with an LCC of Class I with irrigation and Class IIIc without irrigation. Per NRCS designations, these soils are considered Prime Farmland if irrigated.

Table 3.2-2. Specific Plan Area Soil Capabilities

Map Symbol	Soil Name	Acreages in Project Site	Class		Important Farmland Designation[1]	Slope %	Surface Runoff
			IR	NI			
127	Cropley clay	43.8 (40.3%)	IIs	IIIs	Prime (if irrigated)	0 to 2	Medium
130	Diablo and Cibo clays	16.0 (14.7%)	IIIe	IIIe	Non-prime	9 to 15	Very high
131	Diablo and Cibo clays	7.3 (6.7%)	IVe	IVe	Non-prime	15 to 30	Very high
162	Los Osos – Diablo complex	1.8 (1.6%)	IIIe	IIIe	Non-prime	5 to 9	Very high
164	Los Osos – Diablo complex	14.5 (13.3%)	VIe	VIe	Non-prime	15 to 30	Very high
183	Obispo – Rock outcrop complex	21.8 (20.0%)	VIIe	VIIe	Non-prime	15 to 75	Very high
221	Xerets – Xerolls – Urban land complex	0.7 (0.6%)	VIII	VIII	Non-prime	0 to 15	Very high
300	Corducci – Typic Xerofluvents	2.9 (2.7%)	N/A	VIe	Non-prime	0 to 5	Very low

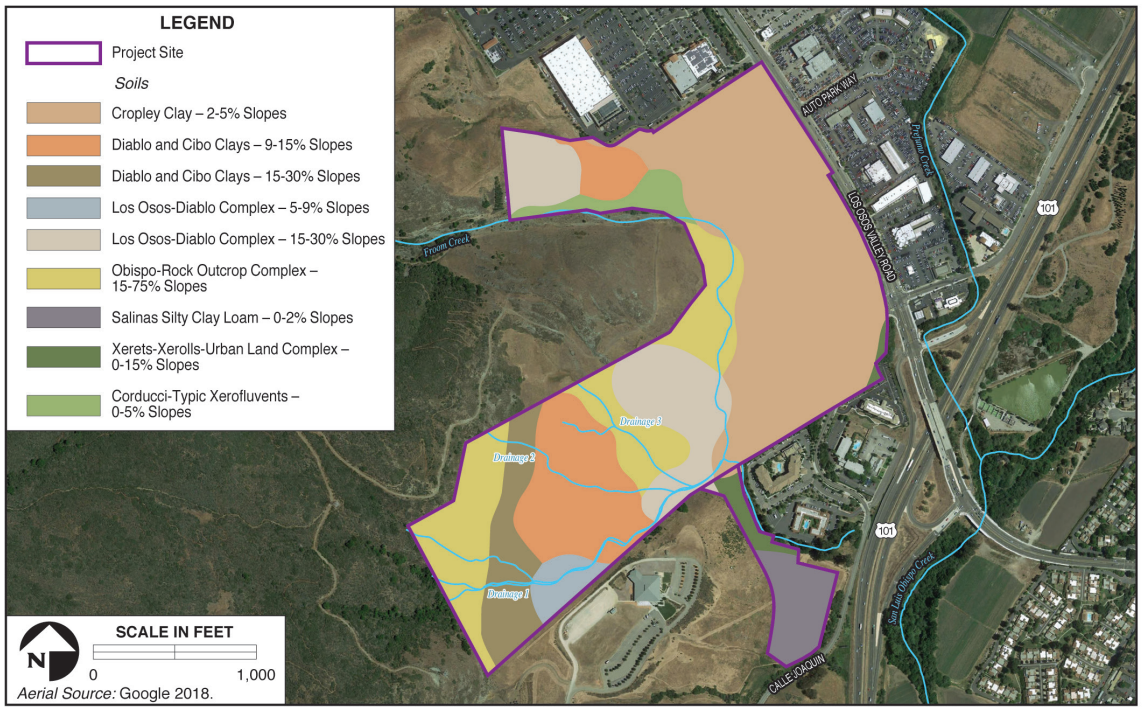
Notes: IR = irrigated; NI = non-irrigated.
[1] NRCS criteria for prime soils is the same as that used for the Farmland Protection Policy Act, which is dependent on site-specific irrigation and drainage; however, it is noted that prime soils under Williamson Act criteria only considers soils with Class I or II capabilities as prime (NCRS 2016).
Source: NRCS 2018.

Table 3.2-3. Proposed Stormwater Detention Basin Area Soil Capabilities

Map Symbol	Soil Name	Acreages in Project Site	Class		Important Farmland Designation[1]	Slope %	Surface Runoff	Irrigation Limitation
			IR	NI				
127	Cropley clay	0.1 (1.8%)	IIs	IIIs	Prime (if irrigated)	0 to 2	Medium	Water availability
197	Salinas silty clay loam	3.7 (62.2%)	I	IIIc	Prime (if irrigated)	0 to 2	Negligible	Water availability
221	Xerets – Xerolls – Urban land complex	2.2 (36.0%)	VIII	VIII	Non-prime	0 to 15	Very high	Water availability / well drained

Notes: IR = irrigated; NI = non-irrigated.
[1] NRCS criteria for prime soils is the same as that used for the Farmland Protection Policy Act, which is dependent on site-specific irrigation and drainage; however, it is noted that prime soils under Williamson Act criteria only considers soils with Class I or II capabilities as prime (NCRS 2016).
Source: NRCS 2018.

The Cropley clay soils in the Specific Plan area and proposed stormwater detention basin area, in addition to the Salinas silty clay loam soils of the proposed stormwater detention basin area, are not currently nor historically irrigated, nor have they been historically utilized for crop cultivation. However, an agricultural well exists at the Project site, which could provide a reliable source of water for irrigating these soils. As such, the Cropley clay and Salinas silty clay loam soils are conservatively considered to be prime soils.



wood.

Agricultural Soils within the Project Site

FIGURE 3.2-2

3.2.2 Regulatory Setting

Agricultural resources are governed primarily by local jurisdictions, consistent with state law. Regulations that are directly relevant to the Project are summarized below.

3.2.2.1 State

Department of Conservation Farmland Mapping and Monitoring Program (FMMP)

The California Department of Conservation established the FMMP in 1982 to assess the location, quality, and quantity of agricultural lands and analyze the conversion of these lands throughout California. Public Resources Code (PRC) Section 21060.1 defines agricultural land for the purposes of assessing environmental impacts under the FMMP.

The list below provides a description of all categories mapped by the California Department of Conservation (California Department of Conservation 2016):

- **Prime Farmland.** Farmland that has the best combination of physical and chemical features and is able to 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 four 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 four years prior to the mapping date.
- **Farmland of Local Importance and Local Potential.** Farmland of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. Farmland of Local Importance is either currently producing crops, has the capability of production, or is used for the production of confined livestock. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance or Unique Farmland. In the County, the local advisory committee has elected to additionally define areas of Local Potential, which include soils that qualify for Prime Farmland or Farmland of Statewide Importance, but generally are not cultivated or irrigated. For FMMP reporting purposes, Local Potential and Farmland of Local Importance are combined in the acreage tables, but are shown separately on the Important Farmland Map.
- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. It also does not include heavily brushed, timbered, excessively steep, or rocky lands that restrict the access and movement of livestock, rural residential land, or publicly owned lands for which there is an adopted policy preventing agricultural use.
- **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 non-agricultural 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 located 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 per the income-producing value of their property in agricultural use, rather than on the property's assessed market value. 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.

3.2.2.2 Local

City of San Luis Obispo General Plan

Land Use Element (LUE)

The City's adopted General Plan LUE outlines multiple policies designed to protect agricultural resources and prime agricultural land. The City's General Plan sets forth specific requirements for the Project vicinity and Project site, as well as overall requirements for protection of agricultural land and required mitigation standards for loss of agricultural land. Policies relevant to the Project are listed below:

Policy 1.7.3 Interim Uses. Expansion areas should be kept in agriculture, compatible with agricultural support services, or open space uses until urban development occurs, unless a City-approved specific plan provides for other interim uses.

Policy 1.8.1 Open Space Protection. Within the City's planning area and outside the urban reserve line, undeveloped land should be kept open. Prime agricultural land, productive agricultural land, and potentially productive agricultural land shall be protected for farming. Scenic lands, sensitive wildlife habitat, and undeveloped prime agricultural land shall be permanently protected as open space.

Policy 1.9.2 Prime Agricultural Land. The City may allow development on prime agricultural land if the development contributes to the protection of agricultural land in the urban reserve or greenbelt by one or more of the following methods, or an equally effective method: acting as a receiver site for transfer of development credit from prime agricultural land of equal quantity; securing for the City or for a suitable land conservation organization open space or agricultural easements or fee ownership with deed restrictions; helping to directly fund the acquisition of fee ownership or open space easements by the City or a suitable land conservation organization. Development of small parcels which are essentially surrounded by urbanization need not contribute to agricultural land protection.

Conservation and Open Space Element (COSE)

The City's adopted General Plan COSE also contains policies designed to protect agricultural resources and prime agricultural land, as well as offset the development of agricultural areas. Policies relevant to the Project are listed below:

Policy 8.6.3 Required Mitigation. Loss or harm shall be mitigated to the maximum extent feasible. Mitigation must at least comply with federal and state requirements. Mitigation shall be implemented and monitored in compliance with state and federal requirements, by qualified professionals, and shall be funded by the project applicant.

C. For a widespread habitat type or for farmland, mitigation shall consist of permanently protecting an equal area of equal quality, which does not already have permanent protection, within the San Luis Obispo Planning Area.
G. Any development that is allowed on a site designated as Open Space or Agriculture, or containing open space resources, shall be designed to minimize its impacts on open space values on the site and on neighboring land.

1. Hillside development shall comply with the standards of the Land Use Element, including minimization of grading for structures and access, and use of building forms, colors, and landscaping that are not visually intrusive.
2. Creek corridors, wetlands, grassland communities, other valuable habitat areas, archaeological resources, agricultural land, and necessary buffers should be within their own parcel, rather than divided among newly created parcels. Where creation of a separate parcel is not practical, the resources shall be within an easement. The easement must clearly establish allowed uses and maintenance responsibilities in furtherance of resource protection.
3. The City will encourage the County not to create new parcels within the greenbelt, with the exception of those permitted under the County's agriculture cluster incentive. Outside of cluster districts, allowed parcel sizes within the greenbelt should be no smaller, and the number of dwellings allowed on a parcel should be no greater than as designated in the September 2002 San Luis Obispo Area Plan and related County codes.
4. The City will encourage the County to adopt and implement a mandatory cluster district for appropriate areas of the greenbelt under County jurisdiction to preserve open space qualities, consistent with the Conservation and Open Space Element. The City will encourage other agencies to follow these policies.

County of San Luis Obispo General Plan

The County's General Plan guides land use and planning in unincorporated areas and the Agriculture Element of the County's General Plan addresses agricultural resources specifically. As the Project site is currently unincorporated, the County's General Plan currently applies and may be relevant when considering onsite, adjacent, or nearby agricultural resources.

Agriculture Element

Goal AG-2 – Conserve agricultural resources.

a. Maintain the agricultural land base of the county by clearly defining and identifying productive agricultural lands for long-term protection.

b. Conserve the soil and water that are the vital components necessary for a successful agricultural industry in this county.

c. Establish land-use policies in this element that support the needs of agriculture without impeding its long-term viability.

Goal AG-3 – Protect agricultural lands.

a. Establish criteria in this element for agricultural land divisions that will promote the long-term viability of agriculture.

b. Maintain and protect agricultural lands from inappropriate conversion to non-agricultural uses. Establish criteria in this element and corresponding changes in the Land Use Element and Land Use Ordinance for when it is appropriate to convert land from agricultural to non-agricultural designations.

c. Maintain and strengthen the county's agricultural preserve program (Williamson Act) as an effective means for long-term agricultural land preservation.

d. Provide incentives for landowners to maintain land in productive agricultural uses.

Policy AGP17: Agricultural Buffers – Protect land designated Agriculture and other lands in production agriculture by using natural or man-made buffers where adjacent to non-agricultural land uses.

San Luis Obispo County Local Agency Formation Commission (LAFCO)

The San Luis Obispo County Local Agency Formation Commission (LAFCO) considers annexations to cities and special districts, and, as such, would review the Project's proposed annexation to the City. LAFCO considers the impact that a proposal may have on existing agricultural lands with focus on protecting prime agricultural lands. LAFCO has adopted specific policies regarding the preservation of agricultural resources.

2.9.12 Agricultural Policies. The Commission may approve annexations of prime agricultural land only if mitigation that equates to a substitution ratio of at least 1:1 for the prime land to be converted from agricultural use is agreed to by the applicant (landowner), the jurisdiction with land use authority. The 1:1 substitution ratio may be met by implementing various measures:

a. Acquisition and dedication of farmland, development rights, and/or agricultural conservation easements to permanently protect farmlands within the annexation area or lands with similar characteristics within the County Planning Area.

b. Payment of in-lieu fees to an established, qualified, mitigation/conservation program or organization sufficient to fully fund the acquisition and dedication activities stated above in 12a.

c. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural land at a 1:1 ratio.

2010 Open Space and Agricultural Conservation Easement Agreement

In 2010, as part of the annexation and development of the Prefumo Creek Commons project located across LOVR from the Project site, an open space and agricultural conservation easement was established over a 7.1-acre portion of the Project site to satisfy LAFCO Policy 2.9.12, *Agricultural Policies* (refer to Figure 2-2). The land within the easement was found suitable to meet the LAFCO criteria for dedication for the Prefumo Creek Commons project impacts, as it contains the same type of soils; however, the area was never cultivated, and now overlays a delineated wetland area, as described in Section 3.4, *Biological Resources*. The open space and agricultural conservation easement is intended to allow the continuation of prior historical agricultural activities on the property, including grazing and agricultural production, and otherwise restricts the use of the land from development that would not support agricultural production. Additionally, the easement agreement states that the area may be used for wetland and biological resource mitigation banking (e.g., the restoration, creation, enhancement, and/or preservation of wetlands and/or biological resources) for the purpose of providing compensation mitigation as a result of impacts to similar resources. The easement is managed by the City and may be amended with written consent of both Irish Hills Plaza, LLC and the City; LAFCO would review any proposed amendment to confirm it is in conformance with the conditions of the easement agreement.

3.2.3 Environmental Impact Analysis

3.2.3.1 Thresholds of 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 FMMP 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 PRC Section 12220(g)), timberland (as defined by PRC 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.

Non-Applicable Thresholds

- Threshold (c) (*Zoning for Forest Land, Timberland, or Timberland Production*): The Project site does not contain zoning for forest land, timberland, or timberland zoned Timberland Production, nor does it propose the rezoning of any of these areas. As such, there would be no potentially significant adverse impacts related to forest- and timberland-related resources and this issue will not be analyzed further in this EIR.
- Threshold (d) (*Forest Land Conversion*): The Project site does not contain any forest land. As such, there would be no potentially significant adverse impacts related to the loss or conversion of forest land with implementation of the Project and this issue will not be analyzed further in this EIR.

3.2.3.2 Impact Assessment Methodology

Data for this analysis was derived from the review of the City's General Plan LUCE Update EIR (2014); General Plan COSE (2006); NRCS soil maps; and the FMMP San Luis Obispo Important Farmland Map (2016). Potential impacts to agricultural resources are associated with the conversion of open space lands used for grazing to urban development, including 39.1 acres of residential and 3.1 acres of retail commercial land uses, as further described below. Though the Project site is currently unincorporated land under the jurisdiction of the County, the City's LUCE Update EIR and General Plan have planned for the annexation of the site. The potential for impacts to agricultural resources are therefore evaluated in the context of City resources and agricultural conservation policies. The LUCE Update EIR analyzed the potential for planned development of the Specific Plan area to convert agricultural resources to developed urban uses, and concluded that impacts would be less than significant with the incorporation of program-level mitigation measures and application of LUCE policies, which require conservation of comparable agricultural

resources within the San Luis Obispo Planning Area. Such policies include the dedication of offsite agricultural lands or payment of in-lieu fees to ensure that such land is conserved. In addition, the analysis below also considers the physical loss of agricultural resources and prime if irrigated soils.

The analysis for agricultural resources uses Land Evaluation and Site Assessment (LESA) methodology to determine the potential for significance of impacts, which are assessed in this section below. LESA Model estimates for the Project site are contained within Appendix L of this EIR. 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 FMMP with an Important Farmland designation that would be directly converted as a result of the Project.
b) Identify any onsite prime soils that would be impacted based on the NRCS designation of prime agricultural soils. The NRCS 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.

3.2.3.3 Project Impacts and Mitigation Measures

Implementation of the Project has the potential to result in direct impacts to onsite agricultural resources, including grazing land and prime soils. The Project also has the potential to result in impacts to agricultural resources based upon consistency with goals and policies within the LUE and COSE of the City's General Plan (refer also to Section 3.9, *Land Use and Planning*), and the 2010 Open Space and Agricultural Conservation Easement agreement. These impacts are further discussed below and summarized in Table 3.2-4.

Table 3.2-4. Summary of Project Impacts

Agricultural Resource Impacts	Mitigation Measures	Residual Significance
AG-1. The Project would convert onsite Farmland of Local Potential and prime soils if irrigated to non-agricultural uses.	None Required	Less than Significant
AG-2. Implementation of the Project would create potential conflicts with existing agricultural zoning.	None Required	Less than Significant
AG-3. The Project would adjust the boundary of an existing open space and agricultural conservation easement to a location that would reduce the viability of agricultural operations within the recorded easement.	None Required	Less than Significant

Impact AG-1 The Project would convert onsite Farmland of Local Potential and prime soils if irrigated to non-agricultural uses. (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 FMMP of the California Resources Agency (see also, Figure 3.2-1 and City General Plan COSE, Figure 10). Per the City General Plan COSE Figure 10, *Prime Agricultural Soils*, the Project site contains areas mapped as Farmland of Local Potential. Therefore, the Project would not convert FMMP-designated Important Farmland. The Project site contains 46.2 acres of FMMP-designated Grazing Land, which has vegetation suited to grazing livestock, and 67.6 acres of FMMP-designated Farmland of Local Potential, which are potentially suitable for farmland but are not currently, and have not historically been, cultivated or irrigated. Implementation of the Project would result in the conversion of approximately 15.1 acres of Grazing Land (primarily within the Upper Terrace of the Project site) and 47.0 acres of Farmland of Local Potential (primarily within Lower Area and Madonna Froom Ranch) to developed urban uses. The loss of Grazing Land and Farmland of Local Potential is not considered a significant impact under CEQA, nor under the City's General Plan LUE.

The Project site contains approximately 43.9 acres of Cropley clay and 3.7 acres of Salinas silty clay loam soils (total 47.6 acres), which are considered to be prime soils if irrigated. Though not currently irrigated, available water supplies exist to support irrigation of these soils, including an existing well onsite. As such, these soils could be considered prime under NRCS classifications and prime agricultural land under the City's General Plan if water sources were used to irrigate the land for crop cultivation. However, no portion of the Project site is currently irrigated and there is no history of irrigated crop production

within 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. LESA is a method used to define an approach for rating the relative quality of land resources based upon specific measurable features. The California Agricultural LESA Model is composed of six different factors: two Land Evaluation (LE) factors are based upon 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 making a determination of a project's potential significance, based upon a range of established scoring thresholds.

- If the total LESA 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 LE and SA subscores are each greater than or equal to 20 points."
- If the score is from 60 to 79 points, it is "considered significant unless either LE or SA subscore is less than 20 points."
- If the score is from 80 to 100 points, it is "considered significant" (California Department of Conservation 1997).

LESA scores for the Project site (including the offsite stormwater basin) are summarized in Table 3.2-5 below.

Table 3.2-5. Final LESA Score Sheet

	Factor Scores		Factor Weight (%)	Weighted Factor Scores
Land Evaluation Factors				
Land Capability Classification	*<1>*	52.79	25	13.2
Storie Index	*<2>*	51.22	25	12.81
Subtotal			***50***	***26.01***
Site Assessment Factors				
Project Size	*<3>*	80	15	12
Water Resource Availability	*<4>*	25	15	3.75
Surrounding Agricultural Land	*<5>*	0	15	0
Protected Resource Land	*<6>*	50	5	2.5
Subtotal			***50***	***18.25***
Final Score				**44.26**
Significance Determination			Less than Significant	

Source: Appendix L.

The Project would also be required to comply with LAFCO Policy 2.9.12, *Agricultural Policies*, which provides that the Commission may approve annexations of prime agricultural land only if mitigation that equates to a substitution ratio of at least 1:1 for the prime land to be converted from agricultural use is agreed to by the applicant (landowner), the jurisdiction with land use authority.

The Project would not convert Important Farmland (as defined by the FMMP of the California Resources Agency) or prime agricultural soils (due to lack of historic or current irrigation), and is not considered a significant conversion of land per the California Agricultural LESA Model. Therefore, the loss of this resource through development of the Project is considered *less than significant.*

Impact AG-2 Implementation of the Project would create potential conflicts with existing agricultural zoning (Less than Significant).

The Project site currently contains land within the Agriculture and Rural Lands land use designations within the County and Commercial Retail land use within the City and supports some limited grazing uses, historic structures utilized to support a construction business, and an active permitted rock quarry. Currently, the Specific Plan area is leased for horse grazing; the proposed stormwater detention basin area is vacant and not used for agricultural activities. Upon Project approval, the Specific Plan area would be designated for residential, commercial/retail, and parks/open space uses within the City. The proposed residential, commercial/retail, and public park land uses would convert more rural uses to urban uses and eliminate existing grazing uses. The Project site is planned for urban development with a Specific Plan (SP-3) land use designation under the City's LUE and the Project would be consistent with Policy 1.7.3, *Interim Uses*, where grazing uses would continue until urban development occurs under a Specific Plan.

There are parcels within the Agriculture and Rural Lands designations within the County adjacent to the Project site to the west and south. However, none of the immediately adjacent lands currently support agricultural uses, including cultivation or grazing. Instead, adjacent agricultural parcels contain open space within conservation easements and Mountainbrook Church. In the vicinity, agriculturally zoned lands exist within 0.25 mile of the Project site on the east side of U.S. 101, which are currently in active agricultural production (row crops). Further to the south, some of these agricultural parcels are subject to Williamson Act contracts. However, agricultural parcels within 0.5 mile of the Project site are separated from the Project site by the existing urban development, such as the Irish Hills Plaza, hotels, and Mountainbrook Church, as well as non-agricultural open space

areas, such as the Irish Hills Natural Reserve. This substantial distance and developed buffer would prevent indirect impacts of the Project on existing agriculturally zoned parcels or existing agricultural operations in the Project vicinity.

Development of the Project site would convert 116.8 acres of Agriculture, Rural Lands, and Commercial Retail designated land uses to urban uses. This includes 59.0 acres of Agriculture and Rural Lands designated land use that would be annexed and re-designated as Open Space under the Project, making these areas not suitable for agricultural uses in the future. However, the site is planned for urban development, park land, and open space consistent with the City's General Plan. Therefore, impacts would be adverse, but *less than significant.*

Impact AG-3 The Project would adjust the boundary of an existing open space and agricultural conservation easement to a location that would reduce the viability of agricultural operations within the recorded easement (Less than Significant).

The 7.1-acre open space and agricultural conservation easement was established onsite in 2010 based on LAFCO Policy 2.9.12 and requires that the land within the easement be capable of retaining historical onsite agricultural operations, and/or provide open space and biological resource value, such as wetlands. The easement currently encircles a contiguous block of land with soils that are prime if irrigated within the southeast area of the Project site. The Project would adjust the boundary of the 7.1-acre easement (refer to Figure 2-4). The proposed easement boundary adjustment would retain a total of 7.1 acres of land; however, the dedicated area would be divided into two isolated areas. Approximately 5.5 acres of the proposed reconfigured easement area would be located west of Calle Joaquin, while approximately 1.6 acres would be located east of Calle Joaquin.

To comply with LAFCO requirements and the 2010 Open Space and Agricultural Conservation Easement agreement, the proposed adjusted easement would need to support historical agricultural operations, including existing grazing uses, or allow for conservation of biological resources, including wetlands. Adjustment of the existing easement boundary would effectively reduce the extent of lands dedicated to grazing uses from 7.1 acres to 5.5 acres, as livestock would not have the ability to access or utilize the 1.6-acre portion east of Calle Joaquin. This effective reduction would also reduce the viability of existing grazing operations or other agricultural operations to occur within the 5.5-acre portion of the adjusted easement. However, realignment of the easement would support conservation of habitat and biological resources, particularly the protection of existing wetlands within

this 1.6-acre portion east of Calle Joaquin, which is consistent with the terms of the easement. Thus, adjustment of the 7.1-acre easement would continue to meet the objectives and LAFCO requirements of the 2010 Open Space and Agricultural Conservation Easement agreement and this impact is considered *less than significant*.

3.2.3.4 Cumulative Impacts

Implementation of the Project would contribute incrementally to the loss of agricultural land (Grazing Land and Farmland of Local Potential) to development within the County and particularly within the City's Sphere of Influence. Although agricultural resources in the Project vicinity are predominantly located outside of City limits, agriculture is a major industry in the County. The County has experienced the trend of conversion of agricultural resources to developed uses; between 2010 and 2012, the FMMP recorded a net loss of 3,601 acres of Important Farmland, and between 2012 and 2014, the FMMP recorded a net loss of 10,706 acres of Important Farmland. However, between 2014 and 2016, FMMP reports indicate that this trend in conversion of agricultural resources to development uses began to reverse, and approximately 1,758 acres of Important Farmland were gained (California Department of Conservation, Division of Land Resource Protection 2012, 2014, 2016). In addition, within the City, projects such as the San Luis Ranch Specific Plan and Avila Ranch Development Plan would result in the conversion of over 200 acres of agricultural land to urban uses in the Project vicinity.

The Project would not contribute to the loss of Important Farmland. Consistent with the LUCE Update EIR, the Project would implement mitigation measures to ensure compliance with the goals and policies of the General Plan. Similar to the Project, other cumulative development within the City that would result in the conversion of agricultural resources would be subject to Policy 1.9.2 in the LUE, Prime Agricultural Land, and Policy 8.6.3 in the COSE, Required Mitigation. However, cumulative development would continue to result in the irreversible loss of agricultural resources. The Project would result in the incremental loss of agricultural resources within the County, including the loss of Grazing Lands and loss of Farmland of Local Potential, per the FMMP. The County has experienced a net gain of 8,117 acres of Grazing Land between 2010 and 2016 (California Department of Conservation, Division of Land Resource Protection 2014; 2012; 2016). However, the Project site does not contain prime agricultural resources per the FMMP, current soil classifications, or the California Agricultural LESA Model, nor would it contribute to the loss of prime agricultural land within the County. Therefore, the Project's cumulative contribution to loss of agricultural resources would be *less than significant*.

3.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

This section analyzes air quality and greenhouse gas (GHG) emissions impacts associated with the Project, including local and regional air quality within the County. Air quality is evaluated according to the concentration of pollutants in ambient air. The U.S. Environmental Protection Agency (U.S. EPA) and California Environmental Protection Agency (CalEPA) have established national and state criteria to protect public health and welfare for seven criteria pollutants, including carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), sulfur dioxide (SO_2), 10-micron particulate matter (PM_{10}), 2.5-micron particulate matter ($PM_{2.5}$) and lead (Pb). The CalEPA has also established state criteria for sulfates, hydrogen sulfide (H_2S), and visibility reducing particulates. Other air pollutants of concern include toxic air contaminants (TACs) or hazardous air pollutants (HAPs), in diesel particulate matter, generated from the operation of diesel engines (e.g., trains, equipment, trucks, etc.).

3.3.1 Environmental Setting

3.3.1.1 Regional Climate and Meteorology

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. Pollutants may accumulate more during this time of year, remaining over the ocean for a few days and being carried back onshore. Strong inversions, or a deviation in the typical decrease in temperature with respect to altitude, can form at this time, trapping pollutants near the ground surface; 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, often pollutant-laden, is transported into the County from the east and southeast. The break-up of this condition generally occurs within seven days and may then result in stagnant conditions and a build-up of pollutants offshore. The sea breeze can also bring these pollutants back onshore, where they combine with local emissions and cause higher pollutant concentrations.

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 mph 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 District [SLO County APCD] 2001).

3.3.1.2 Greenhouse Gases and Global Climate Change

The U.S. EPA defines climate change as "any significant change in the measures of climate lasting for an extended period of time." In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among other conditions, that occur over several decades or longer. Scientific consensus is that human-caused emissions of GHGs above natural levels is the primary contributor to global climate change. When GHG levels increase in the atmosphere, the greenhouse effect intensifies on Earth and drives long-term climate change. GHGs trap heat in the atmosphere and regulate the Earth's temperature and include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrogen oxides (NO_x), chlorofluorocarbons (CFCs) and O_3. The largest anthropogenic source of emissions comes in the form of CO_2, which makes up approximately 82 percent of U.S. GHG emissions annually (U.S. EPA 2017). Although methane, nitrogen oxides,

chlorofluorocarbons, and hydrocarbons make a smaller portion of GHG volume, they are powerful greenhouse gases and play an outsized role in climate change.

The primary human activities that emit GHGs include the electric power industry, transportation, industrial/manufacturing, agricultural, commercial, and residential uses (U.S. Energy Information Administration [U.S. EIA] 2017). The main sources of GHGs due to human activity include the combustion of fossil fuels and deforestation (loss of CO_2 sequestration); livestock and rice paddy farming, wetland depletions, and landfill emissions (CH_4); refrigeration systems and fire suppression systems use and manufacturing (CFCs); and agricultural activities, including the use of fertilizers (NO_x) (U.S. EPA 2017).

In 2015, the State of California produced approximately 363.5 million metric tons of CO_2 equivalent (MMT CO_2e) emissions from fossil fuel combustion. Sector sources of these CO_2 emissions are as follows: transportation (56.7 percent), industry (19.6 percent), electricity generation (12.2 percent), residential (6.4 percent), and commercial (5.1 percent) (U.S. EIA 2017). In 2016, the City's emissions amounted to 242,210 metric tons of CO_2 equivalent (MT CO_2e), an approximately 10 percent reduction compared to the City's 2005 GHG inventory which amounted to 269,720 MT CO_2e. In 2016, GHG emissions in the City were from transportation (51 percent), commercial and industrial energy (electricity and natural gas) (22 percent), residential energy (electricity and natural gas) (18 percent), solid waste (6 percent), wastewater (<1 percent), and off-road sources (6 percent) (City of San Luis Obispo 2018).

The global climate crisis has already impacted the City and will continue to affect an increasing range of resource areas, including hydrological and biological resources. Projected impacts to the region caused by global climate change include rising sea levels, coastal flooding, increased tsunami hazards, drought, increased fire frequency, size, and severity, and sediment transportation and deposition-related impacts on aquatic ecosystems (California Natural Resources Agency 2018).

3.3.1.3 Regional Air Quality

The County is part of the South Central Coast Air Basin (SCCAB), which also includes Santa Barbara and Ventura counties to the south. Air quality within the County is contingent on several factors including the type, amount and dispersion rates of pollutants being emitted within the region. Major factors affecting pollutant dispersion, as discussed in the previous paragraphs, are wind speed and direction, atmospheric stability,

temperature, the presence or absence of inversions, and the topographic and geographic features of the region.

3.3.1.4 Regional Emissions

Under the Federal Clean Air Act (FCAA) of 1963, federal air quality standards, known as the National Ambient Air Quality Standards (NAAQS), were established for the criteria air pollutants described previously. Similarly, the California Clean Air Act (CCAA) of 1988 establishes state air quality standards that are more stringent than the NAAQS as part of the California Ambient Air Quality Standards (CAAQS). Measurements of ambient concentrations of criteria air pollutants are used by the U.S. EPA and the California Air Resources Board (CARB) to assess and classify the air quality of each air basin, county, or in some cases a specific developed area. The classification is determined by comparing monitoring data with the national and state air quality standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment." If the pollutant exceeds the standard, the area is in marginal, moderate, serious, severe, or extreme "non-attainment," depending on the magnitude of the air quality standard exceedance. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

The County has historically been designated as in non-attainment of state standards for 1-hour and 8-hour O_3 (see Table 3.3-1). The national 8-hour O_3 standard was lowered from 75 to 70 parts per billion (ppb) on October 1, 2015. The eastern portion of the County is still designated as in non-attainment for the new standard, while the western portion of the County is designated as within attainment status (SLO County APCD 2019). O_3 is a secondary pollutant that is not produced directly by a specific emission source, but rather is formed by a reaction between NO_x and reactive organic gases (ROGs) in the presence of sunlight. Primary sources of NO_x are motor vehicles (over 50 percent), public utility power generation, and fuel combustion by various industrial sources. O_3 can impact public health at higher concentrations by causing respiratory irritation and other effects upon the lungs. It can also affect sensitive plant species by interfering with photosynthesis, and is therefore a threat to California agriculture and native vegetation (U.S. EPA 2018).

Table 3.3-1. Ambient Air Quality Standards and County Attainment Status (2019)

Pollutant	Average Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	**Non-Attainment**	--	**Non-Attainment Eastern County** – Attainment Western County (Project site)
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)	
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	**Non-Attainment**	150 µg/m^3	Unclassified*/ Attainment
	Annual Arithmetic Mean	20 µg/m^3		--	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	--	Attainment	35 µg/m^3	Unclassified*/ Attainment
	Annual Arithmetic Mean	12 µg/m^3		12 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Unclassified*
	8 Hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Unclassified*
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 mg/m^3)	Unclassified*
	3 Hour	--		0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm	
	Annual Arithmetic Mean	--		0.030 ppm	
Lead (Pb)	30-Day Average	1.5 µg/m^3	Attainment	--	No Attainment Information
	Calendar Quarter	--		1.5 µg/m^3	
	Rolling 3-Month Average	--		0.15 µg/m^3	

Table 3.3-1. Ambient Air Quality Standards and County Attainment Status (2019) (Continued)

Pollutant	Average Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Visibility Reducing Particulates	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particulates when relative humidity is less than 70 %. Method: Beta Attenuation and Transmittance through Filter Tape.	Attainment	No Federal Standards	
Sulfates	24 Hour	25 µg/m^3	Attainment		
Hydrogen Sulfide (H2S)	1 Hour	0.03 ppm (42 µg/m^3)	Attainment		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	No Attainment Information		

Notes: ppm = parts per million; ppb = parts per billion
µg/m^3 = micrograms per cubic meter; mg/m^3 = milligram per cubic meter
-- = Not applicable
*Unclassified (U.S. EPA/federal definitions): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant.
Attainment (U.S. EPA/federal definitions): Any area that meets the national primary or secondary ambient air quality standard for that pollutant. (CARB definition): State standard was not exceeded during a three-year period.
Non-Attainment (U.S. EPA/federal definitions): Any area that does not meet, or contributes to an area that does not meet the national primary or secondary ambient air quality standard for that pollutant. (CARB definitions): State standard was exceeded at least once during a three-year period.
Source: SLO County APCD 2017b.

The County is in non-attainment for the state PM_{10} standards; however, the County is within attainment of national PM_{10} standards. PM_{10} is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Human activities that generate PM_{10} include agricultural operations, industrial processes, fossil fuel combustion, construction and demolition operations, and entrapment of road dust into the atmosphere. Natural sources include wind-blown dust, wildfire smoke, and sea spray salt (U.S. EPA 2018).

3.3.1.5 Emissions in the Vicinity of the Project Site

The Project site is composed of grazing land and disturbed/developed area in the northwestern area of the site that comprises the historic Froom Ranch Dairy complex (see Section 3.5, *Cultural and Tribal Cultural Resources*), a construction storage yard, and quarry/aggregate mining pit and storage area. Ongoing construction storage yard activities

generate fugitive dust via uncovered stockpiles of various materials such as dirt and rock and pollutant emissions from operation of heavy construction equipment and trucks. Information about the daily average operations of equipment at the Project site varies substantially due to the nature of the existing construction business. However, based on field observations and aerial imagery, the regular driving of heavy trucks and earthmoving equipment within the quarry and on the property also contributes to existing onsite fugitive dust and diesel particulate emissions. The 3.2-acre onsite stormwater detention basin does not produce emissions besides those associated with infrequent maintenance clearing; based on aerial imagery, clearing of vegetation within the basin occurred in 2013 and 2018. The remainder of the site is unimproved, consisting of natural areas that do not currently produce emissions.

The Project site is surrounded to the north, east, and south by urban development, including the Irish Hills Plaza shopping center to the north, several automobile dealerships to the east, and four hotels and Mountainbrook Church to the south. These uses generate traffic on local roads. LOVR runs immediately east of the Project site and U.S. 101 is located as close as 400 and 600 feet south of the Specific Plan area. Vehicles in the Project vicinity contribute to existing emissions in the SCCAB, along with land uses, equipment, and industrial processes within urban areas, and agricultural uses in rural areas.

The Project site lies within the Naturally Occurring Asbestos (NOA) buffer area per the SLO County APCD's NOA map and is therefore subject to CARB's Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. CARB has identified asbestos as a TAC that if inhaled may result in the development of lung cancer or cause other health hazards. NOA can be found in serpentine rock and can be released into the air when it is broken or crushed. In the County, serpentine rock is located in many regions, including the Project site. Work in serpentine areas requires a SLO County APCD pre-approved dust control plan and may include asbestos air monitoring. Prior to any grading activities at a site within an area potentially containing NOA, the Applicant is required to comply with the applicable sections contained in the NOA ATCM, including the California Code of Regulations (CCR) Title 17, Section 93105.

The air monitoring station located nearest to the Project site is the San Luis Obispo – Higuera Street station, located at 3220 S. Higuera Street, approximately 1.0 mile northeast of the Project site. This station has been active since 2005 and is operated by CARB and measures O_3, $PM_{2.5}$, and PM_{10} (CARB 2018). Table 3.3-2 summarizes the annual air quality emissions data for the local airshed between the years 2016-2018, with values

exceeding state emissions underlined (there were no federal exceedances at this monitoring station recorded during this period).[1] The number of exceedance days for each pollutant are also shown. This table shows the general air quality trends of the area for pollutants measured near the Project site.

Table 3.3-2. Ambient Air Quality Data at San Luis Obispo – Higuera Street Station

	O_3 ppb			PM_{10} µg/m^3		$PM_{2.5}$ µg/m^3	
	Worst 1-Hour	Worst 8-Hour	O_3 Exceedance Days 1-Hour/ 8-Hour	Worst 24-Hour	Exceedance Days	Worst 24-Hour	Exceedance Days
2016	69	62	0/0	42	0	21	0
2017	74	66	0/0	<u>62</u>	3	25	0
2018	62	53	0/0	46	0	13	0
Threshold	90	70		50		-	

Notes: ppb = parts per billion, µg/m3 = micrograms per cubic meter; <u>underlined</u> values have exceeded state emissions standards; there are no values at this station that exceed federal emission standards.
Source: CARB 2018; 2019.

3.3.1.6 Sensitive Receptors

The SLO County APCD defines sensitive receptors as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s) (SLO County APCD 2012). These uses are considered sensitive as they are more likely to contain populations of people who have an increased sensitivity to air pollution or environmental contaminants. Children under the age of 16 are particularly susceptible to health problems from air emissions exposure for developing lungs, as well as elderly people over 65, individuals with respiratory and cardiovascular health problems, and people conducting strenuous work or active exercise.

There are no existing sensitive receptors within or immediately adjacent to the Project site. The Project site is surrounded by undeveloped land in the Irish Hills Natural Reserve and commercial development, including four hotels, Mountainbrook Church, automobile dealerships and service centers, and the Irish Hills Plaza shopping center. Mountainbrook Church lies approximately 75 feet from the southern boundary of the Project site and 580 feet from the Upper Terrace. Mountainbrook Church is open daily and offers religious services throughout the week, including classes and programs for children and youth, with

[1] A local airshed is defined as a geologic area that shares a common air flow or atmosphere that is exposed to the same condition, such as source of pollutants or dispersion.

most programs offered during evenings and weekends. Four hotels (Rose Garden Inn, Courtyard by Marriott, Hampton Inn & Suites, and Motel 6) are located 40 to 160 feet east of the Project site boundary. The closest school is Pacific Beach High School, which is approximately 0.27 mile northwest of the Project site and is considered the nearest sensitive receptor. Neither the Mountainbrook Church or the hotels along Calle Joaquin are considered sensitive receptors to air pollutants, as guests and visitors of these developments are considered transient and would not be exposed to air pollutant emissions for extended periods of time. The closest existing residential area is approximately 0.3 mile northeast of the Project site.

3.3.1.7 Odors/Nuisance Emissions

Common sources of odors and nuisance emissions include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and chemical manufacturing facilities. The nearest such source of odor to the Project site is the San Luis Obispo Water Resource Recovery Facility (WRRF) located approximately 0.66 mile east of the Project site boundary, across U.S. 101. Odors from the WRRF, which are caused from H_2S, a gas that smells like rotten eggs, are not perceptible at the Project site based on field reconnaissance by the EIR consultant from 2017 through 2019.

3.3.2 Regulatory Setting

Air quality and GHG emissions are governed primarily by federal and state laws, although local jurisdiction laws would also apply to future development under the Project. Federal, state, and local regulations that are directly relevant to the Project are summarized below.

3.3.2.1 Federal

Federal Clean Air Act

The FCAA was enacted in 1970 and amended in 1977 and 1990, and was the first comprehensive federal law to regulate air emissions from stationary and mobile sources. Among other things, the law authorizes the U.S. EPA to establish NAAQS. The NAAQS help to ensure basic health and environmental protection from air pollution. The FCAA also gives the U.S. EPA authority to limit emissions of air pollutants coming from sources like chemical plants, utilities, and steel mills.

U.S. Environmental Protection Agency

The U.S. EPA is the federal agency responsible for enforcing the FCAA of 1970 (as amended in 1977 and 1990). The U.S. EPA has established NAAQS for O_3, CO, NO_2, SO_x, PM_{10}, $PM_{2.5}$, and Pb, as shown in Table 3.3-1. The U.S. EPA also maintains jurisdiction over emissions sources outside state waters (outer continental shelf) and establishes various emissions standards for vehicles sold in states other than California (as the CalEPA has established more stringent emissions standards for vehicles sold in California).

As part of its enforcement responsibilities, the U.S. EPA requires each state that is in non-attainment for any federal criteria pollutant to prepare and submit a State Implementation Plan (SIP) that identifies the measures necessary to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The FCAA allows states to adopt ambient air quality standards and other regulations, provided they are at least as stringent as the federal standards.

3.3.2.2 State

California Clean Air Act

The CCAA was enacted in 1988 and requires all areas of the state to achieve and maintain the CAAQS by the earliest practicable date. The CAAQS includes more stringent standards than the NAAQS. The CAAQS were established within the CCAA of 1988 for criteria pollutants and additional standards for sulfates, H_2S, vinyl chloride, and visibility reducing particles (see Table 3.3-1). The CCAA requires each APCD in California to adopt strategies for achieving the NAAQS and CAAQS by the earliest practicable date. CARB is responsible establishes emissions standards for vehicles sold and operated within the state, while the local APCD is responsible for enforcing standards and regulating stationary sources.

California Air Resources Board

CARB, a part of CalEPA, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets CAAQS, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. CARB establishes emissions standards for motor vehicles sold in California, consumer products

(such as hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In April 2005, CARB issued a guidance document on air quality and land use, "Air Quality and Land Use Handbook: A Community Health Perspective", which recommends that sensitive land uses not be located within 500 feet of a freeway or other "High Traffic Roadway" and that a site-specific health risk assessment be performed as a way to more accurately evaluate the risk. "High Traffic Roadways" are defined as urban roadways with 100,000 vehicles per day (vpd) or more, or rural roads with 50,000 or more vpd. In traffic-related studies, the additional non-cancer health risk attributable to proximity to high-volume roadways was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70 percent drop-off in particulate pollution levels at 500 feet. The nearest highway or High Traffic Roadway is U.S. 101 located approximately 400 to 800 feet from Project site.

California Global Warming Solutions Act (Assembly Bill 32)

The California State Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, NO_x, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. CARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

CARB approved the 1990 GHG emissions level of 427 MMT CO_2e on December 6, 2007 (CARB 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO_2e.

Senate Bill 32 and Assembly Bill 197

Senate Bill (SB) 32 and AB 197 were both approved by Governor Jerry Brown on September 8, 2016 and became effective on January 1, 2017. SB 32 sets into law the targets for GHG emissions reductions at 40 percent of 1990 levels by 2030, as mandated under Governor Jerry Brown's Executive Order B-30-15. AB 197 is paired with SB 32 and is a measure that increases legislative oversight over the CARB, in order to ensure strategies to lower emissions favor those most impacted by climate change.

Executive Order S-13-08

Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the " ...first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15

Executive Order B-30-15, set into state law by SB 32, establishes a California GHG reduction target of 40 percent below 1990 levels by 2030. California is on track to meet or exceed the current target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emissions reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions by 80 percent under 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius - the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels. The reduction targets mandated under Executive Order B-30-15 were set into law under SB 32 in September 2016.

Executive Order B-55-18

On September 10, 2018, Governor Edmund G. Brown Jr. issued Executive Order B-55-18 to establish a new ambitious statewide goal to achieve carbon neutrality as soon as possible,

but no later than 2045, and achieve and maintain net negative targets of reducing GHG emissions.

California Air Resources Board: Scoping Plan

On December 11, 2008, CARB adopted the Scoping Plan as directed by AB 32 (CARB 2008). The Scoping Plan identifies actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategies. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing vehicle miles traveled (VMT) and vehicle GHGs through fuel and efficiency measures. These measures would be implemented statewide rather than on a project-by-project basis.

CARB released the First Update to the Climate Change Scoping Plan in May 2014 to provide information on the development of measure-specific regulations and to adjust projections in consideration of the economic recession (CARB 2014). In the update, CARB estimated the AB 32 Baseline 2020 to be 509 MMT CO_2e. The Scoping Plan's current estimate of the necessary GHG emission reductions is 78 MMT CO_2e (CARB 2014). This represents an approximately 15.32-percent reduction. CARB is forecasting that this would be achieved through the following reductions by sector: 25 MMT CO_2e for energy, 23 MMT CO_2e for transportation, 5 MMT CO_2e for high-global warming potential (GWP) GHGs, and 2 MMT CO_2e for waste. The remaining 23 MMT CO_2e would be achieved through Cap-and-Trade Program reductions. This reduction is flexible – if CARB receives new information and changes the other sectors' reductions to be less than expected, the agency can increase the Cap-and-Trade Program reduction (and vice versa).

In response to EO B-30-15 and SB 32, all state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target, and, and adopted the 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target on November 30, 2017. The 2030 mid-term target outlined in the Scoping Plan is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions. The Second Update to the Scoping Plan was approved by CARB on December 14, 2017.

Senate Bill 375

Passing the Senate on August 30, 2008, SB 375 was signed into law on September 30, 2008. Per SB 375, the transportation sector is the largest contributor of GHG emissions. SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Senate Bill 743

SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce VMT that contribute to GHG emissions. SB 743 eliminated the measurement of automobile delay, including level of service (LOS), as a metric for determining traffic impacts. SB 743 required the State Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of GHG emissions, the development of multi-modal transportation networks, and a diversity of land uses. For land use projects, OPR identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis. Additional provisions of SB 743 include reforming aesthetics and parking CEQA analysis for urban infill projects and in transit priority areas. Regulatory changes to the CEQA Guidelines that implement SB 743 were approved on December 28, 2018. July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. OPR released a December 2018 Technical Advisory that contains recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

Air Toxics Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations

Under CARB's NOA ATCM for Construction, Grading, Quarrying, and Surface Mining Operations, prior to any grading activities at a site identified as having the potential to contain NOA, the Owner or Operator will be required to comply with the applicable sections contained in the NOA ATCM. Projects that require grading within an area where an NOA may be present are required to demonstrate adequate dust control measures with the SLO County APCD. For example, for projects that require grading of 1 acre or more

in serpentine, a geologic evaluation and Asbestos Dust Mitigation Plan must be submitted to the SLO County APCD.

3.3.2.3 Local

City of San Luis Obispo Climate Action Plan

The City's Climate Action Plan, adopted by Resolution No. 10388 in 2012, is a strategic document based on the idea that effective global solutions to climate change will largely be the result of collective action of local communities and governments. The Climate Action Plan enables the City to maintain local control of implementing state direction (AB 32 – the California Global Warming Solutions Act) to reduce GHG emissions to 1990 levels by 2020. The adjusted GHG emissions forecast shows that implementation of all strategies in this plan can achieve a 15 percent reduction from baseline levels by 2020, which will meet required AB 32 state reduction goals. The plan identifies strategies to guide the development and implementation of GHG reduction measures in the City and quantifies the emissions reductions that result from these strategies. The Climate Action Plan proposes strategies to reduce GHG emissions from community-wide activities and government operations. Community-wide activities are broken down into six focus areas: buildings, renewable energy, transportation and land use, water, solid waste, and parks and open space. Corresponding goals include: energy-efficient buildings, clean and renewable energy sources, improved transportation options, reduced water consumption, reduced waste, and maintenance and growth of the urban forest.

The City is currently updating the Climate Action Plan, including an updated GHG inventory and measures to achieve a net-zero carbon emissions target communitywide. The updated plan will include strategies that can achieve 40 percent reduction from baseline levels by 2030, which will meet required SB 32 state reduction goals. In addition, at a City Council hearing held on September 18, 2018, the City declared its intent to adopt a target for achieving citywide carbon neutrality by the year 2035. The update to the Climate Action Plan will identify new measures and policies applicable to development within the City for reducing carbon emissions from various sources, including energy consumption, transportation, and organic waste disposal, to achieve this target.

Clean Energy Choice Program

The City is currently developing local amendments to the 2019 California Building Code (CBC) to encourage all-electric new buildings. When paired with Monterey Bay Community Power's carbon free electricity supply, all electric new buildings are carbon

free and avoid health and safety issues associated with fossil fuels and GHGs. At its meeting on Tuesday, September 3, 2019, the City Council approved the Clean Energy Choice Program. The City anticipates the second reading of the ordinance and subsequent implementation to occur in early 2020. The City joins more than 50 other California communities currently considering ways to encourage cleaner buildings. Unlike some cities that are banning natural gas entirely, the proposed Clean Energy Choice Program will provide options to people who want to develop new buildings with natural gas. New projects wishing to use natural gas will be required to build more efficient and higher performing buildings and offset natural gas use by performing retrofits on existing buildings or by paying an in-lieu fee that will be used for the same purpose.

County of San Luis Obispo Clean Air Plan and CEQA Air Quality Handbook

SLO County APCD adopted the Clean Air Plan in January 1992; the Clean Air Plan was updated in 1998, and again in 2001. The Clean Air Plan is a comprehensive planning document designed to reduce emissions from traditional industrial and commercial sources. The Clean Air Plan also aims to reduce emissions from motor vehicles by establishing goals and targets for reducing personal vehicle trips and trip lengths, such as encouraging or promoting multimodal alternatives. The purpose of the Clean Air Plan is to address the attainment and maintenance of state and federal ambient air quality standards by following a comprehensive set of emission control measures within the plan.

In 2009, SLO County APCD adopted guidelines for assessment and mitigation of air quality impacts under CEQA. The CEQA Air Quality Handbook, which was updated in 2012 (SLO County APCD 2012) and subsequently amended in 2017 (SLO County APCD 2017), is an advisory document that provides lead agencies, consultants, and project applicants with uniform procedures for addressing air quality issues in environmental documents. The CEQA Air Quality Handbook also includes standard construction and operational mitigation measures that may be applied to projects that exceed SLO County APCD thresholds. For instance, SLO County APCD requires inclusion of Best Available Control Technologies (BACTs) for construction equipment when estimated O_3precursor emissions for the equipment and vehicle fleet are expected to exceed adopted thresholds of significance and implementation of fugitive dust control measures (watering of the grading site, vegetation of exposed soils, early roadway paving, construction vehicle speed control, etc.) for any project with a grading area greater than 4 acres or that are located within 1,000 feet of any sensitive receptor.

3.3.3 Environmental Impact Analysis

3.3.3.1 Thresholds of Significance

Air Quality CEQA Thresholds

Significance criteria for evaluating impacts on air quality emissions associated with the Project are based on Appendix G of the CEQA Guidelines. Implementation of the Project would have a significant impact on air quality and GHG emissions if the Project would:

a) Conflict with or obstruct implementation of the SLO County APCD's adopted Clean Air Plan (including providing for growth that is above the rate of growth contained in the Clean Air Plan);
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard;
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.

Non-Applicable Threshold(s)

- Threshold (d) *(Other emissions affecting a substantial number of people)*: The Project would not involve the development of the types of land uses that generate non-criteria pollutant emissions or odors that would affect a substantial number of people such as wastewater treatment plants, landfills, composting facilities, refineries, or chemical plants. Nor would the Project locate sensitive receptors within proximity of these types of sources. Therefore, the Project would not have a potential to have an impact related to odors and nuisance emissions and this issue will not be further discussed.

SLO County APCD Clean Air Plan

As recommended by SLO County APCD, the most appropriate standard for assessing the significance of potential air quality impacts is the preparation of a consistency analysis where the project is evaluated against the land use goals, policies, and population projections contained in the current Clean Air Plan. The rationale for requiring the preparation of a consistency analysis is to ensure the attainment projections developed by SLO County APCD are met and maintained. SLO County APCD's CEQA Air Quality Handbook recommends evaluation of the following questions:

- Are the population projections used in the plan equal to or less than those used in the most recent Clean Air Plan for the same area;
- Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area; and
- Have all applicable land use and transportation control measures from the most recent version of the Clean Air Plan been included in the plan to the maximum extent feasible?

SLO County APCD Significance Criteria (Air Quality and Criteria Air Pollutants)

Significance Criteria for Construction-Related Emissions

Short-term construction emission thresholds for the SLO County APCD (Table 3.3-3), as stated in SLO County APCD's CEQA Air Quality Handbook are described below. Due to the length of the Project's construction phases, quarterly thresholds are used in this analysis.

ROG and NO_x Emissions

- Daily: For construction projects, the 137 pounds per day (lbs/day) threshold requires Standard Mitigation Measures;
- Quarterly – Tier 1: For construction projects exceeding the 2.5 tons per quarter (ton/qtr) threshold, Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment are required. Offsite mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for the project; and
- Quarterly – Tier 2: For construction exceeding the 6.3 ton/qtr threshold, Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and offsite mitigation are required.

Diesel Particulate Matter (DPM) Emissions

- Daily: For projects expected to be completed in less than one quarter, exceedance of the 7 lbs/day threshold requires Standard Mitigation Measures;
- Quarterly – Tier 1: For construction projects lasting more than one quarter, exceedance of the 0.13 ton/qtr threshold requires Standard Mitigation Measures, and BACT for construction equipment; and

- Quarterly – Tier 2: For construction projects lasting more than one quarter, exceedance of the 0.32 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and offsite mitigation.

Fugitive Particulate Matter (PM_{10}), Dust Emissions

- Quarterly: Exceedance of the 2.5 ton/qtr threshold requires Fugitive PM_{10} Mitigation Measures and may require the implementation of a CAMP.

If construction-related emissions of the Project equal or exceed any of the thresholds stated above, mitigation of construction activities and implementation of BACT would be required.

Table 3.3-3. Thresholds of Significance for Construction Operations

Pollutant of Concern	Threshold		
	Tons/Qtr Tier 1	Tons/Qtr Tier 2	lbs/Day
ROG + NO_x (combined)	2.5	6.3	137
Diesel Particulate Matter (DPM)	0.13	0.32	7
PM_{10}	-	2.5	-

Source: SLO County APCD 2012a.

Significance Criteria for Operational Emissions

Long-term operational emission thresholds for the County, as stated in SLO County APCD's CEQA Air Quality Handbook, have been set by SLO County APCD as follows (see Table 3.3-4):

Ozone Precursor (ROG + NO_x) Emissions

- Projects which emit 25 lbs/day or more of ROG and NO_x should be submitted to SLO County APCD for review. Onsite mitigation is recommended. If feasible mitigation is incorporated and emissions are still greater than 25 lbs/day, then an EIR should be prepared.
- Projects which emit 25 tons/year or more of ROG and NO_x require the preparation of an EIR.

Diesel Particulate Matter (DPM) Emissions

- Projects that emit over 1.25 lbs/day of DPM require implementation of onsite BACT measures.

Fugitive Particulate Matter (PM_{10}) Dust Emissions

- Projects that emit over 25 lbs/day or 25 tons/year of PM_{10} require implementation of permanent dust control measures to mitigate emissions or provide suitable offsite mitigation approved by SLO County APCD.

Table 3.3-4. Thresholds of Significance for Operational Operations

Pollutant of Concern	Threshold	
	Daily	Annual
ROG + NO_x (combined)	25 lbs/day	25 tons/year
Diesel Particulate Matter (DPM)	1.25 lbs/day	-
PM_{10}	25 lbs/day	25 tons/year

Source: Sa SLO County APCD 2012a.

GHGs and Climate Change CEQA Thresholds

According to Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the Project would be significant if the Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Significance Criteria for GHGs

The City has not adopted GHG emissions thresholds for use in CEQA documents, but SLO County APCD has adopted recommended GHG significance thresholds. These thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in CARB's Scoping Plan. The GHG significance thresholds include one qualitative threshold and two quantitative thresholds options for evaluation of operational GHG emissions. Lead agencies may select most applicable of the above thresholds to determine the significance of a project's GHG emission impact to a level of certainty based on the type of project.

The qualitative threshold option is based on a consistency analysis in comparison to a Qualified GHG Reduction Strategy, or equitably similar adopted policies, ordinances and programs. If a project complies with a Qualified GHG Reduction Strategy that is

specifically applicable to the project, then the project would be considered less than significant. The 2012 Climate Action Plan serves as the City's Qualified GHG Reduction Strategy, consistent with SLO County APCD guidance and CEQA Guidelines Section 15183.5(b), which allows for streamlining of the GHG impacts analysis of projects that are consistent with the Climate Action Plan. This EIR includes an analysis of the Project's conformance with the City's adopted Climate Action Plan. However, the Climate Action Plan was prepared to comply with the requirements of AB 32 and achieve the goals of the AB 32 Scoping Plan, which have a horizon year of 2020. The adopted Climate Action Plan does not reflect the SB 32 targets for GHG emissions reductions at 40 percent of 1990 levels by 2030. Therefore, the City's Climate Action Plan is not compliant with SB 32 and cannot be considered a qualified GHG reduction strategy for assessing the significance of GHG emissions generated by projects with a horizon year post 2020. Therefore, the Project is also evaluated against reduced quantitative GHG emissions thresholds, as discussed below.

Under SLO County APCD's two quantitative significance thresholds, a residential and/or commercial project is considered to result in a significant impact if annual GHG emissions exceed a Bright-Line threshold of 1,150 MT CO_2e or exceed an efficiency threshold of 4.9 MT CO_2e/service population (SP). The Bright-Line numeric threshold of 1,150 MT CO_2e/yr represents an emissions level below which a project's contribution to global climate change would be deemed less than "cumulatively considerable." However, emissions from projects that exceed the 1,150 MT CO_2e/yr Bright-Line Threshold could still be found less than cumulatively significant if the project as a whole would result in a GHG efficiency of 4.9 MT CO_{2e}/SP/yr or less. If projects as proposed exceed both thresholds, they would be required to implement mitigation measures to bring them below the 1,150 MT CO_{2e}/yr Bright-Line Threshold or within the 4.9 MT CO_{2e}/SP/yr Efficiency Threshold. If required mitigation could not bring a project below either threshold requirement, the project would be found cumulatively significant.

However, SLO County APCD's thresholds and the City's Climate Action Plan are specific to AB 32 goals and do not consider the 2030 GHG reduction targets contained in SB 32 that was adopted 2016. The 2017 Climate Change Scoping Plan sets the state on a course to reduce GHG emissions an additional 40 percent below 1990 levels by 2030 under SB 32. Within the Scoping Plan, CARB recommends a statewide target of no more than 6 MT CO_2e/SP/yr by 2030 (CARB 2017b). However, this statewide target is based on all emissions sectors in the state, statewide population forecasts, and necessary statewide reductions, and is not reflective of local conditions. In an attempt to inform new GHG

thresholds for land use development projects in compliance with the targets set forth in SB 32, the Association of Environmental Professionals (AEP) in 2016 released a Climate Change Committee White Paper which developed an example GHG efficiency target of 2.6 MT CO_2e/SP/yr by 2030 (AEP 2016).

The current SLO County APCD GHG quantitative thresholds for land use projects would achieve AB 32 targets but not SB 32 targets. Since the Project's operational year (2025) would exceed the AB 32 target year (2020) and given most recent guidance described above, it is reasonable to apply a reduced threshold to the Project. Therefore, the Project is also analyzed against the SLO County APCD GHG thresholds reduced by 40 percent to account for the continued reductions required by 2030 under SB 32. For this comparison, the bright line threshold was reduced to 690 MT CO_2e and the efficiency threshold was reduced to 2.65 MT of CO_2e/SP/yr for the purposes of analysis of Project impacts where current adopted thresholds do not uphold state law (SB 32) and City goals and policies, as further discussed below.

At a City Council hearing held on September 18, 2018, the City declared its intent to adopt a target for achieving citywide net-zero GHG emissions by the year 2035. For the purposes of this analysis, the Project's stationary (non-mobile) operational emissions are also analyzed for compliance with the City's 2035 net-zero GHG emissions target, as it aligns with current City objectives and is consistent with and exceeds the GHG emissions targets established under SB 32 and requirements of Executive Order B-55-18.

3.3.3.2 Impact Assessment Methodology

This analysis addresses both short-term construction impacts and long-term operational impacts from air pollutant emissions generated by the Project. Potential impacts are identified, along with potential mitigation measures that could avoid or reduce impacts. This discussion of air quality and GHG impacts is based on a review of information contained in the City's General Plan, the Draft FRSP, the County's Clean Air Plan, the City's Climate Action Plan, and the California Emissions Estimator Model (CalEEMod) runs completed for the Project (Appendix D). CalEEMod was performed for each phase of proposed Project implementation, as described in Section 2.6, *Project Construction*.

Criteria Pollutants

This analysis focuses on the air quality impacts that could occur from criteria air pollutant emissions associated with the construction and operation of the Project, including impacts from Project-related traffic volumes. Project-related construction and operational

emissions for ROG, NO_x, DPM, and PM_{10} were estimated using CalEEMod Version 2016.3.2 computer model, and then compared to the thresholds of significance defined above. See Appendix D for CalEEMod worksheet results.

The air quality analysis and CalEEMod estimates for criteria air pollutants follow the guidelines and methodologies recommended in SLO County APCD's CEQA Air Quality Handbook (2012). Construction emissions from heavy-duty diesel exhaust were calculated using SLO County APCD's CEQA handbook and typical construction equipment details provided in Section 2.6.2, *Construction Activities*. Emissions factors for calculating emissions from construction equipment, including fugitive dust emissions from ground disturbance and stockpile activities were based upon default CalEEMod assumptions supplemented by Project-specific details where reasonable. In accordance with SLO County APCD recommendations, an overall qualitative analysis was conducted to determine if emissions resulting from implementation of the Project would be consistent with the emissions projections in the most recent version of the Clean Air Plan.

Construction Air Quality Emissions

Construction emissions are estimated using CalEEMod for each phase of Project construction, including excavation and site preparation, building construction, and architectural coatings as presented in Table 2-7 of Section 2.6.1, *Project Construction Phases*. Emission estimates are based on the anticipated types and amount of equipment that would be used in Project construction, the amount of demolition debris and excavated soil to be removed, the size and type of new construction, anticipated construction schedule, and the vehicle trips generated by construction workers (refer to Section 2.6, *Project Construction*).

Project construction would temporarily increase diesel emissions and would generate particulate matter (dust). Construction equipment within the Project site that would generate ROGs and NO_x emissions could include graders, excavators, dump trucks, cranes, and bulldozers. It is assumed that all construction equipment used would be diesel powered. The precise construction timeline for the Project depends on the timing of entitlements and permit processing. For the purposes of studying the reasonable worst-case emissions for this EIR, construction activity for the Project is assumed to occur over a five-year period beginning in 2020. See Section 2.6, *Project Construction,* for details about Project phasing.

Operational Air Quality Emissions

Operational emissions associated with the Project are estimated using CalEEMod for mobile source, area, and energy emissions. Mobile emissions would be generated by the resident, employee, visitor, and material delivery motor vehicle trips to and from the Project site. These are calculated based on the Project's Transportation Impact Study (TIS) trip generation and other default traffic assumptions (see Appendix J). Area source emissions would be generated by consumer products (e.g., household cleaning products), architectural coatings, and landscape maintenance equipment.[2] Energy source emissions would be generated by emissions resulting from electricity and natural gas consumption for space and water heating and powering electrical appliances. The default emissions were used for area and energy sources with consideration of SLO County APCD rules and regulations that would be required of the Project related to the Project's operations. Use-specific water demands estimated in the Project's Water Supply Assessment (Appendix K) were utilized for estimating air and GHG emissions from operational water demands. To determine if an air quality impact would occur, the increase in emissions was compared with SLO County APCD's operational thresholds.

Prior to full buildout of the Project by 2025, it is anticipated that the Lower Area of Villaggio would be fully occupied and operational starting in 2022, prior to completion the Upper Terrace of Villaggio and the Madonna Froom Ranch portion of the Specific Plan area. For the purposes of this analysis, full occupancy of the Specific Plan area is assumed to occur in 2024-2025, following completion of Madonna Froom Ranch.

GHG and Climate Change

Consistent with CEQA and SLO County APCD's recommendations, the significance of the Project's GHG emissions and resulting global climate change impacts are assessed against the threshold of the City's adopted Qualified GHG Reduction Strategy in the City Climate Action Plan. In addition, as noted above, the Project's stationary (non-mobile) operational emissions are also analyzed for compliance with the City's 2035 net-zero GHG emissions target, as it aligns with current City objectives and is consistent with and exceeds the GHG emissions targets established under SB 32 and requirements of Executive Order B-55-18.

[2] SLO County APCD defines "area sources" emissions as non-vehicular emissions sources which include energy use, evaporative emissions from paints and solvents, fuel combustion by small utility equipment (e.g., lawnmowers, leaf blowers), residential wood burning, household products, and other small sources (SLO County APCD 2012).

In addition, GHG emissions associated with the construction and operation of the Project were estimated using CalEEMod (Appendix D). The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

Construction GHG Emissions

GHGs from construction projects must be quantified and amortized over the life of a project. The amortized construction emissions must be added to the annual average operational emissions and then compared to the operational thresholds in Section 3.5.1 of SLO County APCD's CEQA Air Quality Handbook—Significance Thresholds for Project-Level Operational Emissions. To amortize the emissions over the life of a project, total GHG emissions for the construction activities would be divided by the project life (i.e., 50 years for residential projects and 25 years for commercial projects) then added to the annual operational phase GHG emissions.

The construction GHG analysis considers the Project's anticipated five-year construction schedule as well as the likely types and number of construction equipment to be used. Construction-related GHG emissions are amortized over 25 years per SLO County APCD methodology outlined in the CEQA Air Quality Handbook. Amortization over a 25-year period is selected for the Project due to the proposed mix of residential and commercial uses, as opposed to amortization of a 50-year period for solely residential projects, and therefore provides a conservative analysis of GHG emissions.

Operational GHG Emissions

The following activities are typically associated with the operation of residential and commercial uses, as well as senior living communities, that would contribute to the generation of GHG emissions:

Vehicular trips. Vehicle trips generated by residential, senior living, and commercial uses within the Project site would result in GHG emissions through combustion of fossil fuels.

Onsite use of natural gas and other fuels. For the purposes of this analysis, it is assumed that natural gas would be used by the Specific Plan development to heat the residential and commercial spaces; natural gas would also be utilized for water heating, cooking, laundry, and power backup. This would result in a direct release of GHGs. Estimated emissions from the combustion of natural gas and other fuels is based on the number of dwelling units

(single-family, multi-family, and retirement), commercial space, health care, hotel, and recreational uses applying the default/typical consumption rates as presented in the CalEEMod modeling output.

Electricity use. Electricity is generated by a combination of methods, which include combustion of fossil fuels. Use of electricity for operation of the Project would contribute to the indirect emissions associated with electricity production. Estimated emissions from the consumption of electricity are based on the number of dwelling units (single-family, multi-family, and retirement), commercial sf, health care, hotel, and recreational uses applying the default/typical consumption rates as presented in the CalEEMod modeling output.

Water use and wastewater generation. The amount of water used and wastewater generated by a Project has indirect GHG emissions as a result of the energy used to supply, distribute, and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can result in the emission of both CH_4 and NO_x depending on the treatment method. Estimated emissions from potable water demand are based on CalEEMod default emissions factors and use-specific water demands that were calculated in the Water Supply Assessment prepared for the Project (Appendix K). Estimated emissions from the generation of wastewater is based on the number of residential and senior (independent and assisted) dwelling units, commercial space, and water consumption rates as presented in the CalEEMod modeling output.

Solid waste. Emissions calculated for solid waste reflect the indirect GHG emissions associate with waste that is disposed of at a landfill. GHG emissions associated with the decomposition of waste are quantified based on amount of degradable organic carbon generated by the total residential and senior (independent and assisted) dwelling units, commercial space, health care, hotel, and recreational uses proposed by the Project.

3.3.3.3 Project Impacts and Mitigation Measures

This section discusses the potential air quality and GHG-related impacts associated with the construction and operation of the Project. Air quality and GHG emissions impacts associated with the Project are summarized in Table 3.3-5 below.

Table 3.3-5. Summary of Project Impacts

Air Quality Impacts	Mitigation Measures	Residual Significance
AQ-1. The Project would result in potentially significant construction-related emissions, including dust and air pollutant emissions.	MM AQ-1 MM AQ-2 MM AQ-3	Less than Significant with Mitigation
AQ-2. The Project would result in potentially significant long-term operational emissions.	MM AQ-4	Significant and Unavoidable
AQ-3. Release of toxic diesel emissions or naturally occurring asbestos during construction of the Project could expose sensitive receptors to emissions-related health risks.	No Mitigation Required	Less than Significant
AQ-4. The Project would be consistent with the City's Climate Action Plan, but would result in potentially significant GHG emissions during construction and operation which would be inconsistent with other state and local goals for reducing GHG emissions.	MM AQ-4 MM AQ-5 MM AQ-6	Significant and Unavoidable
AQ-5. The Project is potentially inconsistent with the SLO County APCD's Clean Air Plan.	MM AQ-2 MM TRANS-5 MM TRANS-8 MM TRANS-9 MM TRANS-10	Significant and Unavoidable

Impact AQ-1 The Project would result in potentially significant construction-related emissions, including dust and air pollutant emissions (Less than Significant with Mitigation).

Within each Project implementation phase, construction would consist of site preparation, grading, building construction, and paving. Substantial grading and earthmoving would be required to shape the site, realign Froom Creek, and raise the elevation of the Lower Area and Madonna Froom Ranch above the 100-year flood elevation. Project construction would generate significant construction air pollutant emissions, including fugitive dust (PM_{10} and $PM_{2.5}$) associated with grading and exhaust from heavy construction vehicles. During building construction, ROGs would be released during the application and drying of paints and architectural coatings.

Site preparation and grading would involve substantial earthmoving activities and heavy equipment use. Phase 1 (Installation of Project Infrastructure and Stormwater Management System) would involve rough grading and earthmoving activities associated with installation of private roads, public utility connections, LOVR frontage improvements, and the stormwater management system (including realignment of Froom Creek and

development of the proposed offsite stormwater detention basin). At the same time, grading of the Lower Area and Upper Terrace, in anticipation of later development under Phases 2 and 3, as well as rough grading of Madonna Froom Ranch, would occur, as fill from each phase would be balanced across the site. During this overlapping grading period, approximately 31,800 cubic yards (cy) of fill materials would be balanced onsite, while 220,000 cy of fill rock material would be imported to the site to raise the Lower Area by 1 foot above the 100-year flood elevation. In addition, the realignment of Froom Creek would require delivery of approximately 2,300 cy of rock material for bank stabilization and erosion protection along the creek. The extensive amounts of grading would require large amounts of use of heavy diesel grading equipment and approximately 15,832 heavy haul truck trips in order to haul fill and rock material to the site, resulting in large quantities of NO_x, CO, and particulate matter emissions. For purposes of this analysis and consistent with the Phasing schedule identified in Section 2.6.1, *Construction Phasing and Implementation*, peak grading activities are assumed to occur for an approximate eight-month period from May 2020 to December 2020.

After completion of grading activities for the Lower Area, Phase 2 (Development of Villaggio Lower Area) would involve installation of private roadway and utility infrastructure, the emergency access road to Mountainbrook Church, as well as construction of the Lower Area senior residential community development. following completion of grading activities within the Upper Terrace Construction of Phase 3, following completion of grading activities within the Upper Terrace, would involve the development of residential uses and non-residential ancillary components of the Villaggio Upper Terrace, as well as the public park within Madonna Froom Ranch. Phase 4 (Development of Madonna Froom Ranch) would involve the development of the residential and commercial components of Madonna Froom Ranch. See Table 2-7 in Section 2.6.2, *Construction Activities* for details on construction phases and approximate grading amounts.

Construction pollutant emissions, such as NO_x and PM_{10}, would be generated through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the Project site. The majority of the Project's ROG emissions would be generated from the application of architecture coatings, including paints, stains, and other finishes that off-gas ROGs during the drying/curing process.

Emissions were calculated based on a typical construction equipment list and default CalEEMod emission factors. Each construction phase of the Project would last for more

than 90 days and would result in overlapping construction phases totaling five years of construction. Therefore, SLO County APCD quarterly thresholds (rather than daily thresholds) were used to determine the significance level of construction emissions. Maximum short-term emission estimates from construction of the Project are provided in Table 3.3-6. Detailed construction emissions and calculation assumptions are provided in Appendix D.

Table 3.3-6. Short-term Construction Emissions (Unmitigated)

	ROG	NO_x	ROG + NOx	CO	SO_2	PM_{10}	DPM (Exhaust $PM_{2.5}$)
Peak Daily Emissions (lbs/day)	180.81	191.01	371.82	109.68	0.27	30.51	7.23
Peak Quarterly Emissions (tons/qtr) [1]	1.09	5.46	8.15[2]	3.16	0.07	0.91	0.21
APCD Daily Thresholds (lbs/day)	--	--	137	--	--	--	7
APCD Quarterly Thresholds – Tier 1 (tons/qtr)	--	--	2.5	--	--	2.5	0.13
Above Threshold?	--	--	**YES**	--	--	NO	**YES**
APCD Quarterly Thresholds – Tier 2 (tons/qtr)	--	--	6.3	--	--	--	0.32
Above Threshold?	--	--	**YES**	--	--	--	NO

[1] tons/qtr calculated based on maximum annual emissions divided by four (i.e., one quarter of a year).
[2] tons/qtr for ROG + NO_x emissions calculated in CalEEMod.
See Appendix D for CalEEMod worksheets.

Modeled emissions for the Project were found to be above SLO County APCD daily and Tier 1 and Tier 2 Quarterly thresholds for construction emissions of ROG and NO_x, and above SLO County APCD Daily and Tier 1 Quarterly thresholds for DPM. Therefore, Project construction emissions are considered *potentially significant.*

Mitigation Measures

MM AQ-1 *A Construction Activity Management Plan (CAMP) shall be included as part of Project grading and building plans and shall be submitted to SLO County APCD and to the City for review and approval prior to the start of construction. The plan shall include but not be limited to the following elements:*

1. *A Dust Control Management Plan that encompasses the following dust control measures:*

    - *Reduce the amount of disturbed area where possible;*
    - *Water trucks or sprinkler trucks shall be used during construction to keep all areas of vehicle movement damp enough to prevent dust from leaving the site and from exceeding the APCD's limit of 20 percent opacity for greater than 3 minutes in any 60-minute period. At a minimum, this would require twice-daily applications. Increased watering frequency would be required when wind speeds exceed 15 miles per hour (mph). Reclaimed water or the onsite water well (non-potable) shall be used when possible. The contractor or builder shall consider the use of a SLO County APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control;*
    - *All dirt stock-pile areas shall be sprayed daily as needed;*
    - *Permanent dust control measures identified in the approved Project revegetation and landscape plans of any development within the Specific Plan area should be implemented as soon as possible following completion of any soil disturbing activities;*
    - *Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;*
    - *All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by SLO County APCD;*
    - *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;*
    - *Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;*
    - *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least 2 feet of freeboard in accordance with California Vehicle Code Section 23114;*
    - *Designate access points and require all employees, subconsultants, and others to use them. Install and operate a "track-out prevention device" where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can be any device or combination of devices that are effective at preventing track-out, located at the point of*

intersection of any unpaved area and a paved road. If utilized, rumble strips or steel plate devices shall be cleaned periodically. If paved roadways accumulate tracked-out soils, the track-out prevention device shall be modified or replaced to prevent track-out;

- *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;*
- *All of these fugitive dust mitigation measures shall be shown on grading and building plans; and*
- *The contractor or builder shall designate a person or persons to monitor the fugitive dust control 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 holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to SLO County APCD Compliance Division prior to the start of any grading, earthwork or demolition.*

2. *Implementation of the following BACT for diesel-fueled construction equipment. The BACT measures shall include:*
    - *Use of at least Tier 3 off-road equipment and 2010 on-road compliant engines;*
    - *Repowering equipment with the cleanest engines available; and*
    - *Installing California Verified Diesel Emission Control Strategies.*
3. *Implementation of the following standard air quality measures to minimize diesel emissions:*
    - *Maintain all construction equipment in proper tune according to manufacturer's specifications;*
    - *Fuel all off-road and portable diesel-powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).*
    - *Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines and comply with the State On-Road Regulation;*
    - *Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;*

- *On- and off-road diesel equipment shall not be allowed to idle for more than five minutes. Signs shall be posted in the designated queuing areas to remind drivers and operators of the five-minute idling limit;*
- *Diesel idling within 1,000 feet of sensitive receptors is not permitted;*
- *Staging and queing areas shall not be loated within 1,000 feet of sensitive receptors;*
- *Electrify equipment when feasible;*
- *Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,*
- *Use alternatively fueled construction equipment onsite where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.*

4. *Tabulation of on- and off-road construction equipment (age, horse-power, and miles and/or hours of operation);*
5. *Schedule construction truck trips during non-peak hours (as determined by the Public Works Director) to reduce peak hour emissions; and*
6. *Limit the length of the construction work-day period to 8 hours max.*

Plan Requirements and Timing. The CAMP shall be submitted to SLO County APCD and to the City for review and approval prior to issuance of grading and construction permits and recordation of the final VTM. All required fugitive dust and emissions control measures shall be noted on all grading and building plans and all construction activities shall adhere to measures throughout all grading, hauling, and construction activities. The contractor or builder shall provide the City Community Development Director and SLO County APCD with the name and contact information for an assigned onsite dust and emissions control monitor(s) who has the responsibility to: a) assure all dust control requirements are complied with including those covering weekends and holidays, b) order increased watering as necessary to prevent transport of dust offsite, and c) attend the pre-construction meeting. The dust monitor shall be designated prior to grading permit issuance for each Project phase. The dust control components apply from the beginning of any grading or construction throughout all development activities until occupancy is issued and landscaping is successfully installed.

Monitoring. City staff shall ensure measures are depicted on the CAMP and all submitted grading and construction plans for each Project phase. The Applicant shall be responsible for compliance during construction activities, including holidays or weekends when work may not be in progress. City grading and building inspectors shall spot check and ensure compliance onsite.

MM AQ-2 *To reduce ROG and NO_x levels during the architectural coating phase, low or no Volatile Organic Compound (VOC)-emission paint shall be used with levels of 50 grams per liter (g/L) or less (Odorless, Zero VOC Paint). The schedule for architectural coatings application shall be extended, limiting the daily coating activity to a level determined acceptable by SLO County APCD.*

Plan Requirements and Timing. The Applicant shall verify the measures through written documentation submitted to the City and SLO County APCD for review and approval. Measures shall be indicated on all building and construction plans and submitted to SLO County APCD and to the City for review and approval prior to issuance of building permits and recordation of the final VTM.

Monitoring. City shall verify measures with the Applicant and SLO County APCD. City staff shall ensure measures are depicted on all building and construction plans. City building inspectors shall perform site inspections to ensure compliance.

MM AQ-3 *An offsite mitigation strategy shall be developed and agreed upon by the Applicant, City, and SLO County APCD at least three months prior to the issuance of grading permits. Offsite mitigation strategies may be in the form of cash payment, circulation improvements above the Project's fair share, or funding for ongoing transit improvements. The Applicant shall provide appropriate funding necessary to offset the Project's residual construction-related ROG+NO_x emissions beyond SLO County APCD's daily threshold at least two months prior to the start of construction to help facilitate emission offsets that are as real-time as possible. Cash payment of offsite mitigation fees shall be calculated based on the most current ARB-approved Carl Moyer Guidelines at the time of commencement of each Project phase. Offsite mitigation strategies shall include one or more of the following:*

- *Develop or improve park-and-ride lots;*
- *Fund a program to buy and scrap older, higher emission passenger and heavy-duty vehicles;*
- *Retrofit or repower heavy-duty construction equipment, or on-road vehicles;*
- *Subsidize vanpool programs;*
- *Contribute to funding of new bike lanes;*
- *Replace/repower San Luis Obispo Regional Transit Authority (SLORTA) transit buses;*
- *Purchase Verified Diesel Emission Control Strategies (VDECS) for transit buses or construction fleets; and*
- *Fund expansion of existing SLORTA transit services.*

Plan Requirements and Timing. The Applicant shall prepare and submit the offsite mitigation strategy to SLO County APCD for review and to the City for approval at least three months prior to the issuance of grading permits for Phase 1 construction. The Applicant shall provide any necessary funding to SLO County APCD at least two months prior to the start of construction.

Monitoring. SLO County APCD and City staff shall ensure offsite mitigation measures are appropriate. If the Applicant elects to pay mitigation fees, SLO County APCD shall verify the receipt of funding to the City. If the Applicant elects to provide improvements, proposed improvements shall be approved by the City and SLO County APCD prior to implementation. City and SLO County APCD staff shall monitor proposed improvements to ensure compliance.

Residual Impact

The Project would be required to implement MM AQ-1 through -3 which are consistent with standards mitigation measures for construction equipment, application of BACT, and implementation of a CAMP. MM AQ-1 and -2 consist of quantifiable emissions reduction measures which would reduce construction-related air quality impacts from ROG, NO_x, and DPM emissions below SLO County APCD Tier 2 quarterly thresholds. Despite implementation of these measures, ROG and NO_x emission would continue to exceed SLO County APCD daily and Tier 1 quarterly thresholds (see Table 3.3-7). As such, the Project is required to implement MM AQ-3, requiring that the Project Applicant fund or implement

a range of improvements intended to mitigate Project emissions offsite, or pay the SLO County APCD's standard mitigation fee. Though the mitigation strategies and associated emissions reductions outlined in MM AQ-3 cannot be quantified for the Project, SLO County APCD deems the measures effective in reducing Project emissions to a level of insignificance. Residual impacts would be *less than significant.*

Table 3.3-7. Short-Term Construction Emissions (Mitigated)

	ROG	NO_x	ROG + NOx	CO	SO_2	PM_{10}	DPM (Exhaust $PM_{2.5}$)
Peak Daily Emissions (lbs/day)	59.96	120.79	180.75	129.09	0.27	17.74	4.35
Peak Quarterly Emissions (tons/qtr)[1]	0.38	3.43	5.00[2]	3.71	<0.01	0.51	0.13
APCD Daily Thresholds (lbs/day)	--	--	137	--	--	--	7
APCD Quarterly Thresholds – Tier 1 (tons/qtr)	--	--	2.5			2.5	0.13
Above Threshold?	--	--	**YES**	--	--	NO	NO
APCD Quarterly Thresholds – Tier 2 (tons/qtr)	--	--	6.3	--	--	--	0.32
Above Threshold?	--	--	NO	--	--	NO	NO

[1] tons/qtr calculated based on maximum annual emissions divided by four (i.e., one quarter of a year).
[2] tons/qtr for ROG + NO_x emissions calculated in CalEEMod.
See Appendix D for CalEEMod worksheets.

Impact AQ-2 The Project would result in potentially significant long-term operational emissions (Significant and Unavoidable).

Operational emissions from the Project include those generated by vehicle trips (mobile emissions), the use of natural gas (energy emissions), use of consumer products and appliances, and the use of landscaping maintenance equipment (area source emissions). Maximum daily operational emissions of the Project were estimated using CalEEMod.

While the Project would not exceed annual emissions thresholds, projected maximum daily emissions for the Project would be above the established APCD daily thresholds for operational emissions of ROG + NO_x (see Table 3.3-8). Project operational emissions are therefore considered *potentially significant.*

Table 3.3-8. Long-Term Operational Emissions (Unmitigated)

	ROG	NO_x	ROG + NOx	CO	SO_2	PM_{10}	DPM
Total Daily Operational Emissions							
Area (lbs/day)	24.27	0.60	24.87	51.96	<0.01	0.28	0.28
Energy (lbs/day)	0.38	3.35	3.73	2.16	0.02	0.26	0.26
Mobile (lbs/day)	6.70	23.85	29.80	67.42	0.21	20.47	0.17
Total (lbs/day)	31.35	27.80	58.4	121.54	0.23	21.01	0.72
Threshold (lbs/day)	-	-	25	550	-	25	1.25
Above Threshold?	-	-	**YES**	NO	-	NO	NO
Total Annual Operational Emissions							
Area (tons/year)	4.40	0.10	4.50	8.57	<0.01	0.05	0.05
Energy (tons/year)	0.07	0.61	0.68	0.39	<0.01	0.05	0.05
Mobile (tons/year)	1.05	3.99	5.04	11.06	0.03	3.35	0.03
Total (tons/year)	5.52	4.70	10.22	20.02	0.03	3.45	0.13
Threshold (tons/year)	-	-	25	-	-	25	-
Above Threshold?	-	-	NO	-	-	NO	

Note: Values in this table are rounded for reporting purposes.
See Appendix D for CalEEMod worksheets.

Mitigation Measures

MM AQ-4 *Consistent with standard mitigation measures set forth by SLO County APCD, Projects generating more than 50 lbs/day of combined ROG + NO_x shall implement all feasible measures within Table 3-5 of the Air Quality Handbook. The following mitigation measures shall apply to the Project (Table 3.3-9).*

Requirements and Timing. The Applicant shall include the mitigation measures in Table 3-5 of the 2012 SLO County APCD CEQA Air Quality Handbook (as amended by the 2017 Clarification Memorandum), as indicated in the column "How the Project Will Include This Measure" in Table 3.3-9, above. All feasible standard mitigation measures shall be included in the FRSP prior to approval of the final FRSP and these measures shall also be included on the final VTM prior to recordation. City staff shall ensure the above measures are incorporated into the FRSP, final VTM, and building plans prior to permit issuance.

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
1	R	SD	Install gas or electric fireplace in place of U.S. EPA-certified Tier 2 residential wood burning appliances.	GHG, O, P	D	The Project does not propose any wood burning appliances.
2	C, R	SD, T	Design and build high-density, compact development within the urban core or URL to encourage alternative transportation (walk, bike, bus, etc.).	GHG, O, P	D	The Project would include residential and commercial development within the URL and would provide access to transit and non-vehicular transportation; however, the Project site lies on the southern edge of the City and is not located within an urban core area. To encourage alternative transportation, the Project shall provide a range of transit options and incentives to employees and residents of Villaggio, and commercial and residential developments within Madonna Froom.
3	C, I, R	SD, T	Provide a pedestrian-friendly and interconnected streetscape with good access to/from the development for pedestrians, bicyclists, and transit users to make alternative transportation more convenient, comfortable and safe (may include: appropriate signalization and signage; safe routes to school; linking cul-de-sacs and dead ends; orienting buildings towards streets with automobile parking in the rear, etc.).	GHG, O, P	D	The Draft FRSP includes guidelines for incorporating pedestrian walkways, outdoor seating, and landscape areas where possible. Public commercial collector roads shall be connected to adjacent development to allow pedestrian and bicyclist access, and public pedestrian trails will connect public roads to the existing trail system in the Irish Hills Natural Reserve.

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
4	C, I, R	SD, T	Provide shade over 50 % of parking spaces to reduce evaporative emissions from parked vehicles.	O	D	Shade trees are to be provided as part of the Project per City requirement. The Applicant shall amend the Draft FRSP to require shade trees are provided so a minimum of 50 % of proposed parking spaces are shaded.
5	C, I, R	SD, T	Reduce fugitive dust from roads and parking areas with the use of paving or other materials.	P	D	No unpaved roads, driveways, or parking areas are proposed as part of the Project.
6	C, I, R	SD, T	Implement driveway design standards (e.g., speed bumps, curved driveway) for self-enforcement of reduced speed limits on unpaved driveways.	P	D	The City has a requirement that the design speeds in local and collector roads not exceed 25 mph. Bulb-outs, traffic circles, chicanes, and other features are also included in the Project. There are no unpaved roads or driveways in the development.
7	C, I, R	SD, T	Use an APCD-approved suppressant on private unpaved roads leading to the site, unpaved driveways and parking areas, applied at a rate and frequency that ensure compliance with APCD Rule 401: Visible Emissions, and ensures offsite nuisance impacts do not occur.	P	O	No unpaved roads, driveways, or parking areas are proposed as part of the Project.
8	C, I, R	SD, T	Incorporate traffic calming modifications to Project roads to reduce vehicle speeds and increase pedestrian and bicycle usage and safety.	GHG, O, P	D	City has a requirement that the design speeds in local and collector roads not exceed 25 mph. Bulb-outs, traffic circles, chicanes, and other features are included. There are no unpaved

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
						roads or driveways in the development.
9	C, I, R	SD, T	Work with SLOCOG to create, improve, or expand a nearby 'Park-and-Ride' lot with car parking and bike lockers in proportion to the size of the Project.	GHG, O, P	D	The Project Applicant shall work with SLOCOG to improve or expand nearby 'Park-and- Ride' lots within the City, such as the 'Park–and-Ride' lot located at the Calle Joaquin hotel development.
10	C	SD, T	Implement onsite circulation design elements in parking lots to reduce vehicle queuing and improve the pedestrian environment.	GHG, O, P	D	The Applicant shall amend the Draft FRSP to require onsite circulation design in parking lots to reduce vehicle queueing and improve the pedestrian environment.
11	C, I	SD, T	Provide employee lockers and showers to promote bicycle and pedestrian use. One shower and five lockers for every 25 employees is recommended.	GHG, O, P	D	The Applicant shall amend the Draft FRSP to require workplaces provide employee lockers and showers consistent with this measure and the City Zoning Regulations.
12	C, I, R	SD, T	Increase bicycle accessibility and safety in the vicinity of the Project; for example: provide interconnected bicycle routes/lanes or construction of bikeways.	GHG, O, P	D	The Project includes a number of improvements to pedestrian and bicyclist environment. MM TRANS-5, -8, -9, and -10 requiring installation of protected bike lanes along Tank Farm Road and LOVR and would ensure consistency with this measure.
13	C, I, R	SD, T	Exceed Cal Green standards by 25 % for providing onsite bicycle parking: both short-term racks and long-term lockers, or a locked room with standard racks and access limited to bicyclists only.	GHG, O, P	D	The Applicant shall amend the Draft FRSP to require onsite bicycle parking consistency with this measure and the City Zoning Regulations.

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
14	C, I, R	SD, T	Develop recreational facility (e.g., parks, trails, gym, pool, etc.) within 0.25 mile from site.	GHG, O, P	D	The Project includes development of various facilities to meet the recreational needs of the residents of Villaggio. The Project also includes the development of a 2.9-acre neighborhood park within the Project site.
15	C, I, R	SD, T	If the project is located on an established transit route, provide improved public transit amenities (e.g., covered transit turnouts, direct pedestrian access, bicycle racks, covered bench, smart signage, route information displays, lighting, etc.).	GHG, O, P	D	The Project site is located along LOVR and residential development is less than 0.25 mile from bus stops for Transit Line 2A and the Laguna Tripper. The Project would include installation of a new transit stop for these routes to improve public transit amenities and access.
16	C, I, R	T	Provide bicycle-share program for development.	GHG, O, P	O	The Applicant shall work with Public Works to amend the Draft FRSP to include a hub/node of the City's bicycle share network at the Project site. The infrastructure/operation of the site shall be the responsibility of the developer.
17	C, I	T	Require 15 % of fleet vehicles to be zero emission vehicles.	DPM, GHG, O	O	The Project does not propose any commercial or industrial use types which would utilize fleet vehicles; however, future uses may include the use of shuttles (i.e. hotel/airport shuttle). The Applicant shall amend the Draft FRSP to require the use of zero emission vehicles for 15 percent of all proposed shuttle or group-transport vehicles.

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
18	C, I	T	Project includes alternative fuel fleet vehicle(s).	DPM, GHG, O	O	The Project does not propose any commercial or industrial use types which would utilize fleet vehicles; however, future uses may include the use of shuttles (i.e. hotel/airport shuttle). The Applicant shall amend the Draft FRSP to require the use of alternative fuel shuttle or group-transport vehicles.
19	C, I, R	T	Provide neighborhood EV/car-share program for the development.	GHG, O	O	The Applicant shall amend the Draft FRSP to require provision of neighborhood electric vehicles/car-share programs for the development, consistent with MM AQ-5.
20	C, I, R	T	Provide dedicated parking for carpools, vanpools, and/or high-efficiency vehicles to meet or exceed Cal Green Tier 2.	GHG, O, P	O	The Applicant shall amend the Draft FRSP to require the provision of dedicated parking for carpools, vanpools, and high-efficiency vehicles in exceedance of Cal Green Tier 2 standards.
21	C, I	T	Provide vanpool, shuttle, mini bus service (alternative fueled preferred).	GHG, O, P	O	The FRSP shall be amended to include measures for encouraging and incentivizing residents and employees of the proposed development participate in the San Luis Obispo Regional Rideshare program. The Applicant or developer of the FRSP shall also provide car-share opportunities and promote carpool, vanpool, and EV vehicles. See also MM AQ-6.
22	C, I, R	T	Work with SLO Regional Rideshare to educate occupants with alternative	GHG, O, P	O	The FRSP shall be amended to include measures for encouraging

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
			transportation and smart commute information (e.g., transportation board, electronic kiosk, new hire packets, web portal, newsletters, social media, etc.).			and incentivizing residents and employees of the proposed development participate in the San Luis Obispo Regional Rideshare program. See also MM AQ-6.
23	C, I	T	Provide child care facility onsite.	GHG, O, P	O	The Applicant shall amend the Draft FRSP to include policies for the provision of child care facilities onsite.
24	C, I	T	Implement programs to reduce employee vehicle miles traveled (e.g. incentives, SLO Regional Rideshare trip reduction program, vanpools, onsite employee housing, alternative schedules (e.g., 9–80, 4–10, telecommuting, satellite work sites etc.).	GHG, O, P	O	The Project is required to implement mitigation programs and strategies to reduce employee VMT and mobile-source emissions. Refer to MM TRANS-5, -8, -9, -10, MM AQ-6.
25	C, I	T	Provide a lunchtime shuttle to reduce single occupant vehicle trips and/or coordinate regular food truck visits.	GHG, O, P	O	The Applicant shall amend the Draft FRSP to include policies for provision of lunchtime shuttles or to encourage foot truck visits to the Project site to reduce trips associated with onsite commercial businesses, as feasible.
26	C	T	Provide delivery service in clean fueled vehicles.	GHG, O, P	O	The Applicant shall amend the Draft FRSP to require delivery-based commercial uses that may be developed to utilize clean fueled vehicles, as feasible.
27	C	T	At community event centers (i.e., amphitheaters, theaters, and stadiums), provide free valet bicycle parking.	GHG, O, P	O	The Project does not propose development of any community event centers or other communal gathering areas.

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
28	C, I	T	Implement a "No Idling" vehicle program which includes signage, enforcement, etc.	DPM, GHG, O	O	The Applicant shall amend the Draft FRSP to include programs and policies requiring implementation of a "No Idling" vehicle program for commercial development which shall include standards for signage and enforcement.
29	R	T	Provide free-access telework terminals and/or wi-fi access in multi-family projects.	GHG, O, P	O	The Applicant shall amend the Draft FRSP to include programs and policies requiring provision of free-access telework terminals and/or wi-fi access in multi-family development.
30	C, I	T	Meet or exceed Cal Green Tier 2 standards for providing EV charging infrastructure.	GHG, O, P	D	The FSRP includes Program 4.7.2f, which states that individual garages are to be "electric vehicle-ready" and shared parking areas for apartments shall incorporate EV charging stations. In addition, compliance with City Zoning Regulations regarding EV parking spaces shall be required.
31	C, I	T	Install 1 or more level 2 or better EV charging stations.	GHG, O, P	D	The Draft FRSP includes Program 4.7.2f, which states that individual garages are to be "electric vehicle-ready" and shared parking areas for apartments shall incorporate EV charging stations. In addition, compliance with City Zoning Regulations regarding EV parking spaces shall be required.
32	C, I, R	EE	Meet or exceed Cal Green Tier 1 standards for building energy efficiency.	GHG, O	D	The Applicant shall amend the Draft FRSP to include programs and policies for ensuring new

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
						development, at a minimum, meets Cal Green Tier 2 standards for building efficiency.
33	C, I, R	EE	Meet or exceed Cal Green Tier 2 standards for building energy efficiency.	GHG, O	D	The Applicant shall amend the Draft FRSP to include programs and policies for ensuring new development, at a minimum, meets Cal Green Tier 2 standards for building efficiency.
34	C, I, R	EE	Meet or exceed Cal Green Tier 2 standards for utilizing recycled content materials.	GHG	D	The Applicant shall amend the Draft FRSP Program 4.7.4a to require, at a minimum, use of recycled content materials consistent with Cal Green Tier 2 standards.
35	C, I, R	EE	Meet or exceed Cal Green Tier 2 standards for reducing cement use in concrete mix as allowed by local ordinance and conditions.	GHG	D	The Applicant shall amend the Draft FRSP to include a policy for ensuring construction of the Project, at a minimum, meets Cal Green Tier 2 standards for reducing cement use in concrete mix. Recipe for cement mix shall be verified by the City prior to Project construction and subject to inspection by City permit compliance staff.
36	C, I, R	EE	All built-in appliances shall be Energy Star certified or equivalent.	GHG	D	The Draft FRSP includes Program 4.7.3a, which requires that all new residential units shall incorporate high-efficiency Energy Star compliant appliances.
37	C, I, R	EE	Utilize onsite renewable energy systems (e.g., solar, wind, geothermal, biomass and/or bio-gas) to offset at least 10 % of energy use.	GHG	D	The Project is required to comply with MM AQ-5, requiring the Draft FRSP be amended to include measures necessary to reduce Project operational

Table 3.3-9. Mitigation Measures from APCD CEQA Air Quality Handbook (Continued)

Measure #	Land Use[1]	Measure Type[2]	Mitigation Measure	Pollutant Reduced[3]	Phase	How the Project Will Include This Measure
						stationary-source emissions, including utilization of 100 % carbon-free energy.
38	C, I, R	EE	Meet or exceed Cal Green Tier 2 standards for the use of greywater, rainwater or recycled water.	GHG	D	The Applicant shall amend the Draft FRSP to include programs or policies requiring the use of greywater, rainwater, or recycled water by an amount which, at a minimum, meets Cal Green Tier 2 standards.
39	C, I, R	EE	Provide and require the use of battery powered or electric landscape maintenance equipment for new development.	GHG, O	D	The Applicant shall amend the Draft FRSP to include programs or policies requiring the use of battery powered or electric landscape maintenance equipment.
40	C, I, R	EE	Meet or exceed Cal Green Tier 2 standards for using shading, trees, plants, cool roofs, etc. to reduce "heat island" effect.	GHG	D	The Applicant shall amend the Draft FRSP to include programs or policies requiring the use of shading, trees, plants, cool roofs, and other measures to reduce "heat island" effect, at a minimum, meets Cal Green Tier 2 standards.
41	C, I, R	EE	Design roof trusses to handle dead weight loads of standard solar-heated water and photovoltaic panels.	GHG, O	D	The Applicant shall amend the Draft FRSP to include programs and policies requiring the design of roof trusses to handle dead weight loads of standard solar-heated water and photovoltaic panels.

EV – Electric Vehicle
SLOCOG - San Luis Obispo Council of Governments

Monitoring. City staff shall ensure measures are listed on final plans submitted for review and approval by the City. City staff shall work with the Applicant to ensure that these strategies are implemented. The City shall conduct periodic site visits to ensure compliance, in consultation with the SLO County APCD.

Residual Impact

For unmitigated projects that result in emissions of 50 lbs/day or more of combined ROG and NO_x, SLO County APCD CEQA Air Quality Handbook recommends that all feasible standard mitigation measures be implemented as part of the Project to ensure that impacts would be less than significant, based on a list included as Table 3-5 in that document. The list covers a large range of activities and would reduce impacts either through site design or increasing the energy efficiency of the Project, but focuses primarily on reducing mobile-source emissions through implementing transportation strategies to reduce VMT. In many cases, adherence to the Project design guidelines and other required mitigation identified in this EIR would implement many of these measures.

Mitigation Measure AQ-2 summarizes the list of appropriate mitigation measures, and indicates which of these are to be incorporated by the Applicant in accordance with the 2012 APCD CEQA Air Quality Handbook (as amended by the 2017 Clarification Memorandum). Many of these measures would be incorporated as policies of the FRSP for which future development would be required to implement and would manifest as site design measures that would reduce area source emissions. Measures identified in MM AQ-2 emphasize transportation strategies to reduce VMT and associated mobile-source NO_x emissions. Incorporation of this mix of measures would be feasible for the Project, and would substantially reduce operational ROG and NO_x emissions. However, it is noted that many measures listed in MM AQ-2 do not contain quantifiable air quality emissions reductions for programs such as the FRSP. While implementation of these measures can feasibly reduce ROG and NO_x, the Project's estimated emissions after implementation of these measures cannot reasonably be quantified, and long-term operational residual impacts are conservatively considered *significant and unavoidable* due to potential continued exceedance of maximum daily emissions thresholds.

Impact AQ-3 Project development could result in the release of toxic diesel emissions or naturally occurring asbestos which could expose sensitive receptors to emissions-related health risks (Less than Significant).

Toxic Diesel Emissions

The Project would generate DPM emissions from construction activities. DPM is listed as a TAC by the CARB. CARB identifies high-volume freeways and roads (highways, urban roads carrying 100,000 vpd, and rural roads carrying 50,000 vpd), dry cleaners, and large gasoline stations as potential sources of TACs. SLO County APCD has a threshold for construction and operational DPM emissions, but not specifically for mobile-source DPMs for human health effects. The potential for TACs to have an effect on sensitive receptors would occur if the Project would generate TACs in quantities that may have an adverse effect on sensitive receptors.

SLO County APCD defines sensitive uses or receptors as people that have an increased sensitivity to air pollution or environmental contaminants, which include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units (SLO County APCD 2012). The proposed development area in the Upper Terrace area of the site is located as close as 325 feet away and would be accessed from the Mountainbrook Church facility to the south. Mountainbrook Church does not provide day care or long-term child care facilities that may expose children under the age of 16 to extended periods of DPMs during construction. Further, guests of the hotels along Calle Joaquin are not considered sensitive receptors to air pollutants, as these guests would not reside in these hotels for extended periods of time. Thus, the nearest sensitive receptor to the Project site is the Pacific Beach High School located approximately 0.27 mile to the northeast, which would be substantially removed and separated from the site by urban development. Therefore, Project construction would not significantly endanger the health of existing nearby sensitive receptors to air emissions.

Project construction would generate DPM emissions due to operation of heavy construction equipment. For purposes of this analysis, it is assumed that Project phasing would allow the Lower Area of Villaggio to be occupied as early as 2022. Occupancy would precede later construction phases of the Upper Terrace and Madonna Froom Ranch. While mass grading of the site would be complete by 2022, fine grading and vertical construction of the Upper Terrace and Madonna Froom Ranch would continue between 2022 and 2025, which would generate emissions from trucks and construction equipment. Independent living senior residences, the Villaggio Health Care Administration building, and senior assisted living facilities occupied in 2022 would be considered sensitive receptors to air emissions, including TACs and DPMs from Project construction. Grading, onsite transport of cut material between the Upper Terrace and Madonna Froom Ranch areas, and import

of offsite fill to the Madonna Froom Ranch Area would have the potential to generate DPM emissions from heavy construction equipment and heavy haul trucks (15,832 haul truck trips).

To protect future residents in the Lower Area from construction emissions of Phase 3 and Phase 4 (see Section 2.0, *Project Description*), the Project would strategically schedule grading of the Upper Terrace (Phase 3) to occur at the same time as grading activities associated with Phase 1 and 2. All major grading and earthmoving, including balancing soils within the Project site, would occur prior to occupancy of any units within the Specific Plan area. Once occupancy begins, the Project would reroute construction trips to the Upper Terrace, including any heavy haul or materials delivery trips, along Calle Joaquin to the Mountainbrook Church driveway and parking lot instead of through the local roads constructed to serve the Project. This circulation approach would move potential sources of DPM emissions offsite and away from sensitive receptors residing onsite within the Villaggio Lower Area once it is constructed. This proposed construction phasing would therefore reduce potential for exposure of sensitive elderly populations to the most intensive construction activities and DPM emissions associated with development under the Project.

Naturally Occurring Asbestos

The Project would result in excavation and grading of serpentine soils in the Upper Terrace, which may release NOA into the air. The Applicant-prepared geological reports indicate that asbestos-containing serpentine rock is present beneath topsoil in the Upper Terrace (Appendix G). Since the Project site lies within an area with the potential to contain NOA per the SLO County APCD NOA map, compliance with the NOA ATCM would be required. The NOA ATCM requires submittal of a geologic evaluation determining whether serpentine rock is present on a project site, and if so, to what extent (less or more than 1 acre). Depending on the results of the geologic evaluation, the Project would be required to file an exemption request form (if no serpentine is present), a Mini Dust Control Measure Plan (if less than 1 acre of serpentine is present), or an Asbestos Dust Control Measure Plan (if more than 1 acre of serpentine is present). Presuming the Project would disturb more than 1 acre of serpentine, the Project would be required to submit a geologic evaluation and Asbestos Dust Control Measure Plan to SLO County APCD for approval.

The Project would comprise residential and commercial uses, which are considered uses that would not generate substantial amounts of TACs and would not pose a significant risk to sensitive receptors in the Project vicinity. The Project site is not located adjacent to any

existing industrial uses (e.g., construction material companies, machine shops, construction vehicle staging areas) that may generate additional diesel particulates through the idling of large diesel equipment or construction vehicles. Additionally, according to the 2005 CARB's Air Quality and Land Use Handbook, a buffer of 500 feet between residences and a major freeway, and more than 50 feet from a typical gasoline station, should be maintained. U.S. 101 is located approximately 2,330 feet to the south of the Project site, and no gasoline stations are located in the immediate (50 feet or less) vicinity of the Project site. Therefore, the Project is not expected to expose sensitive receptors to substantial levels of TACs following completion of Project construction.

There are no existing sensitive receptors on the Project site or vicinity that would be significantly exposed to Project construction emissions and future sensitive receptors would be protected from exposure to significant construction emissions through Project phasing. Proposed areas of development within the Specific Plan area are also not located adjacent (i.e., within 500 feet) to a freeway producing significant DPMs or a gasoline station (i.e., 50 feet). Though the Project site overlies potentially NOA in serpentine areas underlying the Upper Terrace, SLO County APCD standards require a geologic evaluation and an Asbestos Dust Control Measure Plan for approval prior to grading. Therefore, impacts to sensitive receptors due to air emission health risks would be *less than significant*.

Impact AQ-4 The Project would be consistent with the City's Climate Action Plan, but would result in potentially significant GHG emissions during construction and operation (Less than Significant with Mitigation).

The Project would generate GHG emissions during construction, including heavy equipment, and operation, including energy and vehicle use. Analysis of environmental impacts from GHG emission considers both quantified and qualified analysis herein.

Construction GHG Emissions

Construction activities for the Project are assumed to occur over a period of approximately five years for the purposes of this analysis. Based on CalEEMod estimates, construction activities for the Project would generate an estimated 7,684.95 MT of CO_2e (see Table 3.3-10). Amortized over a 25-year period (consistent with APCD methodology), construction of the Project would generate approximately 307.40 MT of CO_2e per year.

Table 3.3-10. Estimated Construction GHG Emissions (Unmitigated)

Year	Annual Emissions MT CO_2e
2020	2,733.52
2021	1,444.27
2022	896.58
2023	1,691.60
2024	918.98
Total	**7,684.95**
Amortized over 25 years	***307.40***

Operational GHG Emissions

Operational GHG emissions would be generated from area, energy use, solid waste, water use, and transportation. Total operational emissions would be approximately 5,773.50 MT CO_2e/yr (see Table 3.3-11). Combined with construction emissions amortized over a 25-year period (307.40 MT CO_2e), total GHG emissions for the Project would be approximately 6,080.90 MT CO_2e/yr. Based on a new resident population of 1,231, the Project is estimated to result in 4.9 MT CO_2e/SP/yr.

Table 3.3-11. Estimated Operational GHG Emissions (Unmitigated)

Emission Source	Annual Emissions MT CO_2e
Area	14.35
Energy Use	2,235.08
Mobile	3,128.70
Water Use	253.18
Solid Waste	142.19
Total	5,773.50
Amortized Construction Emissions	*307.40*
Total Project GHG Emissions	**6,080.90**
Project Population (Residents)	1,231
Per Capita Emissions	**4.9**

The City's Climate Action Plan is designed as a Qualified GHG Reduction Strategy, consistent with CEQA Guidelines Section 15183.5(b). The Project's consistency with the City's Climate Action Plan goals, actions, and strategies is described below:

- Buildings Goal: Reduce energy-related emissions by promoting greater energy efficiency at the point of final use in buildings.

  - The Project is consistent with the buildings actions and strategies by its inclusion of goals, policies, and programs in Chapter 4, Design Guidelines, of the Draft FRSP for promoting greater energy efficiency, inclusion of alternative energy systems, use of energy-efficient types of lighting, and incorporation of high-efficiency Energy Star compliant appliances.

- Renewable Energy Goal: Use cleaner and renewable energy sources.
  - The Project is consistent with the renewable energy actions and strategies by its inclusion of goals, policies, and programs in Chapter 4, Design Guidelines, of the Draft FRSP for inclusion of alternative energy systems in development over 5,000 sf in size.

- Transportation and Land Use Goal: Improve transportation options.
  - The Project is consistent with the transportation and land use elements and strategies within the Climate Action Plan with development of pedestrian and bicycle facilities along the public street system, dedicated pedestrian pathways, extension of Class II bike lanes along LOVR, and installation of a transit stop at the Project site entrance along LOVR. At full buildout of the Project, the homes and businesses in Madonna Froom Ranch and Villaggio would be interconnected to the rest of the City through a dense street pattern, sidewalks, local and regional bikeways and nearby transit.

- Water Goal: Reduce and reuse water consumed by the community.
  - The Project is consistent with the water actions and strategies by its inclusion of policies and programs oriented towards reducing average daily potable water; and its inclusion of progressive stormwater treatment and management improvements through bioretention swales, runoff treatment and filtration, permeable paving, and other integrated treatment detention/retention systems. Outdoor landscaping irrigation demand for the Project site, including irrigation needed to establish or maintain vegetation in the proposed stormwater detention basin and realigned Froom Creek corridor, will be met entirely with non-potable recycled water.

- Solid Waste Goal: Prevent, reduce, reuse, and recycle solid waste to minimize the amount of waste being sent to the landfill.

  - The Project is consistent with the solid waste actions and strategies by being compliant with the City's proactive waste management practices that reduce waste-related GHG emissions.

- Parks and Open Space Goal: Maintain natural areas and plant trees and green spaces.

  - The Project is consistent with the parks and open space actions and strategies by its inclusion of 59.0 acres of onsite open space in accordance with General Plan LUE Policy 8.1.6, which includes a 2.9-acre neighborhood park that is within 0.25 mile of any residential unit and the realigned Froom Creek corridor.

- Government Operations Goal: Reduce GHG emissions from government operations to 1990 levels using a mix of strategies, including: conservation, clean energy, efficiency upgrades, recycling, and alternative transportation incentives for employee commute.

  - The Project is consistent with the government operations actions and strategies by the inclusions discussed above.

All applicable actions and measures identified in the City's Climate Action Plan must be incorporated as binding and enforceable components of the Project for it to be found consistent with the Climate Action Plan. Based on initial analysis of Project consistency above, the Project would be consistent with the goals of the Climate Action Plan.

However, as described above under the *GHGs and Climate Change CEQA Thresholds* discussion under Section 3.3.3.1, the City's Climate Action Plan is specific to the goals of AB 32 and does not consider, nor is in compliance with, the 2030 GHG reduction targets mandated under SB 32. Therefore, the Project is also analyzed against the SLO County APCD GHG thresholds, reduced by 40 percent to align with SB 32, and CARB and AEP guidance on SB 32 compliance. Compared to SB 32-compliant thresholds for land development, a Bright Line Threshold of 690 MT CO_2e, or an efficiency threshold of 2.65 MT of CO_2e/SP/yr, the Project's estimated 6,080.9 MT CO_2e total and 4.9 MT CO_2e/SP/yr emissions are considered inconsistent with the basic goals, objectives, and emissions reduction strategies of the state's adopted GHG laws. The Project is also considered inconsistent with the City's current goal for achieving citywide net-zero carbon emissions by the year 2035, which reflects the City's intent to achieve the emissions and carbon reduction requirements of SB 32 and Executive Order B-55-18. Project emissions are therefore considered *potentially significant* due to inconsistency with adopted state and local goals and regulations for reducing GHG emissions.

Mitigation Measures

MM AQ-4 shall apply.

MM AQ-5 *The Applicant shall revise the Draft FRSP to include measures necessary to reduce Project operational stationary-source GHG emissions to achieve net zero emissions, consistent with the City's 2035 net-zero GHG emissions target. These measures shall include Best Available Mitigation strategies for reducing operational emissions, including but not limited to the following:*

- *Electrical power for the entirety of Project operations including but not limited to illumination, heating, cooling, and ventilation shall be provided by alternative or carbon-free energy sources according to the following priority: 1) on-grid power with 100-percent renewable or carbon-free source (a planned product of Monterey Bay Community Power available to the City in 2020), or 2) a combination of grid power and on site renewable generation to achieve annual zero net electrical energy usage, or 3) purchase of carbon offsets of any portion of power not from renewable or carbon-free sources. As a first priority, carbon-free sourced energy shall be purchased from Monterey Bay Community Power.*

- *For new buildings, onsite solar photovoltaic systems shall be required, and retrofitted buildings shall be encouraged to install onsite solar photovoltaic systems to offset energy demand, regardless of building size.*

- *All proposed commercial and health care facilities shall exceed the minimum standards of Title 24, Part 11 (Cal Green) by adopting all or some elements of Cal Green Tier 1 and 2 voluntary elective measures to increase energy efficiency in new buildings, remodels and additions. These measures shall prioritize upgrading lighting (e.g., using light-emitting diode [LED] lights), heating and cooling systems, appliances, equipment and control systems to be more energy efficient.*

Requirements and Timing. The Applicant shall include the above measure in the Final FRSP prior to approval and shall include the above measure on the final VTM prior to recordation. Plans submitted for building permits

shall incorporate Best Management Strategies, and for the selected Best Management Strategies, the Applicant shall work with City and SLO County APCD staff to calculate estimated stationary-source emissions to ensure achievement of net-zero stationary source operational emissions for the Project. City and SLO County APCD staff shall ensure the above measures are incorporated into the FRSP, final VTM, and building plans prior to permit issuance.

Monitoring. City staff shall ensure measures are listed on final plans submitted for review and approval by the City. City and SLO County APCD staff shall work with the Applicant to ensure that these strategies are implemented. The City shall verify compliance in consultation with the SLO County APCD.

MM AQ-6 *The Applicant shall revise the FRSP to include measures necessary to reduce the Project's operational, mobile-source emissions, and VMT to the maximum extent feasible, including, but not limited to the following:*

- *Rideshare and Employee Ridership Programs: The FRSP shall be amended to include measures for encouraging and incentivizing residents and employees of the proposed development participate in the San Luis Obispo Regional Rideshare program.*
- *Senior Shuttle Service: Villaggio shall provide clean fuel shuttle services or coordinate with existing shuttle services such as Dial-A-Ride and the Senior Go! Shuttle to provide curb-to-curb shuttle service for residents of the Villaggio Life Community Plan.*
- *All Electric Small Vehicles*: *The FRSP shall require all personal small vehicles (e.g., golf carts) be 100 percent electric powered.*
- *Car Share: Provide car-sharing opportunities within the Villaggio Life Community Plan and Madonna Froom Ranch areas.*
- *Promote Carpools, Vanpools, and Electric Vehicle (EV) Vehicles: Provide dedicated parking for carpools, vanpools, and high-efficiency vehicles in exceedance of Cal Green Tier 2 standards.*
- *Offsite EV Improvements: Work with SLO County APCD to expand or fund the expansion of EV charging stations throughout the City.*

Requirements and Timing. The Applicant shall include all feasible Best Management Strategies as part of the final FRSP and final VTM. For the selected Best Management Strategies, the Applicant shall work with City and SLO County APCD staff to calculate estimated mobile-source emissions to ensure emissions are reduced to the maximum extent feasible. City and SLO County APCD staff shall ensure the above measures are incorporated into the FRSP and final VTM prior to recordation.

Monitoring. City staff shall ensure measures are listed on the final VTM submitted for review and approval by the City. City and SLO County APCD staff shall work with the Applicant to ensure that these strategies are implemented. The City shall verify compliance in consultation with the SLO County APCD.

Residual Impact

Implementation of MM AQ-4 and -5 would ensure stationary-source operational emissions of the Project are reduced to 0 MT CO_2e/yr, consistent with the City's intent to achieve carbon neutrality by 2035, consistent with the purpose and intent of SB 32 to further reduce statewide GHG emissions, and consistent with Executive Order B-55-18 requiring attainment of statewide carbon neutrality by 2045. Similarly, MM AQ-4 and -6 would reduce Project mobile-source emissions to the maximum extent feasible for the proposed development. However, given the reduction in emissions from the combination of onsite and offsite mitigation strategies cannot be directly quantified, implementation of these mitigation would generally demonstrate compliance with adopted state and local policies for reducing GHG emissions, but potential remains for mobile-source GHG emissions to result in inconsistencies with established state and local GHG reduction strategies. Required mitigation would ensure the Project achieves compliance with adopted regulations and Citywide objectives and stationary-source operational emissions are reduced to 0 MT CO_2e/yr. Nevertheless, impacts would be *significant and unavoidable* due to continued potential for exceedance of GHG emissions thresholds as a result of Project mobile-source emissions.

Impact AQ-5 The Project is potentially inconsistent with the SLO County APCD's 2001 Clean Air Plan (Significant and Unavoidable).

Consistency analysis with local and regional plans, such as the Clean Air Plan, is required under CEQA. Consistency with the Clean Air Plan means that stationary and vehicle

emissions associated with the Project are accounted for in the Clean Air Plan's growth assumptions.

According to the County APCD's guidelines, a project may result in significant air quality impacts if it is inconsistent with the assumptions in the SLO County APCD Clean Air Plan. Consistency with the SLO County APCD Clean Air Plan is evaluated based on three criteria:

1) *Are the population projections used in the plan or project equal to or less than those used in the most recent Clean Air Plan for the same area?*

   The Project would include 174 multi-family units, 404 independent and assisted senior housing units, 51 beds for memory care and skilled nursing, and up to 100,000 sf of mixed commercial uses. This development would increase the City's population by approximately 1,231 people. The Clean Air Plan's population estimate for the City is 48,499 by 2015, and 305,854 for the County by 2015 (SLO County APCD 2001). According to 2018 estimates by the California State Department of Finance, the City population estimate is 46,548 and the County population estimate is 280,101 (California Department of Finance 2018). The City's General Plan population estimates are just marginally under the Clean Air Plan's projected population estimates. The increase of approximately 1,231 persons by the Project is within the population projections under the Clean Air Plan.

   The City's LUE Policy 8.1.5 indicates the specific plan for the area including the Project site should provide a variety of housing types and affordability levels, with performance standards stating a minimum of 200 dwelling units, and maximum of 350 dwelling units. This is inconsistent with the land uses and intensities proposed by the Project, which proposes a total of 174 multi-family units and 404 independent and assisted senior housing units. This is above the maximum range of units due to the inclusion of high-density and senior housing. The LUE objectives are intended to ensure that the Project site is developed primarily with a compact mixed-use project and includes provisions for onsite and offsite open space/resource protection. The Project is consistent with the population projections anticipated by the LUE (see Section 3.11, *Population and Housing*). However, as indicated in the LUCE Update EIR, population estimates cannot be directly compared as the Clean Air Plan only projects population estimates until 2015. In addition, as described in Impact AQ-2 above, the Project would result in significant and unavoidable operational air quality impacts generated by area, energy, and

mobile emissions; therefore, the Project is potentially inconsistent with the Clean Air Plan.

2) *Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?*

   The population growth from the Project would exceed the Clean Air Plan projections. As described in Section 3.13, *Transportation and Traffic*, the City's model forecast for the Project is 46,894 daily VMT, an increase of approximately 3 percent within the City sphere of influence and 0.4 percent within the County. The VMT generated per household for the Project is forecasted at 69 daily VMT per household. Although the Project would have a VMT below the regional average, the VMT per household for the Project is forecasted to be approximately 28 percent higher than the average for the City's sphere of influence. The rate of increase in vehicle trips and miles traveled would exceed the Clean Air Plan projections for the Project site; therefore, the Project would be potentially inconsistent with the Clean Air Plan.

3) *Have all applicable land use and Transportation Control Measures (TCMs) and strategies from the Clean Air Plan been included in the plan or project to the maximum extent feasible?*

   The transportation goal of the Clean Air Plan is to reduce the growth of vehicle trips and VMT to the rate of population growth within the County. TCMs are controls that help reduce emissions resulting from motor vehicles, by reducing vehicle use and facilitating the use of alternative transportation options. There are a total of nine TCMs located in the Clean Air Plan which include the following:

   - T-1B Campus Trip Reduction Program
   - T-1C Voluntary Commute Options Program
   - T-2A Local Transit Systems Improvements
   - T-2B Regional Public Transit Improvements
   - T-3 Bicycling and Bikeway Enhancements
   - T-4 Park–and-Ride Lots
   - T-5 Motor Vehicle Inspection and Control Programs
   - T-6 Traffic Flow Improvements, and
   - T-8 Teleworking, Teleconferencing and Telelearning.

T-1B and T-5 are not applicable to the Project as the Project does not include a college campus or smog check program. T-1C and T-8 are applicable to the commercial uses of the Project site. The Project will include one bus stop along LOVR fronting the site with associated transit service, which will be consistent with T-2A and T-2B after Project buildout; however, during early phases of Project development, transit services may not be fully in place (see Section 3.13, *Transportation and Traffic*, for further analysis of this issue). T-3 is included in the Project and supports T-1C. T-6 is also included in the Project.

Land use strategies in the Clean Air Plan include planning compact communities, providing for mixed land use, balancing jobs and housing, circulation management, and communication, coordination and monitoring. Each of the five land use strategies are applicable to and would be implemented by the Project.

The Project could hinder the County's ability to maintain attainment of the state O_3 standard, because the emissions reductions projected in the Clean Air Plan may not be met. The anticipated population growth and increase in vehicle trips is potentially inconsistent with the Clean Air Plan; therefore, impacts are considered *potentially significant*.

Mitigation Measures

MM AQ-2 shall apply.

MM TRANS-5 shall apply.

MM TRANS-8 shall apply.

MM TRANS-9 shall apply.

MM TRANS-10 shall apply.

Residual Impact

In accordance with the 2012 APCD CEQA Air Quality Handbook and 2017 Clarification Memo, all feasible mitigation measures must be incorporated into the Project, which emphasize transportation strategies for reducing Project operational VMT. Implementation of MM TRANS-5, -8, -9, and -10 would ensure facilities serving pedestrians and bicycles in Project vicinity would be provided prior to occupancy of the first unit of Villaggio's Lower Area, which would result in consistency with SLO County APCD's Clean Air Plan Goal T-2A. However, as described above, the Project is not fully consistent with overall land use planning principles contained in the Clean Air Plan due to continued exceedance

of population growth, vehicle trip, and VMT projections for the region. Therefore, residual impacts would be *significant and unavoidable*.

Cumulative Impacts

Air Quality Emissions

The Project, in combination with any approved, pending, and proposed development within the City, would further contribute to the increase in development and associated generation of air quality-related emissions. The SCCAB is currently in state non-attainment for PM_{10} and O_3, for which NO_x and ROGs are a precursor. As the Project would result in significant and unavoidable impacts associated with long-term operational emissions, particularly for NO_x and ROGs, the Project would generate air quality emissions for criteria pollutants within an air basin that is under state non-attainment; therefore, the Project would contribute cumulatively and considerably to air quality emissions throughout the City and region.

Further, as analyzed in the LUCE Update EIR, full buildout under the LUCE would not be consistent with the 2001 Clean Air Plan. Cumulative impacts related to this increase in air-quality emissions resulting from the Project would therefore be cumulatively considerable and *significant and unavoidable*.

GHG Emissions

The Project, in combination with any approved, pending, and proposed development presented in Table 3.0-1 of Section 3.0.3, *Cumulative Impact Analysis*, would further contribute to the increase the generation of GHG emissions. Analysis of GHG emissions and climate change are cumulative in nature because impacts are caused by cumulative global emissions and accumulation of GHGs in the atmosphere. Additionally, climate change impacts related to GHG emissions do not necessarily occur in the same area as the Project is located. As indicated in Impact AQ-4, the Project's construction and operational stationary-source emissions would be reduced to as close to 0 MT CO_2e/yr as feasible with implementation of MM AQ-4 through MM AQ-6. Implementation of these measures would demonstrate consistency with the City and statewide objectives for reducing GHG emissions; however, mobile-source emissions continue to have potential to result in exceedance of established GHG emissions thresholds and state and local GHG reduction strategies due to inability to ensure associated emissions are quantifiably reduced. Therefore, the Project's contribution to cumulative levels of GHGs would be cumulatively

considerable and cumulative impacts from GHG emissions and climate change would be *significant and unavoidable*.

3.4 BIOLOGICAL RESOURCES

This section describes biological resources that may be affected by the Project. Biological resources include sensitive plant and animal species, wildlife habitats, migration corridors, and vegetation communities, as well as aquatic resources under the jurisdiction of local, state, and federal resource management and protection agencies. The biological resources described in this section are based primarily on Applicant-prepared field work and technical studies for the Project, supplemented by review of published literature, previously prepared technical studies, and peer review of the Applicant-prepared studies coupled with reconnaissance-level field observations by Wood. The extent and distribution of sensitive habitats and plant species onsite has varied over time due to drought and periods of high rainfall. Habitats onsite have been subject to several mapping efforts over a four-year period to establish an environmental baseline, as described herein. These reports are described in detail in Section 3.4.3.2, *Impact Assessment Methodology* below.

3.4.1 Environmental Setting

3.4.1.1 Regional Biological Resources Setting

The City has a Mediterranean climate with mild, wet winters and warm, dry summers. The City is surrounded by undeveloped rural land that supports an array of habitats, including grasslands, coastal scrub, chaparral, oak and bay woodlands, riparian habitat, and wetlands. Nearby Froom, Prefumo, and San Luis Obispo Creeks support freshwater marsh, seasonal wetlands, and riparian habitats within low-lying areas. Mature trees and denser vegetation are generally located along riparian corridors or on hillsides, particularly north-facing slopes.

The Project vicinity supports a diverse mix of habitats suitable to support a wide range of plant and animal species, some of which are endemic (native and restricted to a certain location or area) within the region. The Project site lies at the edge of the wildland-urban interface, with urbanized shopping centers, auto malls, and hotels along LOVR and Calle Joaquin to the north, south, and east. To the west, undeveloped land within the Irish Hills Natural Reserve owned by the City provides remarkable biodiversity and habitat conservation within and proximate to the City. In April 2019, a new botanical species known as the Irish Hills spineflower (*Chorizanthe aphanantha)* was discovered in the Irish Hills Natural Reserve less than one mile from the Project site growing on serpentinite rock outcroppings near yucca scrub habitats. The Irish Hills spineflower is currently being recommended and is under review for recognition as one of California's most rare plants (Nelson, Keil, and Hill 2018). Approximately one mile of the western boundary of the

Project site borders the Irish Hills Natural Reserve, a nearly 1,300-acre protected natural open space area, and its diverse habitats, which allows for significant ecological interaction between this important open space reserve and the Project site, including wildlife movement and rare plant propagation. The Irish Hills Natural Reserve consists of a diverse range of habitats supporting a number of sensitive plant species, including endemic species located nowhere else in the world, and providing habitat for a broad range of wildlife. The Froom Creek watershed and tributaries flow from the Irish Hills Natural Reserve down through the Project site and provide habitat connectivity and value throughout the system.

Biological resources on the Project site vary widely. Lower elevations are dominated by nonnative and native annual grasslands with substantial wetlands adjacent to LOVR and Calle Joaquin. Upper elevations are biologically rich with habitat areas that support several sensitive species, such as Chorro Creek bog thistle. The Project site abuts the Irish Hills Natural Reserve to the west, which is one of the most biologically diverse regions in the County.

3.4.1.2 Project Site Overview

The biological setting of the Project site differs greatly between the lower elevations, which constitute disturbed grasslands with wetlands along LOVR and Calle Joaquin, and the upper elevations, which are comparatively undisturbed and rich in biological value as an intact naturally-occurring ecosystem. The most sensitive habitats onsite are located within an area referred to as the Upper Terrace area of Villaggio (west of Froom Creek and adjacent to the Irish Hills Natural Reserve and Mountainbrook Church) and in the lower portions of the site containing the Calle Joaquin wetlands. East of Froom Creek in the areas adjacent to LOVR and the Irish Hills Plaza, repeated disturbance and lack of native vegetation resulting from historic grazing operations, past grading and quarry operations, and development within the historic Froom Ranch Dairy complex has diminished habitat values for native plants and wildlife, though riparian habitat and special status plant species have also been identified in this area.

Froom Creek flows from the Irish Hills through the Project site. Most of the creek is a seasonally dry channel lined with rock and cobble with earthen banks and no riparian vegetation. Downstream of the Specific Plan area, the creek transitions into a spring-fed riparian channel supporting wetland habitats.

Froom Creek traverses the Project site for approximately 3,000 feet, draining a 1,162-acre watershed, including the Irish Hills Natural Reserve (see also, Section 3.8, *Hydrology and Water Quality*). Froom Creek is a direct tributary to San Luis Obispo Creek, which flows to the Pacific Ocean approximately 5 miles southwest of the Project site. Within the Specific Plan area, Froom Creek is a seasonally dry channel lined with rock and cobble with earthen banks and no riparian vegetation. Vegetation is limited along this portion of the creek to low-lying grasses, scrub, and cactus, including an abundant proliferation of non-native invasive species such as yellow star-thistle (*Centaurea solstitialis*). Froom Creek transitions from a wide-open channel (approximately 100 feet wide) where it enters the Project site to a deeper, narrower channel (approximately 15 to 50 feet wide) that cuts through the western side of the Specific Plan area. Banks are often steep and unvegetated along this segment. A substantial unvegetated, constructed berm constrains the Froom Creek alignment on the downslope side. Seasonal pooling in the creek's incised banks create some potential for habitat; for example, field teams observed tree frogs within the creek channel in January 2018. Outside the Specific Plan area, Froom Creek transitions into a narrow riparian channel conveying flows across Mountainbrook Church property to a box culvert under Calle Joaquin and U.S. 101. Even during dry weather, this segment of Froom Creek conveys spring-fed flows

The man-made drainage ditch adjacent to LOVR conveys stormwater runoff from adjacent development to the north and east. Prolonged ponding of runoff has resulted in the establishment of high-quality wetland and riparian habitats.

from Drainages 1, 2, and 3 in the Irish Hills (see Figure 3.4-1). This water source supports a mix of native riparian vegetation and blue gum eucalyptus (*Eucalyptus globulus*) trees. Drainage 4 flows through the southernmost edge of the Project site and flows to San Luis Obispo Creek through a separate culvert; Drainage 4 does not flow to Froom Creek.

The Project site also contains man-made drainage features that support wetland or riparian habitats. Man-made drainage features on the Project site include the LOVR ditch located along the Project site boundaries bordering LOVR and the 3.2-acre Irish Hills Plaza stormwater detention basin (Figure 3.4-1).[1] The LOVR ditch supports substantial wetland and riparian habitat, sustained by surface flows from the site, Irish Hills Plaza, and LOVR. The 3.2-acre Irish Hills Plaza stormwater detention basin supports substantial areas of wetland vegetation, particularly during wetter periods, even though it was constructed above natural grade and outside of mapped wetland habitat.

Wetlands are present adjacent to Calle Joaquin on the southeastern edge of the Project site, in Drainages 1, 2, and 3 of the Upper Terrace, in the LOVR ditch, and within the Irish Hills stormwater detention basin during periods of non-disturbance between permitted maintenance events.

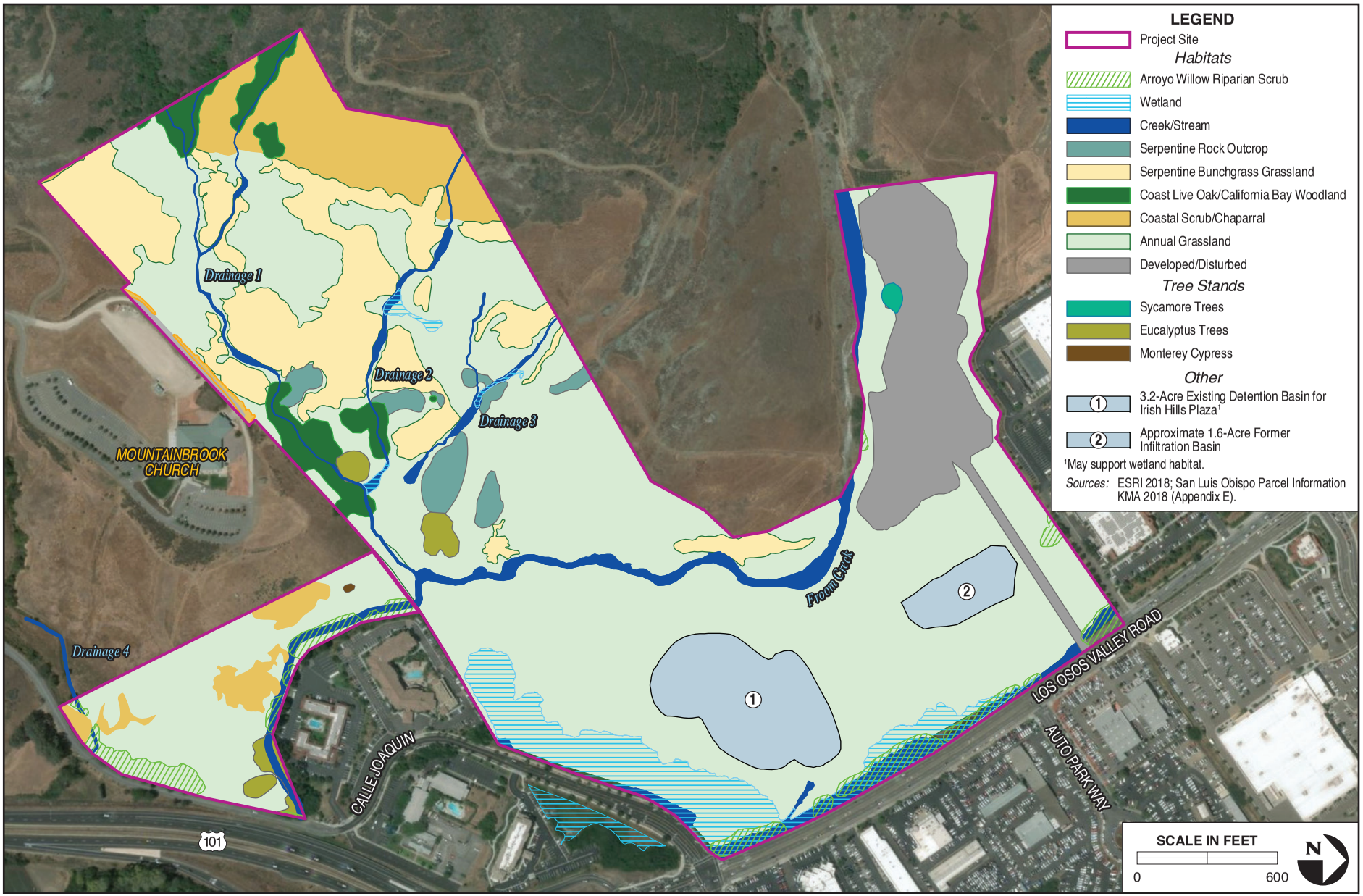
The Calle Joaquin wetlands support roughly 8.3 acres of wetland habitat located in the southeast corner of the Project site extending along more than 500 feet of Calle Joaquin west of its intersection with LOVR. This includes approximately 1-acre of wetland separated by the Calle Joaquin roadway and near the existing hotel development to the east. The 1 acre of wetlands southeast of Calle Joaquin is supported by a number of inlets passing beneath the Calle Joaquin roadway, allowing water to flow between these two areas and facilitating connectivity between these wetlands. These wetlands support emergent wetland vegetation and are fed by a complex mix of surface water flows from onsite drainage channels and generally high groundwater levels, including groundwater discharge from an artesian well. Surface water sources supporting the Calle Joaquin wetlands include runoff from the LOVR ditch and storm event flows from the Irish Hills Plaza stormwater detention basin.

[1] The 1.6-acre former stormwater retention basin was initially constructed to receive runoff only during construction of The Home Depot at the Irish Hills Plaza. Following completion of the Irish Hills Plaza, the 1.6-acre informal retention basin was graded prior to issuance of the NOP for this EIR in July 2017. However, a storm drain continues to deliver water to the former retention basin area, resulting in seasonal ponding.

Froom Creek is largely disconnected from the Calle Joaquin wetlands as a substantial constructed berm confines the creek to an upper elevation within the Project site. Based on site reconnaissance, the Calle Joaquin wetlands only interact with the Froom Creek channel intermittently at the edge of the Specific Plan area adjacent to the existing hotels.

The Upper Terrace contains a range of native habitats that support sensitive species, including native serpentine bunchgrass grassland, coast live oak/California bay woodlands, coastal scrub/chaparral, and wetlands. The terrain is highly varied where Drainages 1, 2, and 3 support wetlands. Open areas comprise annual grasslands, serpentine bunchgrass grassland, coastal scrub/chaparral, and serpentine rock outcroppings. These habitats support numerous rare native plant species and function as an important wildlife habitat and corridor due to their relatively undisturbed nature and proximity to the Irish Hills Natural Reserve.

Non-native annual grasslands dominate the lower portions of the Project site near LOVR and Irish Hills Plaza where past disturbance and grazing has occurred, as well as the proposed stormwater detention basin location on Mountainbrook Church property. Annual non-native grassland and developed/disturbed areas occupy approximately 82 acres (or roughly 64 percent) of the site, particularly in the lower portion of the Project site, east of Froom Creek near LOVR and adjacent to the Irish Hills Plaza.



wood.

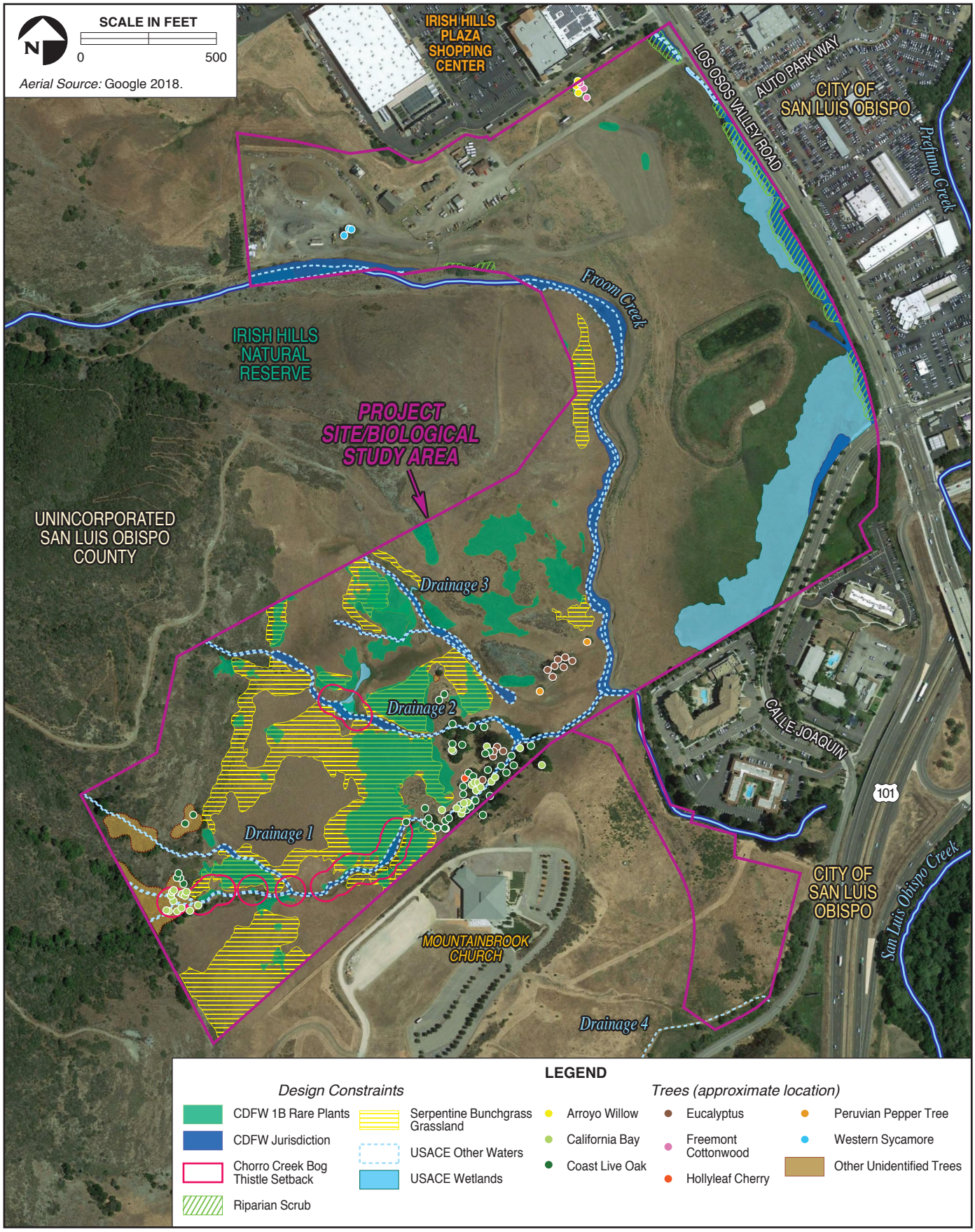
Existing Biological Setting

FIGURE 3.4-1

3.4.1.3 Vegetation and Habitat Types/Communities

The Project site includes ten general habitat types or plant communities. In the Upper Terrace, native habitats comprise roughly 50 percent of the vegetation, where serpentine bunchgrass grassland and coastal sage scrub are co-dominant with annual non-native grassland. This area also supports large stands of coast live oak/California bay woodland and sensitive spring-fed seep and drainage wetlands. Roughly 80 percent of the lower portion of the Project site (east of Froom Creek) is covered with annual non-native grassland and developed/disturbed areas. The notable exceptions are sensitive wetland and riparian habitats present in the Calle Joaquin wetlands, LOVR ditch, and existing stormwater detention basin. The developed/disturbed areas contain native and planted/ornamental vegetation, as well as native and non-native trees (see Table 3.4-1). Detailed summaries of each habitat type observed onsite are included in the Biological Resources Inventory (Appendix E).

The Project site's existing vegetation provides opportunities for nesting, perching, and roosting for birds, open areas for wildlife forage and dispersal, and edge areas for cover and escape. The wetland and riparian habitat along Froom Creek downstream of the Specific Plan area, as well as Drainages 1, 2, and 3 in the Upper Terrace, provide excellent habitat for songbirds, small mammals, amphibians, reptiles, and insects, and serve as corridors for wildlife movement, including both small and large animals (Appendix E). Drainage 4 also flows through the southernmost edge of the Project site across Mountainbrook Church property and supports an additional 400-foot-long area of Arroyo Willow Riparian Scrub habitat with similar values to small wildlife and songbirds adjacent to LOVR (Figure 3.4-1).



wood.

Project Site Biological Constraints

FIGURE 3.4-2

Table 3.4-1. Habitat Types Located within the Project Site

Habitat Type	Portion of Project Site (acres)	Percentage of Project Site
Annual Grassland	68.65	53.3
Developed/Disturbed (Ruderal)[1]	14.52	11.3
Serpentine Bunchgrass Grassland	13.46	10.5
Coastal Scrub/Chaparral	9.26	7.2
Wetland	8.27	6.4
Arroyo Willow Riparian Scrub	4.82	3.7
Coast Live Oak/California Bay Woodland	3.23	2.5
Drainage Feature	3.00	2.3
Serpentine Rock Outcrop	1.96	1.5
Eucalyptus and Sycamore Trees	1.56	1.2
Monterey Cypress Trees[2]	0.03	0.02
Total[3,4]	**128.76**	**100**

[1] Developed/disturbed (ruderal) areas include existing disturbed surfaces (e.g., within the Froom Ranch Dairy complex, graded roadways, the onsite quarry, and stormwater detention basins). Note that although the stormwater basins are periodically cleaned out, this appears to have occurred infrequently (e.g., 2-3 times over 13 years), allowing reestablishment of persistent wetland vegetation.
[2] Monterey Cypress Trees occur only within a small area of the proposed stormwater basin site.
[3] The total Project site boundary identified in the Biological Resources Inventory varies slightly from that described for the Project site in Section 2.0, *Project Description.*
[4] Initial habitat mapping was conducted by KMA in 2015 for the Biological Resources Inventory at the end of a long drought period. In subsequent field investigations by Wood's biologists in February 2018, following a relatively wet winter season, the area of some habitat types was observed as being larger than previously identified in the Biological Resources Inventory; however, acreages have not been updated.
Source: Appendix E.

Froom Creek looking north towards the Upper Terrace. The Project site provides rich natural communities and habitats, including wetlands and serpentine bunchgrass grassland, as well as California bay woodland. The Upper Terrace is particularly rich in these biological resources.

A California Natural Diversity Database (CNDDB) search identified occurrences of nine special-status natural plant communities near the Project site. Within the habitats mapped within the Project site, field surveys identified three natural communities meeting the state's definition of special-status natural communities pursuant to the California Department of Fish and Wildlife (CDFW), including Coastal and Valley Freshwater Marsh (wetland), riparian, and serpentine bunchgrass grassland. Special-status plants also occur in certain features within the Project site, including serpentine rock

outcrops or in areas of annual and perennial grasslands. Where these features support special-status plants, these features should also be considered special-status resources. Further, native habitats such as coastal sage scrub and coast live oak/California bay woodland that occur onsite may be considered sensitive under City policy if they support special status plants or wildlife, serve as wildlife corridors, or support significant trees, as determined by the City Council.

Coastal and Valley Freshwater Marsh (Wetland)

The Calle Joaquin wetlands support significant amounts of ponded water that provide high-quality habitat for several plant and animal species (Appendix E).

The Project site supports approximately 8.27 acres of jurisdictional wetland areas and/or Other Waters subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) and/or the Regional Water Quality Control Board (RWQCB). The Project site also supports approximately 5.41 acres of CDFW state jurisdictional features along Froom Creek, the LOVR ditch, Drainages 1, 2, 3, and 4, and associated riparian habitat (Appendix E).[2] These jurisdictional waters habitats are a combination of the Coastal and Valley Freshwater Marsh and Vernal Marsh vegetation communities. The Coastal and Valley Freshwater Marsh, considered by CDFW to be a sensitive natural community, occurs onsite in Drainages 2 and 3 on the Upper Terrace, the LOVR ditch, and Calle Joaquin wetlands, with a total area of approximately 8.27 acres. These onsite wetlands are important to resident and migratory wildlife. The seep- and spring-fed wetlands along Drainages 2 and 3 provide a water source for wildlife in the broad undisturbed habitats of the Upper Terrace, relatively far removed from human activity and the noise, light, and glare found in the wetlands adjacent to LOVR and Calle Joaquin. Further, these seeps and springs are proximate to generally dry coastal sage scrub, chaparral, and oak woodland habitats in the southeastern area of the Irish Hills Natural Reserve. Wildlife, including large

[2] CDFW jurisdictional areas onsite include all waters of the U.S. within the ordinary high-water mark and additional areas extending to the outer edge of associated riparian vegetation (at least to the extent they exist within the Project site), but do not include non-riparian USACE jurisdictional areas such as the Calle Joaquin wetland.

mammals such as deer, bobcats, coyotes, and mountain lions, may rely on water from these seeps and springs, particularly during dry periods.

Calle Joaquin Wetlands

Adjacent to Calle Joaquin, perennial wetlands support occurrences of wetland plant species such as round-leaf leather root (*Hoita orbicularis*), seep spring monkey flower (*Mimulus guttatus*), silverleaf (*Potentilla ansernia*), California bulrush (*Schoenoplectus californicus*), and rough sedge (*Carex senta*). Small areas of open water within these wetlands likely provide habitat for aquatic invertebrates and amphibians such as the Pacific chorus frog (*Psuedacris regilla*). Seasonal ponded water in this area would also likely serve as a water source for wildlife, and a potential stop over for seasonal or migratory birds or a foraging site for ducks and great blue herons (*Ardea herodias*) (Appendix E). The Calle Joaquin wetlands are predominantly supported by groundwater, as well as an artesian spring, and surface flows from the LOVR ditch and the Irish Hills Plaza stormwater detention basin (Appendix H).

Irish Hills Plaza Stormwater Detention Basin

The Project site contains a stormwater detention basin to control and treat surface runoff from Irish Hills Plaza. The 3.2-acre Irish Hills Plaza stormwater detention basin was constructed approximately 13 years ago between mid-2006 and mid-2007 and includes both a main detention basin and its forebay. The basin is fed through approximately 1,160 linear feet of pipeline that conveys surface flows from Irish Hills Plaza to this basin. During large storm events or in wet years, the basin is designed to overtop and discharge water into the Calle Joaquin wetlands via a concrete spillway. During lower rainfall years or events, stormwater in this basin evaporates or percolates into the ground. The basin is subject to periodic maintenance clearing to maintain capacity and function, though maintenance appears to occur infrequently based on field observations and aerial photography review by the EIR

View of the main basin of the 3.2-acre stormwater detention basin in September 2017. Cattails and tules are present in areas of prolonged saturation, along with herbaceous wetland species (Appendix E). Wetlands have regenerated in this basin between permitted maintenance clearing.

consultant team (e.g., 2-3 times over 13 years). Though not delineated as part of the Project's Wetland Delineation Report or identified as a jurisdictional feature in the Preliminary Jurisdictional Determination approved by the USACE on September 24, 2015, standing water was present in the forebay and Wood staff observed wetland vegetation, including cattails (*Typha* spp.) and rushes (*Juncus* spp.) that were estimated to cover approximately 0.6-acre. Similarly, the main basin also had seasonally moist soils and similar wetland vegetation mixed with upland species within an estimated 1.4-acre area. The 3.2-acre Irish Hills Plaza stormwater detention basin is therefore conservatively considered to support up to 2 acres of wetland habitat for the purposes of the EIR analysis.

Riparian Habitat

Riparian habitat occurs in five locations within the Project site. The largest stand of riparian scrub extends over 1,300 feet along the LOVR ditch and supports both mature and juvenile willow trees, with stands up to 90 feet in width (see Figure 3.4-1). The second-largest stand of riparian vegetation is located along the 800-foot-long segment of Froom Creek on the Mountainbrook Church portion of the site. A 1.02-acre isolated portion of the Project site east of Calle Joaquin also supports a more than 400-foot-long stretch of substantial mature Arroyo Willow Riparian Scrub. Isolated patches of Arroyo Willow Riparian Scrub also occur along a drainage on the north end of the site, adjacent to TJ Maxx and Irish Hills Plaza (see Figure 3.4-1). Finally, Drainage 4 from the Irish Hills across the southwest portion of the Mountainbrook Church property supports an additional stand of Arroyo Willow Riparian Scrub along approximately 400 feet adjacent to Calle Joaquin.

Arroyo Willow Riparian Scrub onsite consists of the Arroyo Willow Shrubland Alliance and forms a forested wetland that corresponds to the Central Coast Arroyo Willow Riparian Scrub community. The Central Coast Arroyo Willow Riparian Scrub is a form of forested wetland that is considered a sensitive natural community by the CDFW. This natural community and other riparian habitat occupy approximately 4.82 acres of the Project site. The habitat is mostly

The largest stand of riparian habitat extends over 1,300 feet along the LOVR ditch and supports both mature and juvenile willow trees, with stands up to 90 feet in width.

dominated by arroyo willow (*Salix lasiolepis*), as well as a few cottonwoods in the drainage adjacent to TJ Maxx. Riparian communities onsite consist of a mixed age class of arroyo willows and generally lack other riparian trees. The largest extents of these habitats are located along the boundary of the Project site adjacent to major roadways (see Figure 3.4-1). Limited tree diversity and underdeveloped understory may limit the foraging value for wildlife and the value of this habitat as cover or as a corridor for movement along the edges of the open area. Common species of wildlife anticipated to be found include: Pacific chorus frog, western fence lizard (*Sceloporus occidentalis*), raccoon (*Procyon lotor*), opossum (*Didephis virginianus*), and striped skunk (*Mephitis mephitis*) (Appendix E).

Aside from the downstream area of Froom Creek on the Mountainbrook Church property, the dry ephemeral nature of Froom Creek and onsite grazing activities limit the extent of riparian vegetation in the main creek channel. In one location in the northwestern part of the Project site, a small occurrence of riparian scrub was observed on the creek bank, south of existing buildings and an equipment storage yard. Common plant species observed in this habitat include Himalayan blackberry (*Rubus discolor*), poison oak, and stinging nettle (*Urtica dioica*) (Appendix E).

Serpentine Bunchgrass Grassland

Native grassland comprised of purple needlegrass (*Stipa pulchra*) along with a mix of native and non-native species occurs within 13.46 acres of the Upper Terrace and hillsides of the Project site where serpentine soils influence plant distribution. These native grasslands exist primarily in the Upper Terrace adjacent to Drainages 1, 2, and 3 and together with several stands of coast live oak/California bay woodland and coastal sage scrub habitat form the most important native habitat complex onsite. These native grasslands correspond to the Valley Needlegrass and Serpentine Bunchgrass Grasslands and the *Nassella* (or *Stipa*) *pulchra* Herbaceous Alliance (purple needlegrass grassland) sensitive natural communities. The *Nassella pulchra* Herbaceous Alliance has a state rarity rank of S3 and is therefore designated by CDFW as a sensitive

The native serpentine bunchgrass grassland represents one of the most significant biological resources on the site, supporting a suite of special-status plant species, many of which are endemic to the San Luis Obispo area.

natural community. Onsite, these grasslands are dominated by purple needlegrass (*Stipa pulchra*), but also support a rich assemblage of grassland herbaceous species including yarrow (*Achillea millelodium*), Cambria morning-glory (*Calystegia subacaulis* ssp. *episcopalis*), checker bloom (*Sidalcea malviflora*), blue-eyed grass (*Sisyrinchium bellum*), and western vervain (*Verbena lasiotachys*). This grassland type provides suitable foraging, breeding habitat, and movement corridors for many wildlife species, including ground-nesting birds such as California meadowlarks and special status horned lark, various raptors, and common rodents (e.g., California vole), insects, lizards, as well as a wide range of other species (Appendix E). When combined with perennial water from springs and seeps, the proximity of this habitat to the Irish Hills Natural Reserve also increases its importance for use by large wildlife species, including deer, as well as predators such as bobcats, coyotes, foxes, and mountain lions.

3.4.1.4 Critical Habitat

Froom Creek, including the portion extending through the Project site, is designated critical habitat for the federally threatened south-central California coast steelhead distinct population segment (DPS) (steelhead; *Oncorhynchus mykiss*) by the U.S. Fish and Wildlife Service (USFWS) (Appendix E; USFWS 2018).[3] Within the Project site, Froom Creek has the potential to provide suitable habitat for steelhead passage during years of high rainfall when flowing water is present. However, steelhead are not expected to spawn onsite given seasonally dry conditions, and it is expected that steelhead would typically only use this portion of Froom Creek as a movement corridor to areas of more suitable upstream habitat (Appendix E). Suitable habitat for steelhead also occurs upstream and offsite in the Irish Hills Natural Reserve, and resident fish in the upper watershed may move downstream through the Project site, as well. San Luis Obispo Creek downstream of Froom Creek is also designated critical habitat for steelhead.

Critical habitat for California red-legged frog is mapped approximately 2.1 miles north of the Project site. A site assessment of California red-legged frog was conducted by Kevin Merk Associates, LLC (KMA) in 2015 and 2016 to determine the presence or absence of suitable habitat and/or individuals within the Project site. Based on the results of the site assessment, suitable habitat for the California red-legged frog may be present within the Calle Joaquin wetlands; however, no California red-legged frog was observed during the

[3] The Biological Resources Inventory prepared by KMA (2015; Appendix E) incorrectly identifies Froom Creek as critical habitat for "southern steelhead", but the federally endangered southern California steelhead DPS and its critical habitat do not occur north of the Santa Maria River in Santa Barbara County.

protocol-level surveys (Appendix E). California red-legged frog were also documented in the Irish Hills Natural Reserve – Waddell Ranch Addition within the upper extents of Froom Creek (City of San Luis Obispo 2018).

3.4.1.5 Special Status Species

A total of 35 special-status plant species and 23 special-status animal species have some potential to occur within the region surrounding the Project site (Appendix E). The special status of these species has been designated by the USFWS, CDFW, California Native Plant Society (CNPS), and/or the City. The list of these species was generated using information available in the CNDDB (CDFW 2018), CNPS's Inventory of Rare and Endangered Plants of California (CNPS 2018b), and the City General Plan's Conservation and Open Space Element (COSE). From this list, 14 special-status plant and 18 animal species were determined to have moderate to high potential to be present in the Project site due to the presence of suitable habitat or direct observation during field surveys (Tables 3.4-2 and 3.4-3).[4]

The Upper Terrace within the Project site supports an abundance of special-status plant species, with a total of 14 special-status plant species observed growing in this area. These species occur within native grasslands, on serpentine outcrops, in spring-fed seeps and wetlands, and coastal sage scrub habitats. Almost 23 acres of native grassland and coastal sage habitats occur within the Project site, which support species such as Brewer's spineflower and Cambria morning-glory. In addition, seven mapped serpentine rock outcroppings covering almost 2 acres of the Project site support special status species such as club hair mariposa lily and Eastwood's larkspur. The general locations of these 14 special-status plants species are depicted on Figure 3.4-2. Of these plant species, one state and federally endangered species – the Chorro Creek bog thistle – is known to occur within the Project site, proximate to the seeps on the Upper Terrace.

[4] Refer to Section 3.4.3, Special-Status Animals, and Appendix E for a complete list of species identified as part of the CNDDB search and their potential to occur on the Project site.

Table 3.4-2. Special-Status Plants with High Potential to Occur in the Project Site

Species[1]	Status[2]	Notes/Occurrence
Adobe yampah ***Perideridia pringlei***	--/--/4.3	Observed onsite. California native endemic often found on grassy slopes and serpentine soils.
Blochman's dudleya ***Dudleya blochmaniae***	--/--/1B.1	Observed onsite. Often found on rocky, often clay or serpentine soils in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grasslands.
Brewer's spineflower ***Chorizanthe* ssp. *breweri***	--/--/1B.3	Observed onsite. Occurs in closed-cone coniferous forests, chaparral, cismontane woodland, and coastal scrub habitats on serpentine derived soils and rock outcrops.
Cambria morning-glory ***Calystegia subacaulis* ssp. *episcopalis***	--/--/4.2	Observed onsite. Occurs in chaparral, cismontane woodland, and sparse to dense grassland covering sloped or flat areas in clay-rich soils.
Chaparral (rayless) ragwort ***Senecio aphanactis***	--/--/2B.2	Observed onsite. Typically found in drying alkaline flats, serpentine soils and barren gravelly or sandy slopes in chaparral, cismontane woodland, and coastal scrub habitats.
Chorro Creek bog thistle ***Cirsium fontinale* var. *obispoense***	E/E/1B.2	Observed onsite. Occurs in chaparral and cismontane woodland habitats, often in serpentine seeps.
Club hair mariposa lily ***Calochortus clavatus* ssp. *clavatus***	--/--/4.3	Observed onsite. Species is known to occur on serpentine rock outcrops, valley grassland (i.e., perennial bunchgrass), chaparral, and foothill woodland.
Congdon's tarplant ***Centromadia parryi* ssp. *congdonii***	--/--/1B.1	Observed onsite. Occurs in moist alkaline conditions in marshes, swamps, vernal pools, and valley and foothill grassland habitats.
Eastwood's larkspur ***Delphinium parryi* ssp. *eastwoodiae***	--/--/1B.2	Observed onsite. Known to occur on serpentine based soils (clays) and outcrops in the general San Luis Obispo area with collection made on Camp San Luis Obispo.
Jones' layia ***Layia jonesii***	--/--/1B.2	Observed onsite. Occurs on clay soils and serpentine outcrops in chaparral and valley and foothill grassland.

Table 3.4-2. Special-Status Plants with High Potential to Occur in the Project Site (Continued)

Species[1]	Status[2]	Notes/Occurrence
Most Beautiful Jewel-flower *Streptanthus albidus* ssp. *Peramoenus*	--/--/1B.2	Observed onsite. A rare California native annual herb found in chaparral, valley grassland, and foothill woodlands on serpentine soils in arid climates.
Mouse-gray dudleya *Dudleya abramsii* ssp. *murina*	--/--/1B.3	High potential to occur. Occurs in chaparral and cismontane woodland, usually on serpentine outcrops.
Palmer's spineflower *Chorizanthe palmeri*	--/--/4.2	Observed onsite. Occurs on serpentine-based soils in grassland and coastal scrub habitat in the outer coast ranges of Monterey, San Luis Obispo, and Santa Barbara Counties.
San Luis mariposa lily *Calochortus obispoensis*	--/--/1B.2	Observed onsite. Occurs on sandstone, serpentine and/or sandy soils in chaparral, coastal scrub and valley and foothill grassland. Species is endemic to San Luis Obispo County and is known from localized occurrences in the San Luis Obispo and Arroyo Grande region.
San Luis Obispo owl's-clover *Castilleja densiflora* ssp. *obispoensis*	--/--/1B.2	Observed onsite. Occurs in meadows, seeps, and valley and foothill grassland. This species was observed onsite.

Bold text denotes species observed onsite during biological surveys.
[1] Source: Appendix E.
[2] Federal Status/State Status/ California Rare Plant Rank
E = Endangered
CRPR 1B = "Plants Rare, Threatened, or Endangered in California and Elsewhere" by the CNPS
CRPR 2 = "Plants Rare, Threatened, or Endangered in California but more common elsewhere"
CRPR 2B = "Plants rare, threatened, or endangered in California but more common elsewhere"
CRPR 3 ="Review List: Plants about which more information is needed"
CRPR 4 = "Plants of Limited Distribution – A Watch List"
0.1 = "Seriously threated in California" (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = "Moderately threatened in California" (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 = "Not very threatened in California" (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Table 3.4-3. Sensitive Wildlife Species with Potential to Occur in the Project Site

Species[1]	Status[2]	Notes/ Occurrence
American badger *Taxidea taxus*	--/SSC/--	Moderate potential to occur. Suitable habitat is present in grassland onsite, but heavy clay soils likely preclude badgers from being regular residents. Could potentially occur as a transient across the site.
California horned lark *Eremophila alpestris actia*	--/WL/--	Moderate potential to occur. Grasslands provide suitable foraging and nesting habitat onsite.
California red-legged frog *Rana draytonii*	T/SSC/--	Moderate potential to occur. Limited suitable habitat exists; however, potential for suitable movement, dispersal, and foraging habitat in onsite wetlands increases outside of drought conditions.
Cooper's hawk *Accipiter cooperii*	--/WL/--	High potential to occur. Potentially suitable nesting habitat is present in oak/bay woodlands and eucalyptus/ sycamore trees onsite. Could also forage across the site.
Hoary bat *Lasiurus cinereus*	--/SA/--	Moderate potential to occur. Suitable foraging habitat onsite. Potentially suitable roosting habitat present in oak woodland especially in close proximity to confluence of tributary drainages of Froom Creek.
Loggerhead shrike *Lanius ludovicianus*	--/SSC/--	Moderate potential to occur. Suitable woodland, grassland, and scrub habitat present for foraging and nesting exists onsite.
Pallid bat *Antrozous pallidus*	--/SSC/--	Moderate potential to occur. Potentially suitable roosting habitat present in oak/bay woodland. Suitable foraging habitat in grasslands and coastal scrub onsite.
San Diego woodrat *Neotoma lepida intermedia*	--/SSC/--	High potential to occur. Suitable habitat present in oak woodlands and coastal scrub through the southwestern portion of the site within the Upper Terrace, adjacent to the Irish Hills Natural Reserve. Woodrat nests observed in upper reaches of the property in coastal scrub habitat. Could potentially occur in woodlands.
South-central California coast steelhead DPS *Oncorhynchus mykiss*	T/SSC/--	High potential to occur. Suitable habitat present upstream in Froom Creek. Potential to occur during heavy rainfall years when flowing water is present. Not expected to spawn onsite but would use Froom Creek onsite as corridor for movement upstream.

Table 3.4-3. Sensitive Wildlife Species with Potential to Occur in the Project Site (Continued)

Species[1]	Status[2]	Notes/ Occurrence
Townsend's western big-eared bat *Corynorhinus townsendii*	--/SSC/--	Moderate potential to occur. Suitable foraging habitat present throughout the site. Potential roosting habitat located at existing buildings.
Tri-colored blackbird *Agelaius tricolor*	T/SSC/-- (Nesting)	Moderate potential to occur. Could occur as an uncommon transient. Suitable nesting habitat in a tule patch was noted as being not large enough to support nesting. However, the species could potentially nest onsite should the tule patch expand/enlarge.
Vernal pool fairy shrimp *Branchinecta lynchi*	T/SA/--	Low potential to occur. The Project site does not support suitable habitat and is not hydrologically connected to known vernal pool fairy shrimp habitat.
Western mastiff bat *Eumops perotis californicus*	--/SSC/--	Moderate potential to occur. Suitable foraging habitat in grasslands onsite. Potentially suitable roosting habitat present in oak woodland and large eucalyptus and sycamore trees.
Western red bat *Lasiurus blossevilli*	--/SSC/--	Moderate potential to occur. Potentially suitable roosting habitat present in oak/bay woodlands and foraging habitat consists of onsite grasslands.
White-tailed kite *Elanus leucurus*	--/FP/-- (Nesting)	Moderate potential to occur. Suitable nesting habitat in oak, bay, eucalyptus and sycamore trees on-site, with good quality foraging habitat in grasslands throughout the site.
Yuma myotis *Myotis yumanensis*	--/SA/--	Moderate potential to occur. Potentially suitable roosting and foraging habitat onsite. Could roost in larger trees along riparian corridors, in oak woodlands, and in eucalyptus trees. Could also potentially roost in rock crevices on steep serpentine slopes.

[1] Source: Appendix E.
[2] Federal Status/State Status/Other Status
SSC = California Species of Special Concern
E = Endangered
T = Threatened
C = Candidate for Listing
FP = Federally Protected
SA = Special Animal
WL = CDFW Watch List

In addition to those designated special-status species identified above, Table 3.4-4 provides a list of species of local concern identified in the City's General Plan COSE that are known to occur within the Project site.[5]

Table 3.4-4. Species of Local Concern Within Vicinity of the Project

Species ID[1]	Common Name	Species Name	Status[1]
Plants			
4	Blochman's dudleya	*Dudleya blochmaniae* ssp. *blochmaniae*	--/--/1B.1
5	Brewer's spineflower	*Chorizanthe breweri*	--/--/1B.3
7	Chorro Creek bog thistle	*Cirisium fontinale* var. *obispoense*	E/E/1B.2
8	Congdon's tarplant	*Centromadia parryi* ssp. *congdonii*	--/--/1B.2
14	Jones' layia	*Layia jonesii*	--/--/1B.2
17	Most Beautiful Jewel-flower	*Streptanthus albidus* ssp. *Peramoenus*	--/--/1B.2
25	San Luis mariposa lily	*Calochortus obispoensis*	--/--/1B.2
Invertebrates			
40	Monarch butterfly	*Danaus plexippus*	--/SA/--

Bold text denotes species observed onsite during biological surveys.
[1] Refer to City General Plan COSE Figure 2 for corresponding species identification
[2] Federal Status/State Status/California Rare Plant Rank
CRPR 1B = "Plants Rare, Threatened, or Endangered in California and Elsewhere" by the CNPS
0.1 = "Seriously threatened in California" (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = "Moderately threatened in California" (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 = "Not very threated in California" (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
E = Endangered
SA = Special Animal
Source: City of San Luis Obispo 2006.

Provided below is a description of special-status plant and animal species of the most concern at the Project site, either due to limited availability of habitat, sensitivity to disturbance, moderate to high potential to occur onsite, and/or their observed presence on the site.

[5] The COSE identifies species of local concern in Figure 2: Species of Local Concern.

Special-Status Plant Species

Blochman's Dudleya. This species is an endemic coastal sage scrub perennial herb native to Southern California and northwestern Baja California that flowers from mid to late spring. While Blochman's dudleya has not been assigned federal or state status, it is considered by the CNPS to be seriously endangered within its distribution across the state. The species typically occurs on rocky, often clay or serpentine soils, in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grasslands at an elevation ranging from approximately 15 to 1,350 feet. This species was observed growing on rock outcrops near Drainage 3 in the Upper Terrace of the Project site (Appendix E).

Blochman's dudleya, a perennial herb that is considered seriously endangered by CNPS, was observed in small patches distributed in rocky outcrop areas of the Upper Terrace area of the Project site. (Photo: CalPhotos; photograph by Keir Morse 2016)

Chorro Creek Bog Thistle (San Luis Obispo fountain thistle). This species is an endemic California perennial herb that flowers from February to July and occurs only in San Luis Obispo County. Chorro Creek bog thistle is designated as both a state and federal endangered species and designated as an imperiled species by CNDDB at the state and global level. The species typically occurs in chaparral and cismontane woodland habitats, often in serpentine seeps ranging from approximately 105 to 1,100 feet. This species was observed growing in wetland habitat along the seep-/spring-fed Drainages 1 and 2 in the Upper Terrace of the Project site (Appendix E).

Chorro Creek bog thistle, a perennial herb that is federally endangered, was observed in wetland habitat along the seep-/spring-fed Drainages 1 and 2 in the Upper Terrace. (Photo: CDFW, Jeb Bjerke)

Congdon's Tarplant. This species is an endemic Californian annual herb that flowers in late spring through fall. While Congdon's tarplant does not have federal or state status, it is considered by the CNPS to be rare or endangered within its distribution across the state. The species typically occurs in moist alkaline conditions in marshes, swamps, vernal pools, and valley and foothill grassland habitats at an elevation ranging from approximately 1 to 700 feet. A population of Congdon's tarplant was observed growing in the northeast portion of the Specific Plan area, adjacent to the Irish Hills Plaza (Appendix E).

Congdon's tarplant, an annual herb that is endemic to California and rare, was observed in the constructed Home Depot detention basin in the northeastern part of the site.

Special-Status Animals

Special-Status Bird Species

Loggerhead Shrike. The loggerhead shrike is a CDFW Species of Special Concern (SSC) and resident of arid regions of the County as well as elsewhere in California. Although historically considered a common resident of most of the County, recent studies indicate populations have declined by as much as 76 percent during the non-breeding season within the County. Preferred habitats for loggerhead shrike include woodland, chaparral, coastal scrub, and grassland, with perches such as fences, posts and scattered trees. Suitable habitat for foraging and nesting is present within the Project site (Appendix E).

California Horned Lark. California horned lark is a CDFW Watch List species known to occur from Sonoma County to San Diego County, as well as east to the foothills of the Sierra Nevada Mountains. It breeds in open, flat habitats with short vegetation, including grasslands, alkali flats, fallow grain fields, and meadows. They are known to make local movements through the seasons, and may not breed in all areas they are observed. Suitable habitat for foraging and nesting is present within the Project site, though no nests were observed (Appendix E).

White-tailed Kite. The White-tailed kite is a California Fully Protected species known to occur in riparian woodlands and near agricultural fields, and forages over grasslands and

scrub habitat. At the Project site, suitable nesting habitat for the White-tailed kite is present in oak, bay, eucalyptus, and sycamore trees dispersed throughout the site, along with good quality foraging habitat in grasslands throughout the site. Though the species was not observed onsite during surveys and no stick nests were identified, White-tailed kite are known to occur north of the site in Los Osos Valley, and could nest onsite or occur during foraging activities (Appendix E).

Special-Status Fish Species

South-central California coast Steelhead. South-central California coast steelhead is listed as threatened under the Federal Endangered Species Act (ESA) and is also listed by CDFW as an SSC. Steelhead depend on quality riparian areas with overhanging vegetation to provide shade to maintain suitable water temperature, filter pollutants (including fine sediments), and to provide habitat for their preferred prey (National Marine Fisheries Service 2007). San Luis Obispo Creek is within the South-central California coast steelhead's range and is a known migration corridor and spawning area. As further discussed above, Froom Creek, including that portion through the Project site, and San Luis Obispo Creek are mapped as critical habitat for steelhead, and the upper reach of Froom Creek has a known population of steelhead (potentially land-locked). It is unknown if steelhead in the upper reaches of Froom Creek make their way through the Project site and into San Luis Obispo Creek. It is highly likely that during the winter storm season when high flows are present in the onsite portion of the creek, that steelhead could move through the site to areas up or downstream with suitable habitat. The onsite reach of Froom Creek is a dry channel for most of the year with flowing water present only following large storm events. Water flows recede quickly, and prolonged pools are poorly represented in the onsite portion of creek. Therefore, no perennial aquatic habitat is present that could support steelhead within the Project boundaries (Appendix E).

Special-Status Reptile and Amphibian Species

California Red-Legged Frog. The California red-legged frog is listed as threatened under the ESA and as an SSC by CDFW. The species inhabits creeks and ponds with open water often overhung with dense growths of woody riparian vegetation, especially willows. Suitable environments for California red-legged frog may also include areas with seasonal waters canopied by willows, which is present at the Project site along Calle Joaquin. This species is known to occur within San Luis Obispo Creek and some of its tributary channels. It generally requires seasonal pools or streams that hold water until late summer for successful breeding. Bullfrogs and introduced fish are detrimental to this species and have

severely reduced populations in many areas. As further discussed in Section 3.4.1.4, *Critical Habitat*, much of Froom Creek is mapped critical habitat for California red-legged frog, though the portion of Froom Creek in the Project site does not provide adequate pool habitat for breeding. However, during the rainy season, transient individuals could move through Froom Creek intermittently. Froom Creek connects to San Luis Obispo Creek, immediately downstream across U.S. 101 from the Project site. One adult and one juvenile California red-legged frog were found in San Luis Obispo Creek 0.1-mile upstream from this confluence. This occurrence is located about 0.5-mile straight-line distance northwest of the Project site. As noted above, this species was also documented in the Irish Hills Natural Reserve – Waddell Ranch Addition within the upper extents of Froom Creek (City of San Luis Obispo 2018). Flowing water was present within Froom Creek in the winter and spring of 2017, and other areas of ponded water in onsite features were identified; however, no California red-legged frog was observed (Appendix E). The Biological Resources Inventory prepared for the project (KMA 2018; Appendix E) subsequently identified potential for occurrence of this species at the Project site as low due to regionally low population levels and marginal suitable habitat onsite.

However, marginal habitat suitability identified by KMA during extensive site surveys between 2015 and 2016 may be due to the prolonged drought-period in prior years in the area (KMA 2017; Appendix E). Despite the long culverts and other potential barriers that may deter movement from documented occurrences in the vicinity, it is feasible for California red-legged frog to disperse onto the site under favorable conditions (i.e., during warm rains) given their ability to travel extensively over land as well as through marginal/seasonally dry riparian corridors. Recent upstream observations of adult and juvenile frogs along Froom Creek on the City-owned Waddell Property indicate that a breeding population is present in the vicinity and could expand if conditions are suitable. Onsite wetlands (Calle Joaquin wetlands, LOVR ditch, 3.2-acre stormwater detention basin) within or near the Project site have the potential to support California red-legged frog in dry years (e.g., Drainages 1, 2, and 3) and other aquatic and wetland features onsite are more suitable in wet years such as 2017. Photos from the Site Assessment for the California Red-Legged Frog (KMA 2017) indicate that drainages and adjacent vegetation onsite may provide potential aquatic dispersal and upland refugia habitat, both important components of California red-legged frog life history. If California red-legged frog are present within the wetlands offsite, drainage features onsite (e.g., Drainage 1) would likely be considered potential dispersal habitat by the USFWS. Given these conditions and

considerations, potential for California red-legged frog to occur onsite during non-drought periods is conservatively considered to be moderate.

Special-Status Mammal Species

Pallid Bat. The pallid bat is a large, long-eared bat that occurs throughout the state from deserts to moist forests, and is considered an SSC. Pallid bats are primarily a crevice roosting species that frequently occur in oak woodlands where they roost in tree cavities. These roosts are generally day or night roosts for one or a few bats. Attics may be used as roosts and during hot days individuals may emerge from crevices and roost on open rafters. Communal wintering or maternity colonies are more common in rock crevices and caves. Suitable roosting habitat is present at the Project site in oak/bay woodlands, and suitable foraging habitat exists in on-site grasslands and coastal scrub (Appendix E).

Townsend's Western Big-eared Bat. Townsend's western big-eared bat is a medium-sized bat with large rabbit-like ears that is an SSC. The Townsend's western big-eared bat has been recorded in a variety of habitats in California, and in the County and is found consistently in the vicinity of creek beds where they use the riparian corridor for foraging. Typical roost sites are found in caves or buildings with cave-like features. Townsend's big-eared bat is a sedentary species and is presumed to spend the winter within 25 miles of its summer roosts. Suitable foraging habitat for the Townsend's western big-eared bat is present throughout the site, and potential roosting habitat occurs at existing ranch buildings onsite (Appendix E).

3.4.1.6 Additional Common Wildlife Species

Although much of the northern and eastern half of the Project site supports disturbed areas and non-native grassland, areas in the Upper Terrace proximate to the Irish Hills Natural Reserve provide important wildlife foraging value. Upland grasslands, Froom Creek, and four tributary drainages provide foraging habitat and movement corridors for wildlife, including birds of prey and large mammals, such as mountain lion (*Felix*

A female mountain lion and her three cubs (two pictured above) were caught on trail cameras approximately 1 mile from the Project site within the Irish Hills Natural Reserve.

concolor), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). The dense vegetation and perennial water within the Calle Joaquin wetlands also provide substantial wildlife habitat value. For example, in January 2018, CDFW staff captured footage of a mountain lion and its three cubs approximately 1 mile from the Project site, and Wood staff observed coyotes at the Project site during field observations. A juvenile mountain lion was also observed on the adjacent Mountainbrook property by City staff and the Project Applicant during a pre-project site visit.

The City General Plan COSE identifies the Project site as being within a Wildlife Zone and Wildlife Corridor due to the undeveloped nature of the site, adjacency to the Irish Hills Natural Reserve, the Froom Creek channel, and quality of upland and lowland habitat. Wildlife zones and corridors are areas that provide the conditions necessary to allow wildlife to move safety through urban areas, or across barriers to wildlife movement (City of San Luis Obispo 2006).[6] As noted above, due to their distance from urban disturbance and proximity to the Irish Hills Natural Reserve, the springs and seeps within Upper Terrace likely provide an important water source for wildlife.

3.4.1.7 Tree Inventory

KMA conducted an inventory of trees within the Project site on February 10 and March 3, 2015. All trees within the site with a diameter at breast height (about 4.5 feet above ground) of approximately 4 inches or greater were identified, measured, tagged and evaluated. Willow shrubs, Monterey cypress, blue gum eucalyptus, and coast live oak that were less than 4 inches in diameter were not tagged, but their general location and canopy were delineated and are included in the total area of habitat in Table 3.4-1 (see also Figure 3.4-2). Based on these surveys, a total of 96 mature trees exist at the Project site, with most being native species such as sycamores, oak, and bay, with the oak and bay trees constituting more than 75 percent of mature trees onsite (see Table 3.4-5). Non-native trees identified within the Project site include blue gum eucalyptus and Peruvian pepper (*Schinus molle*) trees. None of these trees are considered a Heritage Tree under the City's Heritage Tree Program.

[6] The City General Plan COSE identifies wildlife corridors and wildlife zones in Figure 3: Wildlife Corridors.

Table 3.4-5. Inventory of Mature Trees within the Project Site

Common Name	Scientific Name	Number of Specimens
Native Species		
Coast live oak	*Quercus agrifolia*	41
California bay	*Umbellularia californica*	31
Western sycamore	*Platanus racemosa*	3
Fremont cottonwood	*Populus fremontii*	3
Arroyo willow	*Salix lasiolepis*	3
Hollyleaf cherry	*Prunus ilicifolia*	1
Non-native Species		
Blue gum eucalyptus	*Eucalyptus globulus*	12
Peruvian pepper	*Schinus molle*	2
Total		**96**

Note: The KMA Biological Resources Inventory also included delineated canopy area for blue gum eucalyptus, Monterey cypress, arroyo willow, and coast live oak trees. The approximate area or canopy of these trees is included in Table 3.4-1.
Source: Appendix E.

3.4.2 Regulatory Setting

Biological resources are governed primarily by federal, state, and local laws that would apply to the Project. Various development activities proposed under the Project would require coordination and permits from federal and state agencies.

3.4.2.1 Federal

Endangered Species Act

The ESA of 1973, as amended, establishes measures intended to ensure the protection and conservation of threatened and endangered species and the ecosystems on which they depend. Under the federal ESA, it is unlawful to "take" any species listed as threatened or endangered. Take is defined as actions intended to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." An activity is defined as a take even if it is unintentional or accidental. Take provisions under the federal ESA apply only to listed fish and wildlife species under the jurisdiction of USFWS and/or the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS). Consultation with USFWS or NMFS is required if a project "may affect" or result in take of a listed species.

When a species is listed, USFWS and/or NMFS, in most cases, must officially designate specific areas as critical habitat for the species. Consultation with USFWS and/or NMFS is required for projects that include a federal action or federal funding if the project would modify designated critical habitat.

Migratory Bird Treaty Act and Executive Order 13186

The Migratory Bird Treaty Act (MBTA) governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nest, and requires harvests to be limited to levels that prevent overuse. Further, the MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

Clean Water Act (CWA) Section 404 and Section 401

Under Section 404 of the CWA, USACE regulates the discharge of dredged or fill material into waters of the U.S. Waters of the U.S. are those waters that have a connection to interstate commerce, either directly via a tributary system or indirectly through a nexus identified in USACE regulations. In nontidal waters, the lateral limit of jurisdiction under Section 404 extends to the ordinary high-water mark (OHWM) of a water body or, where adjacent wetlands are present, beyond the OHWM to the limit of the wetlands. The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 328.3). In tidal waters, the lateral limit of jurisdiction extends to the high tidal line (HTL) or, where adjacent wetlands are present, beyond the HTL to the limit of the wetlands.

Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for a life in saturated soil conditions." "Other waters" essentially include any body of water not otherwise exempted that displays an OHWM and lacking one or more of the three wetland parameters (i.e., dominance of hydrophytic vegetation, hydric soils, and wetland hydrology).

Under Section 401 of the CWA, the State Water Resources Control Board (SWRCB) must certify all activities requiring a 404 permit. The RWQCB regulates these activities and issues Section 401 water quality certifications for those activities requiring a 404 permit.

3.4.2.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) parallels the main provisions of the Federal ESA and is administered by the CDFW. CESA prohibits the take of state-listed threatened and endangered species. California Fish and Game Code Section 86 defines "take" to include catch, pursue, or capture, or attempt to catch, pursue, or capture. Under the CESA, the CDFW is responsible for maintaining a list of rare, threatened, and endangered species designated under state law (California Fish and Game Code 2070-2079). The CDFW also maintains lists of candidate species, Species of Special Concern, and Fully Protected species. Pursuant to the requirements of the CESA, agencies reviewing proposed projects within their jurisdictions must determine whether any state-listed species have the potential to occur within a proposed project site and if the proposed project would have any significant impacts upon such species. Project-related impacts to species on the CESA's rare, threatened, and endangered list would be considered significant.

Native Plant Protection Act

The Native Plant Protection Act (NPPA; California Fish and Game Code 1900) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites; and changes in land use. Impacts to state designated rare plant species require a permit from CDFW.

3.4.2.3 Local

City of San Luis Obispo General Plan

The City of San Luis Obispo General Plan contains policies requiring protection of special-status plant and animal species. While a comprehensive presentation of these local policy requirements would be prohibitively long, key policies pertaining to biological resources associated with the Project site are summarized below.

Land Use Element

Policy LUE 6.6.3: Amenities and Access. New public or private developments adjacent to the lake, creeks, and wetlands must respect the natural environment and incorporate the natural features as project amenities, provided doing so does not diminish natural values.

Conservation and Open Space Element

Policy COSE 7.3.1 Protect Listed Species (A-D).

A. The City will identify the location, habitat and buffer needs of species listed for protection. This information will be developed by qualified people early in the planning and development review process.
B. The City will establish and maintain records on the location of listed species. The City will maintain, for public use, generalized maps showing known locations of listed species. Specific site information may be kept confidential to protect the resources.
C. The City will comply with State and Federal requirements for listed species.
D. The City will protect listed species through its actions on: land-use designations; development standards; development applications; location, design, construction and maintenance of creeks, City roads and facilities; and on land that the City owns or manages.

Policy COSE 7.3.2 Species of Local Concern. The City will:

A. Maintain healthy populations of native species in the long term, even though they are not listed for protection under State or Federal laws. These "species of local concern" are at the limit of their range in San Luis Obispo, or threats to their habitat are increasing.
B. Identify the location, habitat and buffer needs of species of local concern. This information will be developed by qualified people early in the planning and development review process.
C. Protect species of local concern through: its actions on land use designations, development standards, development applications; the location, design, construction, and maintenance of City facilities; land that the City owns or manages.
D. Encourage individuals, organizations, and other agencies to protect species of local concern within their areas of responsibility and jurisdiction.
E. Protect sensitive habitat, including creeks, from encroachment by livestock and human activities.

Policy COSE 7.3.3 Wildlife Habitat and Corridors. Continuous wildlife habitat, including corridors free of human disruption, shall be preserved and where necessary, created by

interconnecting open spaces, wildlife habitat, and corridors. To accomplish this, the City will:

A. Require public and private developments, including public works projects, to evaluate animal species and their movements within and through development sites and create habitats and corridors appropriate for wildlife.
B. Plan for connectivity of open spaces and wildlife habitat and corridors using specific area plans, neighborhood plans, subdivision maps, or other applicable planning processes, consistent with Open Space Guidelines.
C. Coordinate with San Luis Obispo County and adjoining jurisdictions, federal and state agencies such as Caltrans to assure regional connectivity of open space and wildlife corridors.
D. Preserve and expand links between open spaces and creek corridors.

Policy COSE 7.5.1 Protection of Significant Trees. Significant trees, as determined by the City Council upon the recommendation of the Tree Committee, Planning or Architectural Review Committee, are those making substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. Significant trees, particularly native species, shall be protected. Removal of significant trees shall be subject to the criteria and mitigation requirements in Chapter 8.6.3. Oak Woodland communities in the Greenbelt and in open space areas shall be protected.

Policy COSE 7.5.2 Use of Native California Plants in Urban Landscaping. Landscaping should incorporate native plant species, with selection appropriate for location.

Policy COSE 7.5.4 Preservation of grassland communities and other habitat types. Grassland communities and other habitat types in the Greenbelt and in designated open space areas shall be preserved.

Policy COSE 7.5.5 Soil Conservation and Landform modification. Public and private development projects shall be designed to prevent soil erosion, minimize landform modifications to avoid habitat disturbance, and conserve and reuse onsite soils.

Policy COSE 7.5.6 Minimize synthetic or organic environmental toxins.

Policy COSE 7.7.7 Preserve Ecotones. Condition or modify development approvals to ensure that "ecotones," or natural transitions along the edges of different habitat types, are preserved and enhanced because of their importance to wildlife. Natural ecotones of particular concern include those along the margins of riparian corridors, marshlands, vernal pools, and oak woodlands, where they transition to grasslands and other habitat types.

Policy COSE 7.7.8 Protect Wildlife Corridors. Condition development permits in accordance with applicable mitigation measures to ensure that important corridors for wildlife movement and dispersal are protected. Features of particular importance to wildlife include riparian corridors, wetlands, lake shorelines, and protected natural areas with cover and water. Linkages and corridors shall be provided to maintain connections between habitat areas.

Policy COSE 7.7.9 Creek Setbacks. As further described in the Zoning Regulations [Section 17.70.030], the City will maintain creek setbacks to include: an appropriate separation from the physical top of bank, the appropriate floodway as identified in the Flood Management Policy, native riparian plants or wildlife habitat, and space for paths called for by any city-adopted plan. In addition, creek setbacks should be consistent with the following:

A. The following items should be no closer to the wetland or creek than the setback line: buildings, streets, driveways, parking lots, aboveground utilities, and outdoor commercial storage or work areas.
B. Development approvals should respect the separation from creek banks and protection of floodways and natural features identified in Part A above, whether or not the setback line has been established.
C. Features which normally would be outside the creek setback may be permitted to encroach where there is no practical alternative, to allow reasonable development of a parcel, consistent with the Conservation and Open Space Element.
D. Existing bridges may be replaced or widened, consistent with policies in this Element. Removal of any existing bridge or restoration of a channel to more natural conditions will provide for wildlife corridors, traffic circulation, access, utilities, and reasonable use of adjacent properties.

Policy COSE 8.3.1: Open Space within an Urban Area. The City will preserve the areas listed in Goal 8.2.2 (creek corridors, including open channel with natural banks and vegetation, wetlands and vernal pools, grassland communities and woodlands, wildlife habitat corridors, habitat of listed species, and unique plant and animal communities including "species of local concern") and will encourage individuals, organizations, and other agencies to do likewise. The City will designate these areas as Open Space or Agriculture in the General Plan.

Policy COSE 8.3.2: Open Space Buffers. When activities close to open space resources within or outside the urban area could harm them, the City will require buffers between the activities and the resources. The City will actively encourage individuals, organizations, and other agencies to follow this policy. Buffers associated with new development shall be

on the site of the development, rather than on neighboring land containing the open space resource. Buffers provide distance in the form of setbacks, within which certain features or activities are not allowed or conditionally allowed. Buffers shall also use techniques such as planting and wildlife-compatible fencing. Buffers shall be adequate for the most sensitive species in the protected area, as determined by a qualified professional, and shall complement the protected area's habitat values. Buffers shall be required in the following situations [four of the five noted here, see COSE Policy 8.3.2 for A]:

B. Between urban development and agricultural operations, to address dust, noise, odors, chemical use, and access by people and pets.
C. Between agricultural operations and natural habitat, to address noise, chemical use, sediment transport, and livestock access.
D. Between new development and cultural resources, to address visual compatibility and access by people.
E. Between new development and scenic resources or the greenbelt, to address view blockage, lighting and noise, and visual transition from urban character to rural character.
F. Between urban development -- including parks and public facilities-- and natural habitats such as creeks, wetlands, hillsides, and ridgelines, Morros, scenic rock outcrops and other significant geological features, and grassland communities, to address noise, lighting, storm runoff, spread of invasive, non-native species, and access by people and pets (see also the Safety Element for "defensible space" next to wildland fire areas).

Policy COSE 8.7.2 C: Enhance and Restore Open Space. Remove invasive, non-native species in natural habitat areas, and prevent the introduction or spread of invasive, non-native species and pathogens.

City of San Luis Obispo Municipal Code

Chapter 12.24 Tree Regulations (Ordinance No. 1544). The City regards trees as essential to the community's well-being and adopted Ordinance No. 1544 for the purpose of establishing and maintaining a comprehensive program for planting, maintaining, and preserving trees within the City. Under Chapter 12.24, developers are required to submit tree removal permits to the City for review when proposing to engage in activities that may result in the harm, removal, or disfigurement of any trees.

City of San Luis Obispo Zoning Ordinance

17.70.030 Creek Setbacks. As stated in the zoning regulations, creek setbacks apply to all creeks as defined in the COSE, as shown on that element's Creek map (Figure 9), and only

to those creeks. Creek setbacks shall be measured from the existing top of bank (or the future top of bank resulting from a creek alteration reflected in a plan approved by the City), or from the outside edge of the predominant riparian vegetation, whichever is farther from the creek flow line. The zoning regulations specify different setback dimensions for different classes of covered waterways such as whether the creek was zoning regulations for a 35-foot setback from the top of the bank or outside edge of riparian vegetation; within the 1996 City limits or in areas annexed after 1996. Under Section 17.70.030, Froom Creek is designated for a 35-foot setback; however, 17.70.030.E.3 provides that the City may require larger setbacks for discretionary projects in order to avoid potentially significant environmental impacts.

3.4.3 Environmental Impact Analysis

3.4.3.1 Thresholds of Significance

With respect to biological resources, applicable sections of Appendix G of the State CEQA Guidelines state that a project would normally have a significant impact on the environment if its implementation would result in:

a) A substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

b) A substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

c) 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) Substantial interference 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; or,

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.

Non-Applicable Threshold(s)

- Threshold (f) *(Conflict with an adopted conservation plan)*: The Project site is not located within the management area of any adopted Habitat Conservation Plan,

Natural Community Conservation Plan, or other local, regional, or state habitat conservation plans.

3.4.3.2 Impact Assessment Methodology

The information on existing biological resources presented in this section is based primarily on Applicant-prepared studies spanning the period from 2015 to 2019, which were peer reviewed by the City's EIR consultant. Botanical and biological surveys were conducted for the Project site in 2015, and updated and verified through additional field surveys conducted in spring and early summer of 2019 by KMA. The habitat, vegetation, rare plant, and animal surveys conducted in 2015 – supplemented with the additional rare plant surveys conducted in 2019 – serve as the environmental baseline / existing site conditions, as well as the basis for analysis of Project impacts against existing biological resources onsite, consistent with CEQA Guidelines Section 15125(a)(1). Baseline conditions include approximately 2.0 acres of wetland within the 3.2-acre Irish Hills Plaza stormwater detention basin. This included approximately 0.6 acres of predominately native wetland species (e.g., cattails and rushes) within the forebay, and an additional 1.4 acres of potential hydric soils and similar native wetland species mixed with non-native species within the main basin.[7]

In addition to the surveys conducted by KMA for the Project, Wood's team performed general site reconnaissance five times between 2017 and 2019 to document site conditions. Wood planners, biologists, and botanists conducted an additional one-day reconnaissance-level site visit in January 2018 to document existing conditions and peer review the Applicant-prepared studies. Wood's team photo-documented conditions throughout the site, including the Upper Terrace and the Froom Creek channel. This information was used to review and confirm the locations and extent of creek, riparian, wetland, and upland habitats and extent and location of sensitive species.

Impacts are analyzed by evaluating the Project's effects on candidate, sensitive, or special-status species, vegetative communities, individual occurrences of plant and wildlife species, habitat linkages, and wildlife corridors. The analysis of potential impacts to biological resources is based on a review of information contained in the City of San Luis Obispo's General Plan and Creek and Waterways Management Program, the CNDDB,

[7] As discussed in Section 3.4.1.3, *Vegetation and Habitat Types/Communities*, this basin is subject to a maintenance agreement which requires clearing of vegetation to maintain capacity. Based on review of aerial photographs, the basin appears to have been maintained at least twice since being constructed 13 years ago, with wetland vegetation re-growing after such maintenance events and potentially enduring for multiple years between past maintenance events.

information from the USFWS, and several technical studies prepared by the Applicant team for the Project (Appendix E). These include:

- Biological Resources Inventory prepared by KMA in January 2016 and revised November 2018;
- Vernal Pool Habitat Assessment prepared by KMA in November 2017;
- Site Assessment for the California Red-Legged Frog (*Rana draytonii*) prepared by KMA in December 2017; and
- 2019 Rare Plant Update and Wetland Impact Analysis Memorandum prepared by KMA in July 2019.

To quantify the Project's potential area of effect on specific biological resources, ArcGIS data were prepared by KMA and utilized by Wood staff to calculate the proposed Project's potential impacts on mapped habitat (see Figure 3.4-1) and sensitive biological site constraints (see Figure 3.4-2). The Project would result in the direct development of 39.1 acres of multi-family residential and senior living units, 3.1 acres of commercial, 5.6 acres of roadways and paved surfaces, 2.9 acres of parks and public facilities, disturbance of 11.5 acres associated with realignment of Froom Creek, and disturbance of 7.1 acres associated with development of the stormwater detention basin (i.e., total disturbance of approximately 59.3 percent of the Project site). Approximately 9.91 acres of this development would be associated with the development of the Upper Terrace of Villaggio (approximately 24 percent of the total area of the Upper Terrace). Given this extent of development and disturbance, Project development has the potential to impact a range of sensitive resources, particularly within the Upper Terrace area where biological resources are rich and diverse. Construction impacts are assessed based on the Project's preliminary VTM and the draft Froom Ranch Specific Plan (Appendix C), including rough grading estimates; location and area of disturbance associated with realignment of Froom Creek, roadways, and bridges; and location and size of utility and drainage infrastructure. Construction impacts are assessed based on the likely presence of heavy construction equipment, vehicles, and construction crews operating in close proximity to or within sensitive habitats. Operational impacts are based on the proposed extent of development, vehicle traffic, noise, landscape maintenance, fire protection, light and glare, and human presence within proximity to existing biological resources. This analysis assesses the potential for increased activity and increased impervious surfaces near Froom Creek to result in impacts to biological resources.

3.4.3.3 Project Impacts and Mitigation Measures

Potential impacts to biological resources could result from development of the site, including grading, fill import, realignment of Froom Creek, and vegetation/habitat removal, as well as operational generation of new light and noise, and increased human activity. Permanent and temporary impacts to biological resources in the Project site are analyzed and mitigation measures to avoid or reduce those impacts are identified and summarized in Table 3.4-6.

Table 3.4-6. Summary of Project Impacts

Biological Resources Impacts	Mitigation Measures	Residual Significance
BIO-1. Project implementation would impact sensitive riparian, wetland, and native grassland habitats identified as sensitive natural communities under state and City policy.	MM HAZ-2 MM BIO-1 MM BIO-2 MM BIO-3 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-7 MM BIO-8	Significant and Unavoidable
BIO-2. Project implementation would have substantial direct and indirect adverse impacts on candidate, sensitive, or special-status species that are known to or may occur on the Project site.	MM HAZ-2 MM BIO-1 MM BIO-9 MM BIO-10 MM BIO-11 MM BIO-12	Significant and Unavoidable
BIO-3. Project implementation would have a substantial adverse impact on state and federally protected wetlands.	MM BIO-1 MM BIO-2 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-7 MM BIO-8	Significant and Unavoidable
BIO-4. Project construction and operation would have a substantial adverse impact on the movement of resident or migratory fish or wildlife species or resident and migratory wildlife corridors along Froom Creek, Drainages 1, 2, and 3 and across open grasslands on the Upper Terrace of the Project site.	MM BIO-1 MM BIO-2 MM BIO-3 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-9 MM BIO-11 MM BIO-12 MM BIO-13 MM BIO-14	Significant and Unavoidable
BIO-5. Project construction would result in the potential disturbance, trimming, or removal of up to 75 mature trees.	MM BIO-15	Less than Significant with Mitigation

Impact BIO-1 Project implementation would impact sensitive riparian, wetland, and native grassland habitats identified as sensitive natural communities under state and City policy (Significant and Unavoidable).

Project construction would create substantial direct and indirect impacts to onsite biological resources from construction disturbance, particularly sensitive resources located within the Upper Terrace, in the Irish Hills Natural Reserve bordering the site, and wetlands in the Irish Hills stormwater detention basin, LOVR ditch, and Calle Joaquin wetlands. A total of 8.37 acres of sensitive natural communities would be directly impacted within the Project site, including the loss of 4.74 acres of serpentine bunchgrass grasslands, 1.13 acres of wetlands, and 0.5 acre of Arroyo Willow Riparian Scrub. Project construction over a 5-year period could also expose onsite and adjacent habitats to sustained disturbance and indirect impacts from vegetation clearing, construction staging and storage, dust generation, erosion and sedimentation, risk of spills of fuel or motor oils, and increased human presence in currently natural areas. Indirect impacts would affect onsite and adjacent habitats, such as those within the Irish Hills Natural Reserve along the boundary of the Project site.

Table 3.4-7. Impacts to Sensitive Habitat Types Located within the Project Site

Habitat Type (Corresponding Sensitive Natural Community)	Existing Portion of Project Site (acres)	Direct Impact (acres)	Indirect Impact (acres)[1]
Serpentine Bunchgrass Grassland (*Nassella pulchra* Herbaceous Alliance)	13.46	4.74	11.0 / 3.9
Coastal Scrub/Chaparral **(--)**	9.26	0	
Wetland (Coastal and Valley Freshwater Marsh)	8.27	2.5	
Arroyo Willow Riparian Scrub (Central Coast Arroyo Willow Riparian Scrub)	4.82	1.13	
Total	**35.81**	**8.37**	**14.9**

[1] Onsite indirect impacts / offsite indirect impact.

Project construction would eliminate and potentially contaminate water sources and food supplies and available forage areas in sensitive habitats. Prolonged construction activities and exposure of large areas of disturbed soils and artificial slopes proximate to both the existing and proposed realigned Froom Creek corridor could result in erosion and sediment flows into the creek and downstream habitats during grading and site preparation activities extending over multiple phases and several years. Potential for large volumes of sediment

input could compromise riparian and wetland habitat in Froom Creek and San Luis Obispo Creek downstream, as well as the Calle Joaquin wetlands. Changes to the creek flow and hydrology with potential for release of contaminants into riparian and wetland habitats could directly affect plants and animals by reducing the quality of existing habitat and causing mortality of individuals, both of which constitute an adverse impact to the affected species (see Impact BIO-2). Damage to or direct removal of sensitive vegetative communities as a result of the proposed disturbance and development is considered a *potentially significant* impact.

Once operational, the Project would require maintenance and clearance of vegetation to maintain permanent wildfire buffers both onsite and offsite (e.g., within the Irish Hills Natural Reserve) (For additional information see Section 3.7, *Hazards, Hazardous Materials, and Wildfire*.) The exact location, width, and area of these buffers will be subject to coordination, review, and approval of the City Natural Resources Manager, San Luis Obispo Fire Department (SLOFD), CALFIRE, and the Applicant based on project development plans. This coordination has the potential to result in a reduced size of or need for a wildfire buffer and fuel management zone around the proposed development. However, for the purposes of this analysis, wildfire buffers are conservatively estimated to require a minimum width of 100 feet of defensible space from planned structures.[8] Wildfire buffers are anticipated to extend into the Irish Hills Natural Reserve along approximately 1,000 feet of the perimeter of Madonna Froom Ranch, as well as 700 feet of Villaggio's Lower Area (see Figure 3.7-2). Although the precise location and width of buffers are not known, assuming fire clearance of a maximum of up to 100 feet within Irish Hills Natural Reserve, approximately 3.9 acres of coastal sage scrub, chaparral, and grassland habitats within the Reserve may be indirectly impacted.

Clearance of a wildfire buffer area within internal open space on the Project site would also indirectly result in the permanent loss or modification of up to 11.0 acres of existing vegetation onsite through vegetation clearance. Wildfire buffer clearance would impact annual non-native grasslands and serpentine bunchgrass grasslands, coastal live oak/ California bay woodlands, coastal scrub/chaparral, and riparian habitats in the Upper Terrace. The western boundary of the Lower Area would likely also require additional vegetation maintenance and clearance. Planned development would also closely border

[8] Recent major wildfires in California and observed changes in the severity of fires and their behavior are causing some agencies to adjust fire management strategies, including some changes in buffer requirements. Final fire buffer width and maintenance vegetation clearance and maintenance requirements would be determined by SLOFD.

Drainages 1, 2, and 3, which may also be subject to vegetation clearance and management requirements resulting in impacts to wetland vegetation, including the endangered Chorro Creek bog thistle. Therefore, wildfire buffer clearance requirements would result in potential indirect impacts to biological resources both on and off the Project site, including potentially rare and sensitive habitats, such as serpentine bunchgrass grasslands. See Impact HAZ-1 in Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* for additional discussion of fire clearance requirements. Damage to or direct removal of sensitive vegetative communities as a result of fire management activities (e.g., vegetation clearing for fire clearance) is considered a *potentially significant* impact.

Sensitive Upland Habitat

Project construction would result in the direct, permanent loss of up to 4.74 acres of native serpentine bunchgrass grassland habitat, which corresponds to the *Nassella pulchra* Herbaceous Alliance, a designated sensitive natural community considered biologically important by CDFW. Once operational, maintenance of wildfire buffers could result in up to an additional 14.9 acres of disturbance of habitats on and offsite, including serpentine rock outcroppings and native serpentine bunchgrass grassland habitat (refer also to Impact HAZ-1; see Figure 3.7-2). Fire clearance requirements could also impact coastal scrub and coast live oak/ California bay woodlands, which may support special-status species (see Impact BIO-2 below). Habitat near or adjacent to the Project development area may also be subject to gradual degradation over time through increased human activity such as landscape maintenance practices, herbicide use, polluted runoff, trampling, introduction of non-native species, or other activities of new residents and long-term operation of the developed and landscaped portions of the site. Damage to or direct removal of these vegetation communities as a result of the proposed grading and development or operation of the Project would be considered a *potentially significant* impact.

Sensitive Riparian Habitat

Project construction would result in permanent direct loss of 1.13 acres of Arroyo Willow Riparian Scrub through realignment of Froom Creek and construction of the proposed stormwater detention basin on the Mountainbrook Church property, as well as relocation or realignment of the existing LOVR ditch, widening of LOVR, and construction of a new Project entrance road and culvert. Direct removal of Central Coast Arroyo Willow Riparian Scrub, a designated sensitive natural community, would be considered a *potentially significant* impact.

In addition to these direct impacts, the Project includes realignment and restoration of Froom Creek which may mitigate some of these losses of riparian habitat. If successful, and as shown in the Applicant's proposed restoration plan, the Project would result in the creation of riparian habitat through the relocation and restoration of Froom Creek. However, given the existing Froom Creek habitats and channel characteristics, which are a combination of dry cobble and sandy gravelly wash with no riparian vegetation within the Specific Plan area, successful establishment of a riparian woodland and, more importantly, its long-term survival may be challenging. As discussed in Section 3.8, *Hydrology and Water Quality*, the resiliency of such restored riparian habitat during major flood flows is uncertain, though potential for bank erosion is anticipated to be limited downstream of the proposed bend in the realigned creek channel. Along approximately 1,000 feet of the realigned Froom Creek from the Project site's western boundary and through the major bend in the creek, there appears to be the potential for higher velocity flood flows (5 to 9 feet per second) to scour planted riparian vegetation from the creek bank leading to potential for repeated damage or removal of such vegetation over the 75 or more years life of the Project. In the period shortly following construction of the realigned Froom Creek channel and before riparian vegetation can become fully established, or following a severe flood event that would remove vegetation from the creek bank, flow velocities within the creek would become much greater (8 to 12 feet per second) (Appendix H). This potential would be particularly high during flood events and debris flows that may follow a fire in the upper Froom Creek watershed.[9] While such scouring is a natural process along creek corridors, given the engineered nature of this realigned creek habitat, it is uncertain that native riparian habitat would naturally re-establish, potentially requiring repeated restoration efforts and maintenance over the long term. The Project would directly affect riparian habitat, and proposed restoration in the realigned Froom Creek channel is not certain to fully offset this loss. Therefore, this impact would be considered *potentially significant*.

Sensitive Wetland Habitat

Project development would impact a range of wetland habitats onsite, including both sensitive natural communities and constructed wetlands. Direct adverse impacts could

[9] Fire return frequencies are uncertain. However, there are no records of fires having occurred within the Irish Hills in recent history. While wildfire return frequencies are not easily predictable, it is likely that the Froom Creek watershed will burn at least once or twice during a presumed 75-100 years Project horizon. If such a burn is followed by heavy rains, substantially increased flows, debris, and sediment can be anticipated from this watershed, with associated potential for increases in scouring and sedimentation until watershed vegetation recovers.

affect up to 0.5-acre of wetland habitat, 0.2-acre of which corresponds to the Coastal and Valley Freshwater Marsh sensitive natural community, through construction of the realigned Froom Creek and LOVR road shoulder improvements. In addition, construction of the Upper Terrace may result in the direct disturbance or incidental fill of Drainages 1, 2, and 3 to allow for movement of construction equipment and material around the site. Such activities have potential to result in additional sedimentation or pollution of adjacent or downstream drainages and wetland habitats also associated with the Coastal and Valley Freshwater Marsh sensitive natural community. During construction of private roadways associated with the proposed development, four headwall/culvert road crossings of approximately 30 feet in width would be constructed over Drainages 1, 2, and 3 and would potentially lead to direct loss of habitat and impacts to adjacent and/or downstream wetland and stream habitat. The proposed Project would also eliminate up to 2 acres of wetlands in the existing 3.2-acre Irish Hills stormwater detention basin. This would include approximately 0.6 acres of largely native wetland species (e.g., cattails and rushes) within the forebay, and an additional 1.4 acres of wet soils and similar mixed native wetland species mixed with and non-native species within the main basin. The loss of these sensitive wetland habitats would be substantial, and the Applicant's preliminary plans do not account for restoration of this habitat.

Based on preliminary designs, the Project would include installation of at least three utility lines underlying the realigned Froom Creek and existing Calle Joaquin wetlands to connect with existing infrastructure along LOVR (see Figure 2-13 and Figure 2-14). It is unknown at this time how of these lines would be installed through trenching or directional drilling. As such, it is conservatively assumed that construction of utility lines across Froom Creek and onsite wetlands would require some degree of surface disturbance and result in adverse effects to these habitats. Installation of these utilities may also result in adverse effects to water quality and designated critical instream habitat downstream from potential introduction of sediment runoff, siltation, and accidental spillage of fuel and lubricants.

The Calle Joaquin wetlands are currently fed by high groundwater, an artesian well, and surface water inflows primarily from the LOVR ditch and the 3.2-acre Irish Hills Plaza stormwater detention basin. These wetlands are not typically hydrologically connected to surface waters from Froom Creek, but may receive some flows when flood flows overtop the existing Froom Creek channel; the frequency of such an event is estimated to occur during a 10-year flood event. Project implementation would expose the Calle Joaquin wetlands to substantial changes in hydrology and drainage. The Project would configure the LOVR ditch to flow to the realigned Froom Creek rather than to the Calle Joaquin

wetlands, removing a regular source of inflow to the wetlands. However, as described above, upward groundwater inflow is the primary hydrologic influence supporting these wetlands. Though stormwater is a source of water supporting these wetlands, the presence of groundwater inflows within the area indicates the Calle Joaquin wetland area is likely to persist with relocation of the stormwater basin and installation of the LOVR ditch, even during dryer periods. Given the dominant source of water for these wetlands is and would remain groundwater inflow, alterations in the hydrologic connections and source water for the Calle Joaquin wetlands is not anticipated to significantly affect the health of these wetlands (Appendix E).

Within the Upper Terrace, proposed development would be closely situated along both sides of Drainage 2 for over 475 feet, with setbacks of new buildings from this wetland of as little as approximately 10 feet based on preliminary site plans. Such development could create potential direct and indirect impacts to this wetland habitat through damage caused by heavy equipment operations and polluted runoff during construction, fire clearance requirements, landscape management, changes in surface and subsurface drainage and hydrology over the long-term, and increased disturbance through activity of new residents. Development in the Upper Terrace would also closely border Drainage 1 for almost 250 feet with setbacks of as little as approximately 18 feet. Several units in Lower Villaggio would also be constructed adjacent to Drainages 2 and 3, with similar potential for impacts to sensitive wetland habitat, potentially affecting the health, extent, or quality of these wetlands. For these reasons, impacts to sensitive wetland habitat are considered *potentially significant.*

In addition, as discussed in Section 3.13, *Transportation and Traffic,* the Project would be required to implement MM TRANS-9, which would require widening of LOVR fronting the Project site between Irish Hills Plaza and Calle Joaquin and developing a curb, gutter, sidewalk, and protected bike lane. The design of the proposed improvements would result in an estimated 19,300 sf of additional pavement area extending into the Project site, resulting in an estimated 18,425 sf of disturbance to the wetlands and riparian habitat located within the existing LOVR ditch and Calle Joaquin wetlands. Based on the total area of disturbance associated with widening of LOVR to accommodate this improvement, the secondary impact to sensitive riparian and wetland habitat is estimated to be up to 25,000 sf (0.57 acre). Refer also to Impact TRANS-2 for discussion of secondary impacts associated with these required improvements.

Proposed Policy 3.2.7 of the Specific Plan is intended to address such impacts to sensitive natural communities and habitats and requires that impacts be avoided or minimized, including through the creation of twice the area of habitat lost (2:1 ratio), of equal quality and similar kind, within the Specific Plan Area or adjacent open space. However, several of the habitats impacted would be difficult or infeasible to restore or replace. First, native bunchgrass grasslands and the *Nassella pulchra* Herbaceous Alliance are challenging to successfully restore or replace with habitat of equal quality. For example, while it is possible to plant plugs of *Stipa pulchra*, successful restoration of the full complement of grassland herbaceous species, particularly in the unique serpentine grasslands, may not be feasible.[10] In addition, replacing the unusual seep-fed wetlands present along impacted segments of Drainages 1, 2, and 3 in the Upper Terrace would be challenging. These wetlands would be directly impacted through culvert-headwall installation and sedimentation from grading and development as well as new buildings sited as little a 10-20 feet from these wetlands, and the ability to reestablish and maintain rare plant species present within these areas is unknown. Lastly, ensuring the long-term maintenance of the restored From Creek riparian habitat must be considered speculative and as such, cannot be considered as feasible long-term mitigation due to potential for scour and denudation within the Froom Creek corridor.

In addition to these impacts, there are four additional ways in which Project-related drainage improvements (i.e., Froom Creek realignment) may affect the Calle Joaquin wetlands. These impacts are associated with substantial changes in the hydrologic connection between Froom Creek and the Calle Joaquin wetlands:

1) Change in frequency and quantity of waters entering the Calle Joaquin wetlands and potential changes to wetland habitat.

The proposed creek realignment would substantially increase the hydrologic interaction between the Calle Joaquin wetlands and Froom Creek, effectively making this wetland part of the active stream system. The changes in the hydrologic balance of this wetland may have consequences to the character, function, and species composition of these wetlands. The design of the realigned Froom Creek and low-flow channel would allow for flows greater than a 2-year event to overtop a low-flow channel and flow into the Calle Joaquin wetlands. Flood flows reaching the Calle Joaquin wetlands would become substantially

[10] In consultation with Wood biologists and other local restoration ecologists, the difficulty of fully restoring a functioning native grassland with a full complete set of species has been noted; success of restoration of such grasslands with a full complement of species that currently occur can therefore not be assured.

more frequent, occurring during storms larger than a 2-year storm event. Under existing conditions, based on initial cross sections of the creek channel and banks, Froom Creek overtopping currently occurs along upper segments of the creek bank when flows are in excess of 10-year to 25-year storm conditions, depending on location. Under the Project, due to the topography and the design of the realigned creek channel, the Calle Joaquin wetlands would be inundated with stormwater flows and serve as a wide channel for the realigned Froom Creek. During large rainfall events, up to 11 acre-feet of stormwater would flow into the wetlands, filling to a depth of 3 to 4 feet, submerging the wetlands more frequently and for longer duration than under existing conditions. Further, stormwater collected in the Calle Joaquin wetlands would primarily evaporate, since high groundwater would cause low rates of percolation and the Project does not include drain pipes to allow the detained water to flow downstream or on to other areas. As such, the Calle Joaquin wetlands would hold standing water for extended periods and the wetlands may become submerged more frequently and for prolonged periods of time following storm events. This change in frequency and duration of potential inundation of these wetlands has an unpredictable potential to affect the character and species composition of the wetlands (and associated use by wildlife), potentially affecting their qualifying characteristics as Coastal and Valley Freshwater Marsh and a sensitive natural community. Therefore, the impacts of these changes in the hydrology of the Calle Joaquin wetlands are considered *potentially significant.*

2) Potential for migration of the Froom Creek corridor through the wetlands.

Based on the Preliminary Hydrologic and Hydraulic Calculations and Preliminary Sediment Transportation Analysis and Calculations prepared by RRM (Appendix J) for the proposed Froom Creek channel realignment, water flowing through the low-flow channel would move at a rate that would not cause erosion (less than 1 foot per second). Under normal conditions, erosive flow velocity and sediment transport would not be present through the low-flow channel due to the low anticipated flow rate. The Project does not include any bank stabilization measures for the proposed low-flow berm separating the realigned Froom Creek from the Calle Joaquin wetlands that would ensure it retains its proposed location and function over the life of the Project. During large flood events with higher-velocity flows, over time the low-flow berm may erode, and Froom Creek may migrate into and form a braided channel within the Calle Joaquin wetland due to more frequent bank overtopping and flooding and lower elevations within the wetland area (refer to Appendix E). Migration of the creek channel or establishment of a braided channel within the wetlands would alter and potentially reduce wetland habitat and potentially alter

the mix of wetland vegetation that contributes to the Calle Joaquin wetlands designation as a sensitive natural community. Therefore, impacts are considered *potentially significant.*

3) Increases in sedimentation of the wetlands under typical storm conditions.

Realignment of Froom Creek and design of the low-flow channel would increase potential sedimentation of the Calle Joaquin wetlands over time. The existing Froom Creek overtops and flows to the Calle Joaquin wetlands infrequently from upper reaches onsite during 10- to 25-year storm events. Under most storm conditions, the existing Froom Creek channel conveys all stormwater offsite and does not flow to the Calle Joaquin wetlands. Under proposed conditions, the Froom Creek corridor would directly abut the Calle Joaquin wetlands and a low-flow channel creek bank would allow for substantially more frequent direct flow of water from smaller storm events (anything greater than a 2-year storm event) into the wetlands. Because large-scale (i.e., 50- to 100-year) floods carry the highest sediment volume and already overtop existing creek banks, deposition of sediment within the Calle Joaquin wetlands during smaller overflow events would be incremental. In addition, most sediment within the main realigned Froom Creek channel is expected to drop out (settle) higher up the creek channel, before reaching the Calle Joaquin wetlands. While the potential increased sediment transport from the realigned Froom Creek into the Calle Joaquin wetlands have some potential for increased long-term accumulation of sediments in the Calle Joaquin wetlands, typical sediment volumes carried by more frequent small storms tend to be low, and higher sediment loads are typically carried by larger 50- to 100-year storm events. In addition, and as discussed above, increased frequency and duration of inundation related to stormwater storage would tend to offset incremental increases in sedimentation and its possible effects on the character and species composition of these wetlands. It remains feasible that sediment carried by more frequent storms that would now regularly overtop the banks of the realigned Froom Creek would accumulate and alter the Calle Joaquin wetlands over the life of the Project. Therefore, impacts are considered *potentially significant.*

4) Effects from severe storm and post-fire flood conditions from realignment of the Froom Creek corridor.

Large storm events, particularly those occurring shortly after wildfires have potential to result in substantial sediment loading of creeks and downstream areas. As discussed in Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* there are no records of wildland fires having occurred within the immediate Project vicinity, which may indicate a high degree of fuel loading and increased risk of wildfire, particularly within the Irish Hills

Natural Reserve (County of San Luis Obispo Fire Department 2018). Depending on weather conditions, habitat types, and fire management policies, the Irish Hills and surrounding area have a very high risk of wildland fire and the majority of the area is identified as a Very High Fire Hazard Severity Zone (FHSZ) by CALFIRE. Major storms, particularly those that occur in post-fire conditions, have the potential for mass sediment loading within the realigned Froom Creek and into the Calle Joaquin wetlands with potential to affect the Calle Joaquin wetlands. However, in high intensity post-fire flood conditions, conveyance of sediment and denuded soil to the Calle Joaquin wetlands has potential to occur regardless of the Project. Implementation of the Project would not exacerbate these conditions; therefore, potential impacts would be *less than significant.*

Mitigation Measures

MM HAZ-2 shall apply.

MM BIO-1 The Applicant shall prepare and implement a Biological Mitigation and Monitoring Plan that identifies both construction and operational related avoidance, reduction, and mitigation measures for impacts to sensitive natural communities. The Biological Mitigation and Monitoring Plan shall include Best Management Practices (BMPs) to avoid or minimize impacts to biological resources, and implementation of on and offsite habitat replacement as follows:

1) The Biological Mitigation and Monitoring Plan shall include the following construction-related measures and BMPs:

a) Construction equipment and vehicles shall be stored at least 100 feet away from existing and proposed drainage features and adjacent riparian habitat, and all construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City.

b) Prior to commencement of construction, Drainages 1, 2, 3, and 4 and all associated springs, seeps, and wetlands shall be protected with construction fencing located a minimum of 25 feet from the edge of the stream channel or top of bank and signed to prohibit entry of construction equipment and personnel unless authorized by the City. Fencing shall be maintained throughout the construction

period for each phase of development. Fencing and signage shall be removed following completion of construction.

c) *During any construction activities within 50 feet of the existing Froom Creek channel, realigned Froom Creek channel, LOVR ditch, Drainages 1, 2, 3, or 4, or other existing or proposed drainage features, a City-approved biological monitor shall be present and have the authority to stop or redirect work as needed to protect biological resources.*

d) *All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.*

e) *All trash and construction debris shall be properly disposed at the end of each day and dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.*

f) *The Applicant shall implement measures designed to minimize construction-related erosion and retain sediment on the Project site, including installation of silt fencing, straw waddles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas and along the top of the bank of the existing and proposed Froom Creek channel and other existing or proposed drainage features and 25 feet from the edge of Drainages 1, 2, 3, and 4. All drainage shall be directed to sediment basins designed to retain all sediment onsite.*

g) *Concrete truck and tool washout shall occur in a designated location such that no runoff will reach the creek, onsite drainages, or other sensitive areas.*

h) *All open trenches shall be constructed with appropriate exit ramps to allow species that fall into a trench to escape. All open trenches*

shall be inspected at the beginning of each work day to ensure that no wildlife species is present. Any sensitive wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches will remain open for the shortest period necessary to complete required work.

i) Existing disturbed areas shall be used for construction staging and storage to the maximum extent possible to minimize disturbance of undeveloped habitats. All construction access roads and staging areas shall be located to avoid known/mapped habitat and minimize habitat fragmentation.

Plan Requirements and Timing. The Biological Mitigation and Monitoring Plan shall be submitted for review and approval by the City prior to issuance of grading permits and recordation of the final VTM. The plan shall incorporate any additional measures or requirements identified by state and federal agencies, including but not limited to CDFW, RWQCB, NMFS, and USFWS. The Applicant shall prepare a Biological Mitigation Plan that identifies and incorporates all required measures identified in MM BIO-2 through MM BIO-12 below. The plan shall specify all mitigation site locations, timing of surveys and activities, species composition, habitat compensation, species avoidance measures, and other required information, including identification of appropriate onsite construction staging locations. The plan shall demonstrate compliance with all required measures and any required permits shall be obtained from state and federal regulatory agencies prior to the issuance of grading or building permits. A 7-year site mitigation monitoring plan shall also be prepared by the City-approved biologist and incorporated into the Biological Mitigation and Monitoring Plan prior to issuance of grading permits and recordation of the final VTM, with annual reports submitted to the City Natural Resources Manager and Community Development Department.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements of the Biological Mitigation and Monitoring Plan through

frequent monitoring and inspection, and receipt of quarterly monitoring reports provided by the Applicant's Environmental Coordinator required per MM BIO-2. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities.

MM BIO-2 *The Applicant shall retain a qualified Environmental Coordinator/qualified biologist, subject to review and approval by the City to oversee compliance with the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall monitor all construction activities, conduct a biological resources education program for all construction workers prior to the initiation of any clearing or construction activities, and provide quarterly reports to the City regarding construction activities, enforcement issues, and remedial measures. The Applicant's Environmental Coordinator shall be responsible for conducting inspections of the work area each work day to ensure that excavation areas and sensitive or restored habitats do not exhibit construction-related impacts or hazards to wildlife. If any exposure risk is identified, the Environmental Coordinator shall implement measures that could include, but not be limited to, hazing, fencing, and wildlife removals to eliminate the exposure risk.*

In addition, the Applicant's Environmental Coordinator shall monitor and regulate all construction occurring within 50 feet of the existing and proposed Froom Creek channel, other existing or proposed drainage features, riparian habitat, Drainages 1, 2, 3, and 4, and seasonal or permanent wetlands. During appropriate flowering, nesting, breeding, migration, and dispersal seasons, the Environmental Coordinator shall also conduct sensitive species surveys immediately prior to construction activities and shall monitor construction activities in the vicinity of habitats to be avoided.

The work area boundaries and other off-limit areas shall be identified by the biologist and/or Environmental Coordinator on a daily basis. The biologist and/or Environmental Coordinator shall inspect construction and sediment control fencing each work day during construction activities. Any

vegetation clearing activities shall be monitored by the biologist and/or Environmental Coordinator.

Plan Requirements and Timing. The City shall approve the Applicant's qualified Environmental Coordinator/qualified biologist prior to issuance of grading and building permits for each phase of construction. The Environmental Coordinator shall be present onsite to monitor construction activities pursuant to the approved Biological Mitigation and Monitoring Plan.

Monitoring. The Environmental Coordinator shall monitor all grading and construction activities occurring within the vicinity of sensitive habitats or known location of sensitive species, shall conduct regular site inspections throughout the entire site, and shall be responsible for compliance of the construction activities and the above BMPs within MM BIO-1 and MM BIO-3 through MM BIO-8. During construction, the Environmental Coordinator shall submit quarterly monitoring reports to the City to ensure compliance with the Biological Mitigation and Monitoring Plan and applicable laws, regulations, and policies. The Environmental Coordinator/qualified biologist shall be onsite during all construction activities which take place within 50 feet of sensitive creek, wetland, and riparian habitat areas.

MM BIO-3 *The Biological Mitigation and Monitoring Plan shall include a Habitat Mitigation and Monitoring Plan (HMMP) with details on timing and implementation of required habitat restoration, enhancement, or creation measures. The Biological Mitigation and Monitoring Plan and HMMP shall be prepared under the direction of, and approved by, the City's Natural Resources Manager in conjunction with regulatory agencies with permitting authority over the Project. The HMMP shall contain, at a minimum, the following components (or as otherwise modified by regulatory agency permitting conditions):*

a) Pre-construction surveys and delineation of vegetation communities, habitat, and wetland features, including clear maps and a summary of onsite habitats to be protected and acreage, design, and locations of required habitat mitigation sites.

b) A description of the location and boundaries of the mitigation site and description of existing site conditions.

c) A description of measures to be undertaken to enhance the mitigation site for the target species and to protect sensitive resources.

d) Record necessary replacement of disturbed, altered, and/or lost area of habitat.

e) A binding long-term agreement with the Applicant to implement and maintain protected and restored sensitive habitats, including native bunch grassland, wetlands, springs, seeps, tributary drainages, and other sensitive or restored native habitats. These measures shall identify typical performance and success criteria deemed acceptable by the City and CDFW based on measurable goals and objectives. Said criteria for restored habitats shall be, at a minimum, at least 70-percent survival of container plants and 70-percent relative cover by vegetation type.

f) A description of habitat and species restoration and monitoring measures, including specific and objective performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. (At a minimum, success criteria shall be at least 70-percent survival of container plants and 70-percent relative cover by vegetation type and will include a replacement ratio of 2:1 and determination by a City-approved biologist that the mitigation site provides ecological functions and values for the focal species equal to or exceeding the impacted habitat.)

g) Plan requirements that ensure mitigation elements that do not meet performance or final success criteria within 5 years are completed through an extension of the plan for an additional 2 years or at the discretion of the City Natural Resources Manager with the goal of completing all mitigation requirements prior to the HMMP end date.

h) Monitoring of the mitigation and maintenance areas shall occur for the period established in the HMMP, or until success criteria are

met; an endowment may be required in some cases as determined by the City. If success criteria cannot be met through the HMMP, the City Natural Resources Manager shall specify appropriate commensurate measures (e.g., onsite or offsite restoration, endowment, or bond to the City for completion of necessary mitigation).

i) A binding long-term agreement with the Villaggio Life Plan Community to fund and retain a qualified biologist to train all landscaping crew staff hired over the life of the development on sensitive plant species and habitat within the vicinity of the development, including the identification and avoidance of sensitive plants and habitat. The qualified biologist shall conduct annual monitoring of vegetation surrounding the development and prepare a report summarizing the avoidance or disturbance of sensitive resources from operational activities of the Villaggio development, and identifying necessary replacement or restoration of affected resources. Necessary mitigation shall be subject to the same standards for performance, monitoring, and success identified in subitems b through h, above. The report shall be submitted to the City annually for review and approval.

j) A plan for fencing and/or signage around the Upper Terrace of the Villaggio development, prohibiting residents, guests, and employees from accessing and disturbing the surrounding sensitive resources.

k) Requirements for payment of annual fees to the City to fund City review and inspection of the site and Biological Mitigation and Monitoring Plan and HMMP requirements.

Plan Requirements and Timing. All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance

with requirements for the Biological Mitigation and Monitoring Plan through frequent monitoring and inspection. The Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities through routine monitoring and inspection of restoration activities.

MM BIO-4 *The Biological Mitigation and Monitoring Plan shall require avoidance of sensitive natural communities outside approved development footprints such as the Nassella pulchra Herbaceous Alliance, Central Coast Arroyo Willow Scrub Community, Coastal and Central Valley Freshwater Marsh, and wetland areas to the maximum extent feasible. Mitigation for impacted sensitive natural communities that cannot be avoided shall be achieved through one or more of the following options, subject to City approval:*

a) Onsite restoration, enhancement, or creation of suitable replacement habitat, if feasible onsite restoration opportunities exist and at ratios consistent with those identified in MM BIO-5;

b) Offsite restoration or creation of suitable habitat for the impacted species at the minimum replacement ratio of 2:1 for sensitive natural communities, native grasslands, and riparian habitat;

c) Financial contribution to an in-lieu fee program that results in restoration or creation of suitable habitat for the impacted natural communities and/or species; and/or

d) Purchase of mitigation credits at a USFWS- and/or CDFW-approved mitigation bank.

Plan Requirements and Timing. All requirements shall be included in the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review and approve the BMMP and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Applicant's Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration

activities pursuant to the approved Biological Mitigation and Monitoring Plan and HMMP. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt and review of monitoring reports, and site inspections.

MM BIO-5 *The Biological Mitigation and Monitoring Plan shall require all temporary and permanent impacts to wetlands, grasslands, and riparian habitat be mitigated, as follows:*

a) Temporary wetland, native grassland, and riparian habitat impacts shall be mitigated at a minimum 1:1 mitigation ratio (area of restored habitat to impacted habitat).

b) Permanent impacts to sensitive natural communities, native grasslands, and riparian habitat shall be mitigated at a 2:1 ratio (area of restored and enhanced habitat to impacted habitat).

c) Permanent direct impacts to wetlands shall be mitigated at a minimum 3:1 ratio unless otherwise directed by state and federal agencies, including but not limited to the CDFW, RWQCB, NMFS, and USFWS.

d) Potential indirect impacts to the Calle Joaquin wetlands affected by the Froom Creek realignment and changes to site hydrology shall be mitigated at a minimum 2:1 ratio and require mitigation of at least 10.24 acres. For the purpose of this mitigation, the area of the Calle Joaquin wetlands potentially affected by the Project include those wetlands northwest of Calle Joaquin within the Specific Plan area and southeast of the proposed Froom Creek low-flow channel.

e) Habitat revegetation or creation shall occur in the fall or winter no more than 1 year following habitat disturbance. Revegetation shall be monitored monthly for 7 years with a goal of at least 70-percent survival of container plants and 70-percent relative cover by vegetation type at the end of the 7-year period. Irrigation shall be provided during this period or until otherwise determined necessary by the Applicant's Environmental Coordinator.

f) Riparian vegetation along Froom Creek shall be maintained in perpetuity to the satisfaction of the City by the Applicant or a City-approved designee. Froom Creek conditions shall be monitored annually following winter storm seasons to assess damage to riparian vegetation and need for maintenance restoration. Monitoring and maintenance of riparian vegetation conditions shall be conducted consistent with the requirements of the Habitat Mitigation and Monitoring Plan outlined in MM BIO-3.

Plan Requirements and Timing. All requirements shall be included in the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities through routine monitoring, inspection, and reporting of restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan through receipt of monitoring reports and site inspections.

MM BIO-6 The Biological Mitigation and Monitoring Plan shall detail timing and implementation of required habitat restoration and shall be submitted to the City's Natural Resources Manager for review and approval, including requirements for consultation with CDFW, NMFS, and USACE as needed. A copy of the final plan shall be submitted to the City for review and approval. The plan shall be implemented by the Project Applicant, under supervision by the City and the Applicant's Environmental Coordinator, and shall:

a) Describe replacement of sensitive natural community habitats removed, lost, or adversely impacted by the Project, including a list of the soil, plants, and other materials that will be necessary for successful habitat restoration/ replacement, and a description of planting methods, location, spacing, erosion protection, and irrigation measures that will be needed. Restoration and habitat

enhancement shall be limited to use of appropriate native species. Habitat restoration or enhancement areas shall be designed to facilitate establishment of appropriate native plants such as willows, cottonwoods, bunchgrass, and rushes.

b) *Habitat restoration or enhancement areas shall be established within the Project boundaries, adjacent to and contiguous with existing habitats to the maximum extent possible.*

c) *Habitat restoration or enhancement sites shall be placed within existing or additional necessary deed-restricted area(s) and shall be maintained and monitored for a minimum of 7 years. If sufficient onsite mitigation area is not practicable, an offsite mitigation plan shall be prepared as part of the Biological Mitigation and Monitoring Plan and approved by permitting agencies.*

d) *The Biological Mitigation and Monitoring Plan shall identify appropriate restoration and enhancement activities to compensate for impacts to creek, wetland, native bunch grass and riparian habitat, including a detailed planting plan and maintenance plans using locally obtained native species, and shall include habitat enhancement to support native wildlife and plant species.*

e) *A weed management plan and weed identification list shall be included in the Biological Mitigation and Monitoring Plan.*

f) *Habitat restoration or enhancement areas shall be maintained weekly for the first three years after Project completion and quarterly thereafter. Maintenance shall include replacement of unsuccessful planted specimens and eradication of noxious weeds found on California Department of Food and Agriculture (CDFA) Lists A and B. Noxious weeds on CDFA List C may be eradicated or otherwise managed.*

g) *Quarterly and annual reports documenting site inspections and site recovery status shall be prepared and sent to the City and appropriate agencies.*

Plan Requirements and Timing. All requirements shall be included on the Biological Mitigation and Monitoring Plan and HMMP to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The Environmental Coordinator shall ensure compliance during habitat compensation and/or restoration activities. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan and HMMP through receipt of monitoring reports and site inspections.

MM BIO-7 *All utility lines proposed to be installed across the realigned Froom Creek from LOVR to the Project site shall be installed via horizontal directional drilling (HDD) to avoid impacts to sensitive habitats. Prior to installation of utility lines, a site-specific geotechnical investigation and frac-out clean-up plan shall be completed in areas proposed for HDD. The geotechnical investigation shall provide recommendations for avoidance of frac-outs and/or other HDD related impacts and to determine appropriate HDD methods (i.e., appropriate drilling mud mixtures for specific types of sediments). The investigation shall include results from at least three borings, a geologic cross-section, a discussion of drilling conditions, and frac-out clean-up plan. The frac-out clean-up plan shall identify methods for minimizing potential for frac-outs and addressing any necessary clean-up or remediation in case of a frac-out. The boring operation would be stopped immediately if a frac-out occurs and steps would be taken to contain and minimize the effects of any spill of drilling mud. The Applicant shall comply with all recommendations of the geotechnical investigation.*

Plan Requirements and Timing. Geotechnical investigations shall be conducted, and a report of findings submitted to the City for approval. The findings shall be incorporated into the final Utilities Plan prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review the findings of the geotechnical investigations and final Utilities Plan and confirm compliance through review of grading and improvement plans.

MM BIO-8 *The Applicant shall submit a Froom Creek restoration plan that identifies measures for securing the proposed low-flow channel berm along the stretch of Froom Creek proposed adjacent to the Calle Joaquin wetlands to protect the bank from erosion and prevent migration of the Froom Creek channel into these wetlands. Measures for securing the bank may include a mix of natural and biotechnical measures capable of prevention erosion based on the anticipated erosive velocity of the creek under 100-year storm conditions.*

Plan Requirements and Timing. The Applicant shall submit a Froom Creek restoration plan for review and approval by the City, which incorporates these requirements in addition to all requirements identified by state and federal resource agencies. The proposed bank stabilization measures shall be depicted on final plans prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review the final plans, and shall inspect the Project site during construction to confirm installation of proposed stabilization measures.

Residual Impacts

Implementation of MM BIO-1 through MM BIO-8 would reduce impacts to sensitive vegetation communities and bring the Project into partial compliance with relevant goals and policies of the City General Plan COSE, including COSE Policy 7.5.4, *Preservation of Grassland Communities and Other Habitat Types*. Implementation of these measures would reduce potential impacts to sensitive riparian and wetland habitats within the Lower Area (e.g., LOVR ditch and Calle Joaquin wetlands) to *less than significant with mitigation.* However, with respect to wetlands in the Upper Terrace, replacing the unusual seep-fed wetlands present along impacted segments of Drainages 1, 2, and 3 would be challenging. Due to the lack of detailed plans and setbacks for these minor drainages at this stage in the process, these wetlands could be directly impacted through culvert-headwall installation and sedimentation from grading and development, and the ability to reestablish and maintain rare plant species present within these areas is unknown. Because the Project would directly and indirectly affect sensitive wetlands which support rare plant species and for which successful restoration and mitigation is not known to be possible, impacts would be *significant and unavoidable*.

Further, for impacts to sensitive upland habitats, implementation of these mitigation measures would result in only partial compliance with COSE Policies 7.3.1, 7.3.2, 7.5.4, and 8.3.1 because the Project would not completely avoid disturbance of natural and open space areas designated under the Project due to mandatory fire clearance requirements. Further, MM HAZ-2 would require preparation of a Community Fire Protection Plan and use of a City-qualified biologist to identify and preserve the integrity of vegetation and habitat surrounding proposed development to the maximum extent feasible, also reducing impacts. However, the proximity of new development, particularly within the Upper Terrace would limit the effectiveness of any proposed measures for mitigating impacts to sensitive upland habitats, particularly the *Nassella pulchra* Herbaceous Alliance. It is reasonable to assume that the limited setbacks between proposed development and known sensitive biological resources would not be sufficient to avoid ongoing indirect impacts associated with continued potential for disturbance from human activities and fire management requirements. Therefore, impacts to sensitive upland habitats are conservatively considered *significant and unavoidable.*

The Project would also result in the direct loss of serpentine bunchgrass grasslands corresponding to the *Nassella pulchra* Herbaceous Alliance through Project development or through removal of vegetation as a result of implementation of defensible space requirements. The difficulty in successfully establishing or even restoring a serpentine bunchgrass grassland community is well documented. As such, successful compensatory replacement and restoration of the *Nassella Pulchra* Herbaceous Alliance of equal or greater quality than that which exists onsite is considered unlikely, resulting in the inability to successfully mitigate associated impacts. Therefore, impacts to these sensitive natural communities from Project implementation would be *significant and unavoidable*.

Impact BIO-2 Project implementation would have substantial direct and indirect adverse impacts on candidate, sensitive, or special-status species that are known to occur or have the potential to occur on the Project site (Significant and Unavoidable).

Potentially suitable habitat exists within the Project site for several designated special-status species, particularly in serpentine outcrops, Froom Creek, and seeps, springs, and drainages within the Upper Terrace, as well as within the adjacent Irish Hills Natural Reserve (Table 3.4-2 and Table 3.4-3). The Upper Terrace supports a rich assemblage of sensitive habitats and 12 documented occurrences of special-status plant species, most in close proximity to or within the planned Villaggio development/disturbance footprint.

Disturbance, alteration, or removal of these habitats would result in the loss or damage (take) of sensitive wildlife and plant species. Ground disturbance may result in the direct take of special-status plant and animal species that may reside, forage, or rest within the Project site. Additionally, as more mobile wildlife species (e.g., avian species) would be forced to move into adjacent areas in the vicinity (e.g., Irish Hills), competition would increase for available resources in those areas. This could result in the loss of additional wildlife species outside of the Project site, including sensitive species that may not be able to survive with increased competition.

Further, habitat for sensitive species adjacent to the Project site within the Irish Hills Natural Reserve could be exposed to construction-related noise, which could result in the disruption of foraging, nesting, and reproductive activities. Indirect impacts to sensitive bird and bat species due to construction-related noise, light, and human presence may occur throughout the duration of construction activities (i.e., approximately 5 years), resulting in abandoned nests or breeding colonies. Potential indirect impacts to wildlife utilizing nearby habitats could also result from loss of access to water from the spring seep-fed wetlands, increases in human activity, the increased threat of road-kill by vehicle and machinery traffic both on- and offsite due to emigration of wildlife to nearby habitat, deposition of trash and debris, potential exposure to pollutants and hazardous materials (refer to Impact HYD-1), and increased soil erosion that may contaminate aquatic environments onsite and downstream. Movement of sensitive wildlife through the site would also be temporarily and permanently impeded by development of the Project (refer to Impact BIO-4).

Special-Status Plants

The Upper Terrace supports 14 special-status plant species that have been observed onsite and has the potential to support several other species by the time the Project is under construction given its location at the base of the Irish Hills. These species occur within the native serpentine bunchgrass grassland habitat, on serpentine rock outcrops, and within coastal sage scrub and wetland habitats, all of which are within or in close proximity to proposed development footprints. Proposed development in the Upper Terrace would directly displace existing and potential habitat for three known species and would further indirectly impact special-status plants over the long-term as discussed below.

Chorro Creek Bog Thistle. The Project design attempts to precisely site roads and structures a minimum of 50 feet from mapped locations of sensitive plants, but proposes development in very close proximity to known occurrences of sensitive plants and habitat areas that contain features that would support them. Development of facilities and

infrastructure in the Upper Terrace under the FRSP has been planned in an attempt to avoid known occurrences of Chorro Creek bog thistle located along Drainage 2. However, project grading and construction can have impacts outside of planned building footprints given the specific hydrologic conditions that support this species, and plant communities are mobile, expanding and contracting their distribution in response to changing weather and site conditions. Based on the presence of habitat potentially suitable to support this species, the Project may result in impacts to the Chorro Creek bog thistle due to direct removal or loss of individual specimens during construction of four (4) culvert headwalls across Drainages 1, 2, and 3 or indirectly through site preparation (e.g., grading) and development of new structures, landscaping and paved surfaces in the Upper Terrace. Development within the Upper Terrace would be sited in very close proximity to known mapped populations of Chorro Creek bog thistle, with setbacks of new buildings, roads and driveways as little as 10 feet from seeps, springs, and drainages that are capable of supporting this species, and that provide the habitat conditions (hydrology) that support known occurrences.

Operation of the Project also has potential to result in adverse impacts to the Chorro Creek bog thistle or its habitat through increased human activity such as landscape maintenance, herbicide use, polluted runoff, trampling, or clearing of vegetation and maintenance of required wildfire buffer in this area. For instance, known populations of Chorro Creek bog thistle along Drainage 2 occur entirely within the potential anticipated 100-foot wildfire vegetation maintenance area. Consequently, establishment and maintenance of this required setback would likely result in the harm to or loss of individual specimens or loss of entire populations over the life of the Project.

As such, it is reasonable to assume that Project implementation would potentially result in take of Chorro Creek bog thistle either through direct loss or through habitat disturbance. Therefore, impacts to this species are considered *potentially significant*.

Blochman's Dudleya. The Blochman's dudleya is known to occur on rocky serpentine outcrops, chaparral, coastal scrub, and grasslands, all of which exist primarily within the Upper Terrace portion of the Project site. Development of the Upper Terrace could potentially eliminate known populations of this plant species or suitable habitat during construction. Further, after occupancy, increased human activity such as landscape maintenance, herbicide use, polluted runoff, trampling, or maintenance of required wildfire buffers would result in removal of additional individuals and suitable habitat. Attempting to site multiple large new buildings and supporting infrastructure within and immediately adjacent to known populations of this species would lead to both direct and indirect impacts

over the long term. Therefore, potential impacts to this species would be *potentially significant*.

Congdon's Tarplant. This species was identified within the northeastern portion of the Project site, adjacent to the Irish Hills Plaza during fieldwork conducted to establish the environmental baseline. Construction of the Madonna Froom Ranch development would result in the direct removal of individuals and loss of suitable habitat in this area. Impacts are considered *potentially significant.*

Other Special-Status Plant Species. As noted above, a total of 12 special-status plant species are known to occur within the Project site, primarily within the Upper Terrace within habitats such as rocky serpentine outcrops and native serpentine bunchgrass grassland. Given the rich habitat area and direct connections to the Irish Hills, additional species such as the mouse-gray dudleya have a moderate to high potential to occur (see Table 3.4-2 and Appendix E). The Project would have potential to result in the direct removal of individuals or the loss of suitable habitat for these species. Further loss of individuals and suitable habitat on- and offsite would occur as a result of vegetation clearance and maintenance of the required wildfire buffer areas. Given the quality of habitat present onsite and the high potential for species to occur within the area of proposed development, impacts are considered *potentially significant.*

Special-Status Animals (Species of Special Concern, Special Animal, Watch List)

American Badger. Direct impacts to this species may occur due to loss or interruption of migratory corridors and loss of potential foraging habitat. Construction within the Project site may also result in harassment or injury if badgers are foraging within the Project area during implementation. Impacts to this species are considered *potentially significant*.

Cooper's Hawk. Direct impacts to this avian species may occur due to direct loss of nesting habitat through loss of coast like oak/California bay woodland and removal or disturbance of trees that may contain active nests. Construction within the Project site may also result in indirect impacts should this species be present in or near areas of disturbance at the time of construction. Operation of the Project may also result in indirect impacts from disturbance of nesting individuals as a result of increased human activity adjacent to suitable nesting and foraging habitat. Impacts to this species are considered *potentially significant*.

White-tailed Kite. Direct impacts to this species may occur due to direct loss of high-quality foraging habitat and removal or disturbance of trees that may contain active nests within

riparian areas. Construction within the Project site may also result in indirect impacts should this species be present in or near areas of disturbance at the time of construction. Operation of the Project may also result in indirect impacts from disturbance of nesting individuals as a result of increased human activity adjacent to suitable nesting and foraging habitat. Impacts to this species are considered *potentially significant*.

California Horned Lark. Potential direct impacts to California horned lark within the Project site include loss of nesting habitat and harassment or injury if they are found nesting within the Project area during implementation. Operation of the Project may also result in indirect impacts from disturbance of nesting individuals as a result of increased human activity adjacent to grasslands in the elevated slopes of the Project site. Impacts to this species are considered *potentially significant*.

Hoary Bat. Potential direct impacts to hoary bats within the Project site include removal of roosting habitat in the Upper Terrace and harassment or injury if they are foraging within the Project area during implementation. Increased human activity from operation of the Project in the vicinity of suitable roosting sites may also indirectly affect this species. Impacts to this species are considered *potentially significant*.

Loggerhead Shrike. Direct impacts to this species may occur, primarily in the Upper Terrace, due to removal of high-quality grasslands, trees, and shrubs that may contain active nests. Construction within the Project site may result in indirect impacts should this species be present in the vicinity of areas of disturbance at the time of construction. Operation of the Project may also result in indirect impacts from disturbance of nesting individuals as a result of increased human activity adjacent to suitable nesting and foraging habitat. Impacts to this species are considered *potentially significant*.

Pallid Bat. Potential direct impacts to pallid bats within the Project site include removal of roosting habitat and harassment or injury if they are foraging within the Project area during implementation. Increased human activity from operation of the Project in the vicinity of suitable roosting and foraging sites may also indirectly affect this species. Impacts to this species are considered *potentially significant*.

San Diego Woodrat. The proposed Project would not result in development of areas of suitable habitat or known nesting areas located in the southwestern portions of the site within the Upper Terrace, adjacent to the Irish Hills Natural Reserve. Therefore, the Project would have *no impact* on this species.

Townsend's Big-eared Bat. Potential direct impacts to Townsend's big-eared bats within the Project site include removal of roosting habitat and harassment or injury if they are foraging within the Project area during implementation. Increased human activity from operation of the Project in the vicinity of suitable roosting sites may also indirectly affect this species. Impacts to this species are considered *potentially significant*.

Tri-colored Blackbird. Potential direct impacts to tri-colored blackbirds within the Project site include disturbance or removal of foraging habitat, particularly during realignment of Froom Creek, and harassment or injury if they are foraging within the Project area during implementation. Direct impacts may also occur should suitable nesting habitat expand beyond the extent initially observed by KMA in 2015 by the time of initiating construction activities. Operation of the Project may also result in indirect impacts from disturbance of nesting individuals as a result of increased human activity adjacent to suitable nesting habitat. Impacts to this species are considered *potentially significant*.

Western Mastiff Bat. Potential direct impacts to western mastiff bats within the Project site include removal of roosting habitat and harassment or injury if they are foraging within the Project area during implementation. Increased human activity from operation of the Project in the vicinity of suitable roosting and foraging sites may also indirectly affect this species. Impacts to this species are considered *potentially significant*.

Western Red Bat. Potential direct impacts to western red bats within the Project site include removal of roosting habitat and harassment or injury if they are foraging within the Project area during implementation. Increased human activity from operation of the Project in the vicinity of suitable roosting and foraging sites may also indirectly affect this species. Impacts to this species are considered *potentially significant*.

Yuma Myotis. Potential direct impacts to Yuma myotis within the Project site include removal of roosting habitat and harassment or injury if they are foraging within the Project area during implementation. Increased human activity from operation of the Project in the vicinity of suitable roosting and foraging sites may also indirectly affect this species. Impacts to this species are considered *potentially significant*.

Special-Status Animals (Protected and Federally/State-Listed Species)

California Red-legged Frog. Project development would entail significant direct and/or indirect changes to the riparian, drainage, and wetland features within the Project site. Froom Creek would be relocated to a lower elevation on the site and the existing channel would be filled and developed. The wetlands on site would also be subject to changes in

hydrology with the relocation of Froom Creek, and may receive additional sedimentation and nutrient loading from runoff during construction and operation. While the California red-legged frog is not known to occur on the Project site, potentially suitable habitat is present and would be subject to Project-related impacts. Potential for impacts to California red-legged frog would increase during normal to wet water years when more suitable habitat is likely to be present within the Project site, and frogs would be more likely to be present. Direct impacts to this species would result from the realignment of Froom Creek and loss of associated riparian habitat, as well as impacts to the Calle Joaquin wetlands and the LOVR ditch. Grading and construction – and resulting sedimentation and siltation of onsite creeks and drainages, wetlands, and downstream water bodies – would also adversely affect individuals and habitat for this federally threatened species. While this species has not been observed onsite, the presence of suitable habitat indicates that individuals may exist onsite now and in the future that may be harmed during Project implementation. However, over the long-term, the proposed Froom Creek channel would be designed with pools and connected channels that could support California red-legged frog habitat, potentially resulting in replacement of existing onsite habitat. Nevertheless, implementation of the Project would continue to have the potential to directly affect individual specimens. Impacts to this species are considered *potentially significant*.

South-central California Coast Steelhead. Due to physical barriers to movement and lack of suitable migration corridors in the existing Froom Creek, steelhead are not anticipated to occur onsite except possibly during years of high rainfall when flowing water is present. Site development would likely result in short-term, temporary erosion, sedimentation, and siltation onsite, having the potential to adversely affect water quality downstream (e.g., in San Luis Obispo). As discussed in Impact HYD-1, compliance with existing regulations (e.g., City's National Pollutant Discharge Elimination System Phase II Program, Storm Water Management Plan, the SWRCB's Construction General Permit Order 2009-0009-DWQ, and the City's Storm Water Quality Ordinance [Municipal Code Chapter 12.08]) would reduce or avoid impacts to downstream water quality during Project construction.

The proposed Froom Creek channel would be designed with pools and connected channels that could support steelhead migration and spawning. An identified goal of the proposed realignment of Froom Creek is to improve migration and access for steelhead between the upper reaches of Froom Creek, where land-locked populations are known to exist, and the lower reaches within the Project site. Construction could create short-term impacts to steelhead if it occurred during the rainy season, where the Froom Creek channel would be disturbed and reconstructed in its proposed alignment. Installing all components of the

realigned creek channel prior to grading and removing the current channel would ensure continuous migration access for steelhead. Therefore, impacts from short-term construction activity would remain *less than significant with mitigation.*

In addition, the long-term resiliency of the proposed migration and access features within the realigned Froom Creek is uncertain, as analyzed in Section 3.8, *Hydrology and Water Quality*. During storms, fast-moving waters in upper reaches of the creek within the Specific Plan area may mobilize boulders within the stream channel or cause bank erosion and sedimentation, altering or eliminating the proposed system of pools over time. Pools may fill with sediment or cobble over time, a naturally occurring process, and the long-term success of this proposed habitat modification remains unclear given the location of this reach of Froom Creek, its existing physical characteristics (i.e., dry wash), and the long-term dynamics of flood flows. However, regardless of these potential issues, the overall changes to the stream channel through addition of pools, boulders, and revegetation would improve habitat conditions for steelhead when compared with existing conditions. Therefore, with implementation of the proposed Project – and specifically the realignment of Froom Creek within the Project site – existing steelhead habitat would not be eliminated or damaged, and has the potential to be improved. Therefore, long-term impacts would be *less than significant and potentially beneficial*.

Mitigation Measures

MM HAZ-2 shall apply.

MM BIO-1 shall apply.

MM BIO-9 *Construction and grading of the realigned portion of Froom Creek, including planting of riparian vegetation, watering, and bank stabilization, shall be conducted prior to removal of the existing creek segment to ensure a habitat for special-status species within the creek is maintained through the Project site with no interruption during construction. Project phasing shall be adjusted as needed to accommodate this sequence of construction activities.*

Plan Requirements and Timing. The Applicant shall demonstrate phasing and creek restoration within the final VTM, and the Biological Mitigation and Monitoring Plan. The Applicant shall submit the plan to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review the Biological Mitigation and Monitoring Plan, and final VTM for compliance. The Applicant's Environmental Coordinator shall monitor creek realignment activities to ensure compliance with this mitigation measure.

MM BIO-10 Chorro Creek Bog Thistle Management. Prior to issuance of grading and building permits, the Applicant shall submit or fund a site survey for Chorro Creek bog thistle, and:

1. *All individual locations of Chorro Creek bog thistle shall be mapped using GPS coordinates. No construction activities or disturbance shall occur within 50 feet of mapped Chorro Creek bog thistle. This setback shall be delineated and maintained with construction fencing and clear signage for the duration of grading and construction. If the site survey results identify Chorro Creek bog thistle that may be disturbed or lost from Project construction, the Project shall be redesigned to ensure a minimum 50 foot buffer from mapped Chorro Creek bog thistle occurrences.*

2. *Development adjacent to Drainages 1, 2, and 3 shall be set back a minimum of 50 feet from the top of the bank of these drainages and the edge of delineated associated wetlands.*

3. *Drainages 1, 2, and 3 and associated wetlands shall be fenced a minimum of 50 feet from the top of the bank or edge of delineated wetland. The Applicant shall ensure and demonstrate to the City through frequent reporting requirements approved by the City that these areas are managed and maintained in perpetuity to maintain wetland and Chorro Creek bog thistle habitat values.*

Plan Requirements and Timing. All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan. The

Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities.

MM BIO-11 *The Biological Mitigation and Monitoring Plan shall address special-status wildlife species management. Grading and construction activities shall avoid the rainy season (typically October 15 to April 15) to the extent practicable, particularly within 50 feet of the existing and proposed Froom Creek channel, and other existing or proposed drainage features, riparian or wetland habitat, and any suitable nesting sites as determined by the City-approved biologist. Injury, mortality to, or significant disturbance of onsite sensitive species, including the California red-legged frog, south-central California coast steelhead, and white-tailed kite, shall be avoided. The plan shall include the following measures: pre-construction surveys; worker awareness; cessation of work in occupied areas if individuals are identified; relocation (if necessary) of frogs and steelhead from the work area by a professional biologist authorized by the USFWS and/or CDFW; and monitoring of construction activities within the vicinity of sensitive habitats by a qualified biologist during construction, consistent with MM BIO-2. Necessary permits shall be obtained from the state (CDFW) and federal (USACE and USFWS) regulatory agencies with jurisdiction and/or permitting authority over a portion of the Project. Any other sensitive species observed during the pre-construction surveys shall be relocated by the qualified biologist into the nearest suitable habitat outside the disturbance area as determined in consultation with the appropriate jurisdictional resource agency.*

Plan Requirements and Timing. All requirements shall be included on the Biological Mitigation and Monitoring Plan to be submitted to the City for review and approval prior to issuance of grading permits and recordation of the final VTM.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that all BMPs and appropriate mitigation measures have been included. The City shall ensure compliance with requirements in the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities.

MM BIO-12 The Biological Mitigation and Monitoring Plan shall address the movement of special-status species, as follows:

1. *Migratory and Nesting Bird Management. Grading and construction activities shall avoid the breeding season (typically from February 15 to August 15) to the extent practicable, particularly within 50 feet of riparian or wetland habitat and mature trees. If Project activities must be conducted during this period and within the vicinity of riparian or wetland habitat and/or mature trees, pre-construction nesting bird surveys shall take place no more than one week prior to habitat disturbance associated with each phase; if active nests are located during these surveys, the following measures shall be implemented:*

    a. *Construction activities within 50 feet of active nests shall be restricted until chicks have fledged, unless the nest belongs to a raptor, in which case a 500-foot activity restriction buffer shall be observed.*

    b. *Construction shall be limited to daylight hours (7:00 AM to 7:00 PM or sunset, whichever is sooner).*

    c. *A pre-construction survey report shall be submitted to the City immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. If any sensitive species are observed during pre-construction surveys, the Project biologist shall coordinate with appropriate resource agencies to determine appropriate procedure for handling or avoidance of the specimen.*

    d. *The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and the species involved. A report of findings and recommendations for bird protection shall be submitted to the City prior to vegetation removal. If sensitive species are observed during pre-construction surveys, the Project biologist shall*

coordinate with appropriate resource agencies to determine appropriate procedures for handling or avoidance of the specimen.

2. *Bat Colony Management. Prior to removal of any trees over 20 inches diameter-at-breast-height (DBH) or demolition/relocation of existing onsite structures, a survey shall be conducted by a City and CDFW-approved biologist to determine if any tree or structure proposed for removal, trimming, demolition, or relocation harbors sensitive bat species or maternal bat colonies. Maternal bat colonies shall not be disturbed, and grading and construction activities shall avoid the bat breeding season to the extent feasible. If disturbance of structures must occur during the bat breeding season, buildings must be inspected and deemed clear of bat colonies/roosts within 7 days of demolition and an appropriately trained and approved biologist must conduct a daily site-clearance during demolition. If bats are roosting in a structure or tree in the Project site during the daytime but are not part of an active maternity colony, then exclusion measures shall be utilized and must include one-way valves that allow bats to leave but are designed so that the bats may not re-enter the structure. For each occupied roost removed, one bat box shall be installed in similar habitat as determined by the Project biologist and shall have similar cavities or crevices to those which are removed, including access, ventilation, dimensions, height above ground, and thermal conditions. If a bat colony would be eliminated from the Project site, appropriate alternate bat habitat shall be installed within the Project site. To the extent practicable, alternate bat house installation shall occur near onsite drainages.*

Plan Requirements and Timing. The Biological Mitigation and Monitoring Plan shall include a management plan for migrating and nesting birds and bat colonies and shall be submitted for review and approval by the City prior to issuance of grading and construction permits and recordation of the final VTM. Construction shall be conducted between August 16 and February 14 unless pre-construction surveys are completed. Reports summarizing pre-construction species surveys (i.e., nesting, bat surveys, etc.) shall be submitted to the City within 10 days of survey completion. Construction work shall not commence until after the completion of surveys and City review of corresponding reports. Any

required permits shall be obtained from appropriate state and federal agencies prior to issuance of grading and construction permits and recordation of the final VTM.

Monitoring. The City shall review and approve the Biological Mitigation and Monitoring Plan and HMMP to ensure that appropriate requirements have been included to address potential impacts to bird and bat species. The City shall ensure compliance with requirements for the Biological Mitigation and Monitoring Plan. The Applicant's Environmental Coordinator shall also ensure compliance during habitat compensation and/or restoration activities.

Residual Impacts

Implementation of the Project would result in development of land within and adjacent to populations of at least 14 known sensitive plant species. Mitigation requirements, including pre-construction surveys and relocation of animal species, would minimize potential impacts to the maximum extent feasible, but based on the Project's footprint relative to the locations of known occurrences and the extent of biological habitats capable of supporting special status species, reasonable and feasible mitigation measures would not ensure that all damage to these resources would be avoided or reduced to less than significant during Project construction and long-term operation. MM BIO-1 and MM BIO-9 through MM BIO-12 would reduce impacts to listed, candidate, or special-status wildlife species and partially assure compliance with COSE Policies 7.3.1, *Protect Listed Species*, and 7.3.2, *Species of Local Concern* due to continued loss of protected species and species of local concern which are observed onsite, including, but not limited to: Chorro Creek bog thistle, Blochman's dudleya, Congdon's tarplant, San Luis mariposa lily, and Brewer's spineflower. Implementation of MM HAZ-2 requiring preparation of a Community Fire Protection Plan and use of a City-qualified biologist and Applicant's Environmental Coordinator to identify and preserve the integrity of vegetation and habitat, as well as the maximum feasible avoidance of designated special-status species, would also reduce impacts. Consistency with existing regulations pertaining to water quality would ensure impacts to south-central California coast steelhead and aquatic habitat downstream of the Project site resulting from potential discharge of pollutants or increased erosion and sedimentation would be reduced to *less than significant* (see Impact HYD-1).

While required mitigation would partially reduce impacts to special-status plants, Project development is proposed in such proximity to individual special-status plants and high-

quality habitat for special-status species that complete avoidance of impacts to species may not be feasible. For instance, siting of proposed development in the Upper Terrace would not avoid the known extent of individual plant species or assure populations' long-term survival given the proximity of planned development to populations of special-status plant species. In particular, the proximity of Chorro Creek bog thistle within Drainage 2 and species endemic to rocky serpentine outcrops and native serpentine bunchgrass grassland to planned development in the Upper Terrace would expose such populations to adverse impacts. Operation of the Project and ongoing human activity within these areas would also result in long-term degradation, confinement, and isolation of individuals and suitable habitat. Further, mitigation for replacement or relocation of Chorro Creek bog thistle is not well documented, and there little to no scientific literature regarding the successful replacement or restoration of this species. Mitigation of associated impacts on the species is therefore considered infeasible due to inability to complete avoid or replace disturbed individuals. Therefore, impacts to special-status plant species would be *significant and unavoidable.*

Impact BIO-3 Project implementation would have a substantial adverse impact on state and federally protected wetlands (Significant and Unavoidable).

As analyzed in Impact BIO-1, the Project would have potentially significant adverse impacts on the Calle Joaquin wetlands, the LOVR ditch, and the wetlands in Drainages 2 and 3. Project implementation would result in the loss of up to 1.59 acres of CDFW jurisdictional features, 0.32 acre of USACE jurisdictional wetlands, and 0.79 acre of USACE Other Waters (2.7 acres total; see Table 3.4-8 and Figure 3.4-2). These losses would occur primarily from construction of LOVR frontage improvements and relocation of the LOVR ditch, which would eliminate up to 0.5 acre of wetlands. Based on preliminary site design, much of the wetland area along Calle Joaquin would be preserved; however, an unknown amount of wetland along the outside bank of the realigned creek channel may be adversely affected or eliminated during the realignment of Froom Creek due to construction of the realigned creek channel, construction of the low-flow berm, and substantial changes in hydrology and drainage at the site.[11] Removal of the 3.2-acre stormwater detention basin would also eliminate approximately 2.0 acres of wetland. Lastly, as discussed in Impact BIO-1 and Impact TRANS-2, widening of LOVR would result in secondary impacts to wetlands through disturbance or removal of up to 0.57 acre

[11] Note that this analysis does not account for the potential long-term adverse effects to the quality and extent of the Calle Joaquin wetlands from changes in the hydrologic connectivity of these wetlands with the realigned Froom Creek. Refer to Impact BIO-1 for consideration of associated impacts.

of wetlands located along LOVR. In total, implementation of the Project has potential to result in the direct loss of up to 5.27 acres of wetlands (see to Table 3.4-8).

Construction in the Upper Terrace could result in the direct disturbance or temporary fill of Drainages 1, 2, and 3 as a result of movement of construction equipment and material around the site. Construction would involve soil disturbance, equipment, and materials that could cause sedimentation, pollution, or inadvertent fill of adjacent or downstream wetlands. During construction of private roadways in the Upper Terrace, four headwall/culvert road crossings of approximately 30 feet in width would be constructed over Drainages 1, 2, and 3 and would also potentially lead to loss of adjacent and/or downstream wetlands.

Froom Creek is not currently connected to the Calle Joaquin wetlands. The Project would relocate Froom Creek to flow and flood into the Calle Joaquin wetlands.

Froom Creek would be realigned to connect hydrologically with the LOVR ditch and the Calle Joaquin wetlands and would result in the construction of a restored and widened creek channel. Based on preliminary designs, it is estimated that the realigned Froom Creek could support up to 2.81 acres of restored wetlands. However, future wetlands within the realigned Froom Creek would not sufficiently replace the total acreage of wetlands lost during Project implementation. Under CDFW, USFWS, and RWQCB standards, adequate mitigation for loss or disturbance of wetland features, either direct permanent loss or the temporary disturbance, requires replacement by a ratio of 3:1, which would mean the Project's loss of 5.27 acres of jurisdictional wetlands would be mitigated by a minimum of 15.81 acres of restoration. If 2.81 acres of jurisdictional wetland could be restored onsite within the Froom Creek channel and 0.94 acres could be restored within the proposed LOVR ditch (i.e., a total potential of 3.75 acres restored onsite under the Project), the Project would require 22.3 acres of additional restoration to meet the 3:1 ratio (see Table 3.4-8).

Table 3.4-8. Project Impacts to Jurisdictional Features

Feature	Existing Delineated Area Onsite (Acres)	Area Impacted by the Project (Acres)
Wetlands Waters of the U.S.		
Wetland within OHWM	1.43	0.32
Calle Joaquin wetlands[1]	5.81	
Intermittent Streambed within OHWM	2.66	0.79
CDFW Jurisdictional Areas		
Froom Creek and Tributary Channels; LOVR ditch; sensitive riparian habitat	5.41	1.59
Additional Aquatic Resources		
Wetland Within 3.2-acre Stormwater detention basin	2.00	2.00
Secondary Impacts to Wetlands Along LOVR	--[2]	0.57
Total	**9.91[3]**	**5.27**
Total Necessary Restoration of Direct Impacts (3:1)		**15.81**
Total Necessary Restoration of Calle Joaquin (1:1)		**10.24**
Maximum Potential Area of Restoration with Realigned Froom Creek		***2.81***
Affected Wetland Area Restored at LOVR ditch (3:1 replacement ratio)		***0.94***
Total Potential Restoration Onsite		***3.75***
Necessary Remaining Restoration		***22.3***

OHWM = ordinary high-water mark

[1] This analysis does not account for the potential long-term adverse effects to the quality and extent of the Calle Joaquin wetlands from changes in the hydrologic connectivity of these wetlands with the realigned Froom Creek.

[2] Secondary impacts to wetlands as a result of implementation of transportation mitigation consist of waters of the U.S. and CDFW jurisdictional areas. As such, the existing delineated area of these wetlands subject to secondary impacts of the Project are already reflected in the existing delineated area of those federal and state features.

[3] Total acreage of onsite wetland includes some overlap of USACE, RWQCB, and CDFW jurisdictional features.

As discussed above, the Project includes realignment and restoration of Froom Creek which may mitigate some of these losses of wetlands and other jurisdictional features. However, the Specific Plan does not provide replacement, monitoring, performance standards, or policies for restoration of wetlands onsite. Consequently, development under the Project may not provide reliable or adequate mitigation for the direct net loss of at least 5.27 acres of wetlands. Further, construction and operation of proposed development in the Upper Terrace may result in the direct disturbance, pollution, temporary fill, or loss of an unknown amount of adjacent or downstream wetlands and jurisdictional features located along Drainages 1, 2, and 3. These drainages and associated wetland habitat would also be subject to long-term degradation due to the proximity of new buildings, roads, driveways, and associated disturbance from human activity. Therefore, wetland impacts are considered *potentially significant*.

Further, as discussed under Impact BIO-1 above, the Project would include installation of at least three utility lines beneath the realigned Froom Creek and existing Calle Joaquin wetlands to connect utilities on site with existing infrastructure along LOVR. Installation of these utilities may result in temporary adverse effects to the quality of waters or habitat under the jurisdiction of CDFW and/or USACE. Installation may also adversely affect waters downstream as a result of introduction of sediment runoff, siltation, and accidental spillage of fuel and lubricants.

In addition to the physical loss and disturbance of existing wetlands, realignment of Froom Creek would substantially alter onsite hydrology and drainage with potential to change the characteristics and dynamics of several wetlands. While it is the intention of the Project to maintain or improve wetland habitat onsite, as discussed in Impact BIO-1, realignment of Froom Creek has potential to affect the Calle Joaquin wetlands by changing the frequency and quantity of water supporting the wetlands, increasing potential for migration of the Froom Creek corridor through these wetlands, increasing potential for sedimentation of the wetlands, and altering the effects from severe storm and post-fire flood conditions. Impacts of the Project on these jurisdictional wetlands are therefore considered *potentially significant* (refer to Impact BIO-1 for detailed discussion of potential impacts to the Calle Joaquin wetlands).

The Specific Plan includes several goals and policies pertaining to the protection of onsite wetlands and enhancement of Froom Creek and adjacent habitat. These goals, policies and programs, including Program 3.2.2b, Program 3.2.2e, and Policy 3.2.3, are provided to ensure Project development complies with the goals and policies of the City General Plan COSE. Nevertheless, the alteration of Project site hydrology would create potential for permanent impacts to jurisdictional wetland features or other waters, which would be *potentially significant*.

Mitigation Measures

MM BIO-1 shall apply.

MM BIO-2 shall apply.

MM BIO-4 shall apply.

MM BIO-5 shall apply.

MM BIO-6 shall apply.

MM BIO-7 shall apply.

Residual Impact

Implementation of MM BIO-1, MM BIO-2, and MM BIO-4 through MM BIO-6 would reduce impacts to federal- and state-protected wetland areas through avoidance to the maximum extent feasible, on- or offsite wetland restoration, and full replacement of equivalent wetland values affected by proposed future development of the site. Implementation of MM BIO-7 would ensure that water quality within Froom Creek, adjacent wetlands, and downstream in San Luis Obispo Creek is not adversely impacted by installation of utility lines by requiring HDD techniques. Installation of utility infrastructure by HDD would reduce potential direct impacts to water quality resulting from erosion and accidental equipment-related petroleum releases. While HDD has potential to cause frac-outs or the inadvertent return of drilling fluids to the ground surface and increases in siltation of surface water and groundwater, adherence to the recommendations of the geotechnical investigation would reduce potential for such events to occur.

With respect to wetlands in the Upper Terrace, replacing the unusual seep-fed wetlands present along impacted segments of Drainages 1, 2, and 3 would be challenging. These wetlands would be directly impacted through culvert-headwall installation and sedimentation from grading and development, and the ability to reestablish and maintain rare plant species present within these areas is unknown. Because the Project would directly and indirectly affect jurisdictional wetlands which support rare plant species and for which restoration and mitigation is not considered completely feasible or likely, impacts would be *significant and unavoidable*.

Impact BIO-4 Project construction and operation would have a substantial adverse impact on the movement of resident or migratory fish or wildlife species or resident and migratory wildlife corridors along Froom Creek, Drainages 1, 2, and 3, and across open grasslands on the Upper Terrace of the Project site (Significant and Unavoidable).

The proposed Project would create a new urban community within the wildland-urban interface along more than one mile of the City's existing Irish Hills Natural Reserve, resulting in disruption of wildlife values on the Project site and within boundary areas of the Reserve itself. The Project site is designated in the City General Plan COSE as both a Wildlife Zone and Wildlife Corridor providing the conditions necessary to allow wildlife

to move safety through urban areas, particularly those on the urban-rural interface of the City's boundary.

Implementation of the Project would disrupt wildlife utilization of and movement across the Project site. Development of the Project would largely isolate the restored Froom Creek channel and the Calle Joaquin wetlands from wildlife in the Irish Hills Natural Reserve, replacing the existing broad open grasslands and ecotones that currently link these habitats with intensive development, confining wildlife movement to a relatively narrow restored creek channel extending between the proposed development and LOVR. While the realigned and restored From Creek corridor may provide enhanced riparian habitat, it would be a relatively urbanized creek corridor – compared to its current more natural state – bordered by relatively intensive development.

The Project would disrupt wildlife utilization of and movement across the Upper Terrace and along Drainages 1, 2, and 3, which link the Project site to the Irish Hills. While substantial open areas would remain on the Upper Terrace, construction of local access roads would disrupt wildlife movement through the primary remaining onsite open space corridor linking the Irish Hills Natural Reserve with Froom Creek. Increased wildlife mortality and disturbance can also be expected due to traffic along this road. Extensive site alteration and construction of new homes, roadways, trails, fences, utility and drainage infrastructure, and increased noise, lighting, and glare, particularly within the Upper Terrace, would also disrupt wildlife movement across the Project site over the long-term operation of the Project.

Development in the southwest corner of the Lower Area at the confluence of Drainages 1, 2, and 3 and adjacent to a large serpentine outcrop, would impact sensitive biological resources. Under the Project, a residential cul-de-sac with up to 4 Villas and 2 Garden Terrace apartment buildings would be located immediately adjacent to drainages and wetland areas at the confluence of the three drainages and extending to their ultimate confluence with the realigned Froom Creek channel. The confluence of these drainage plays a vital role in the accessibility to resources and foraging habitat for wildlife within the adjacent Irish Hills Natural Reserve. The location of these Villas would also isolate the restored Froom Creek and sensitive natural communities such as the Calle Joaquin wetlands and LOVR ditch from high-quality grassland and other habitats in the southern portion of the Project area.

Project development would also incrementally impact wildlife values of and movement within adjacent habitats within the Irish Hills Natural Reserve. Fire management activities

and vegetation management within an estimated 100-foot buffer along the Project's boundary with Irish Hills Natural Reserve could directly reduce the value of this area to wildlife through loss of forage value and cover. Noise, light, and glare from new development could inhibit wildlife usage of boundary areas. Predation of pets of future owners and/or passage through new development by large predators such as mountain lions, coyotes, and bobcats may lead to resident requests for predator control and/ or removal. Such increased urban-wildland conflicts would increase demands on City resources to balance management of valued wildlife resources of the Irish Hills Natural Reserve with public safety. These issues are discussed in more detail below.

Permanent Disturbance to Wildlife Corridors

The Project would be densely populated with new residents, employees, and visitors. Long-term impacts to sensitive species would occur due to increased human presence onsite, including lighting located on buildings and in parking areas, increased noise from automobiles, human activity, truck loading, parking lot cleaning and sweeping, trash dumpsters or compactors, and other similar activities. Solid waste and polluted runoff from trash storage areas and approximately 12.58 acres of roads and parking lots could enter Drainages 1, 2, and 3 and Froom Creek through wind or littering from human activities. These long-term impacts could cause sensitive species onsite to be killed, to flee the area, or could cause disruption to breeding/nesting efforts, and could be considered significant impacts to sensitive resident and migratory species.

Outdoor night lighting and noise associated with new development could create glare offsite, light spillage, and increased noise levels degrading the quality of Froom Creek, its tributary drainages, and the associated riparian buffer areas that could be utilized by wildlife to navigate the site. Night lighting and noise would be substantial relative to existing conditions, resulting in potential impacts to wildlife migrating through the site. Development within the Upper Terrace would surround and closely border Drainage 2 and border Drainages 1 and 3, inhibiting wildlife access to key water sources at currently undisturbed springs and seeps. Grading, site alteration, and polluted runoff could also alter these springs and seeps, reducing their value to both onsite wildlife and those resident in the adjacent Irish Hills Natural Reserve.

Further, the interface of the Project site and the realigned Froom Creek would lead to increased human interaction within the proposed riparian area, which could reduce the habitat value of the restored Froom Creek and restrict or inhibit wildlife movement and utilization. A walking path is proposed adjacent to the realigned creek's west side, bringing

pedestrians and bicyclists to the creek corridor. Impacts could occur from increased foot traffic in and around Froom Creek and more post-consumer waste entering the sensitive habitat from use of proposed foot trails within the creek setback areas. Increased runoff from paved surfaces and buildings could lead to increased sedimentation, water turbidity, and water quality degradation in the long-term, directly inhibiting aquatic species. These impacts to wildlands in the Upper Terrace, loss of access to water sources in Drainages 1, 2, and 3, and changes to Froom Creek may cause wildlife to avoid or abandon the site and are considered to have a *potentially significant* impact on wildlife movement through or adjacent to the site.

As discussed under Impact BIO-1, the Draft FRSP contains goals, policies, and programs intended to protect and enhance biological resources at the Project site. Realignment of Froom Creek may maintain and enhance critical instream habitat for south-central California coast steelhead, while also enhancing nesting and foraging habitat for other resident or migratory species. However, because the Project would result in permanent removal of high value native wildlife habitat within the Upper Terrace and disruption of wildlife access to water sources, this impact would be *potentially significant*.

Temporary Disturbance to Wildlife Corridors

During construction phases, the Project would render some areas of the Project site uninhabitable even though the habitat area would be avoided. In the Upper Terrace, Drainages 1, 2, and 3 and the grassland, woodland, and scrub habitats would remain but would be temporarily unavailable (or unattractive) while heavy equipment transformed the site (e.g., during grading and other site preparation activities). Once complete, the proposed open space areas of the Project site would become more available to wildlife with ongoing impacts of the development described above.

Realignment of Froom Creek would result in the temporary loss of a critically important wildlife corridor, lasting until near completion of the realignment of the creek and restoration of riparian habitat. During the anticipated 20-month period it would take to realign Froom Creek, the existing corridor for movement of wildlife across the site would be repeatedly disturbed or inaccessible, including the primary corridor for movement of California red-legged frog and south-central California coast steelhead (see Impact BIO-2 above). This disruption could impact both common and sensitive species that currently rely on Froom Creek for movement. As such, impacts associated with realignment of Froom Creek would be temporarily adverse and *potentially significant*. However, over the long

term, it is anticipated that species would generally return to the migratory corridor after completion of realignment and riparian restoration.

As further discussed under Impact BIO-2, Project development within and adjacent to Froom Creek could impact California red-legged frog, which is considered to have moderate potential to occur onsite. In addition, construction could impact south-central California coast steelhead, which have a low potential to occur onsite. These species could occur in Froom Creek due to the presence of seasonally restricted suitable pool habitat. Removal of instream habitat during realignment of Froom Creek could directly impact suitable downstream habitat for steelhead and could also impact dispersal habitat for the California red-legged frog, if construction occurs during the spring of a year with average or greater rainfall. Froom Creek was also determined to support seasonal movement of transient California red-legged frog intermittently during the rainy season, and construction at that time within the creek could impact movement corridors associated with those species. Impacts are considered *potentially significant.*

Mitigation Measures

MM BIO-1 shall apply.

MM BIO-2 shall apply.

MM BIO-4 shall apply.

MM BIO-5 shall apply.

MM BIO-6 shall apply.

MM BIO-9 shall apply.

MM BIO-11 shall apply.

MM BIO-12 shall apply.

MM BIO-13 The Applicant shall amend the FRSP to establish a 300-foot development buffer on the centerline of the confluence of Drainage 1, 2, and 3 and the realigned Froom Creek to maintain natural vegetation, ecological, hydrologic, and wildlife connectivity between the Irish Hills Natural Reserve and the Froom Creek corridor. The required buffer shall extend from the point at which the proposed realigned Froom Creek exits the Specific Plan area, upstream along the centerlines of Drainages 1, 2, and 3

for 600 linear feet. The Applicant shall relocate residential uses to areas outside of this buffer and should not exacerbate biological resource impacts in other areas of the site.

Plan Requirements and Timing. The above requirements shall be integrated into the Final FRSP and final VTM prior to recordation. City staff shall ensure the above measures are incorporated into building plans prior to issuance.

Monitoring. The City shall ensure the above measure is incorporated into the Final FRSP prior to Project approval.

MM BIO-14 *Proposed roadway/pathway crossings over any drainage shall be designed to ensure adequate passage for wildlife, consistent with the design standards and guidelines of the Federal Highway Administration Wildlife Crossing Structure Handbook.*

Plan Requirements and Timing. The above requirements shall be integrated into the Final FRSP. City staff shall ensure the above measures are incorporated into the improvement plans prior to approval.

Monitoring. The City shall ensure the above measure is incorporated into the Final FRSP prior to Project approval.

Residual Impact

Implementation of MM BIO-1 through -2, BIO-4 through -6, BIO-9, and BIO-11 through -12 would reduce potential impacts to wildlife species, riparian corridors, nesting and foraging habitat adjacent to the site, and other sensitive natural communities. Implementation of MM BIO-13 and MM BIO-14 would ensure some access is maintained for passage of wildlife along Drainage 1 to the realigned Froom Creek corridor and Calle Joaquin wetlands from the Irish Hills Natural Reserve and would help protect the natural ecotones along the drainage confluences. MM BIO-12 and MM BIO-13 would improve Project consistency with City policies for provision and maintenance of continuous habitat corridors and preservation of ecotones, including COSE Policies 7.3.3 and 7.7.7. However, proposed mitigation would not feasibly reduce the level of significance of or mitigate Project impacts, nor would they ensure complete consistency with the City's policies.

The Project site is a designated Wildlife Zone and Wildlife Corridor that provides some of the highest quality and most continuous wildlife corridors and ecotones within the City's

Urban Reserve Line. Because of this, the City has established rigorous policies for the preservation and enhancement of ecotones and wildlife corridors within the City. For instance, City General Plan COSE Policy 7.3.2 aims to preserve continuous wildlife habitat, including corridors free of human disruption. City General Plan COSE Policy 7.7.7 similarly aims to preserve and enhance ecotones and natural transitions between varying habitat types because of their importance to wildlife. Despite proposed mitigation, the Project would continue to alter the value the Project site currently provides with regards to wildlife and habitat connectivity. While realignment of the Froom Creek might improve some habitat for movement of fish or amphibious species, the realigned Froom Creek corridor is proposed as an engineered stream surrounded by urban development. Development within the Upper Terrace would similarly eliminate important foraging habitat for many residents of the Irish Hills and restrict access to lower elevations of the site, including the Calle Joaquin wetlands. Therefore, residual impacts to wildlife corridors and movement of wildlife are therefore *significant and unavoidable.*

Impact BIO-5 Project construction would result in the potential disturbance, trimming, or removal of up to 75 mature trees (Less than Significant with Mitigation).

Up to 75 mature native and non-native trees would be adversely affected by construction of the proposed Project. These trees are generally located in the developed/ disturbed area adjacent to the existing John Madonna Construction operations and in the southwest portion of the Project site adjacent to Drainages 1, 2, and 3 on the Upper Terrace. Construction activities would either result in the direct removal of trees to support development of building pads and structures, trimming of trees, or involve operation of equipment or construction activities within the root zone of a tree. Where work does not require the removal of a tree, trimming or work within the root zone of a mature tree has the potential to result in decline in health or mortality of the affected tree. Further, once operational, clearing of vegetation and maintenance of a 100-foot wildfire buffer area around the Madonna Froom Ranch and Villaggio developments would have potential to result in removal or trimming of additional mature trees, primarily in the Upper Terrace and within the Irish Hills Natural Reserve.

City General Plan COSE Policy 7.5.1 requires that oak woodland communities be protected. An existing oak woodland exists in the southern and western portions of the Project site, within the elevated hillsides near the Project site boundary. Development under the Specific Plan, as well as the 100-foot wildfire buffer area, would avoid

disturbance of this oak woodland community and any mature native oak trees, consistent with COSE Policy 7.5.1. However, the Specific Plan does not include any other goals, policies, or programs, which would reduce or mitigate impacts to mature trees. The potential disturbance of up to 75 mature trees remains a *potentially significant* impact.

Mitigation Measures

MM BIO-15 *Native Tree Protection. To ensure protection of native protected trees with respect to the tree trunk, canopy, and root zone, the Applicant shall hire a City-approved arborist or qualified biologist to conduct a daily, pre-construction survey of all activities occurring within the protected root zones of protected trees, and shall make recommendations for avoidance, and for any necessary remedial work to ensure the health and safety of trees that are encroached, and any measures necessary to reduce and/or remove potential safety hazards posed by any of these trees. Following construction, the health of affected trees shall be monitored by the arborist or qualified biologist for up to 5 years if necessary and as determined at the discretion of the City.*

Should Project activities result in the compromised health of native trees resulting from encroachment, the Applicant shall submit a native tree replacement planting program, prepared by a qualified biologist, arborist, or other resource specialist, which specifies replacement tree locations, tree or seedling size, planting specifications, and a monitoring program to ensure that the replacement planting program is successful, including performance standards for determining whether replacement trees are healthy and growing normally, and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines.

Where the worsened health of a tree results in the loss of protected tree species, mitigation measures in the native tree replacement program shall include the planting of replacement trees on the Project site, if suitable area exists. Riparian trees 4 inches or greater measured at DBH shall be replaced in-kind at a minimum ratio of 3:1 (replaced: removed). Trees 24 inches or greater inches DBH shall be replaced in-kind at a minimum ratio of 10:1. Willows and cottonwoods may be planted from live stakes following

guidelines provided in the California Salmonid Stream Habitat Restoration Manual for planting dormant cuttings and container stock (CDFW 2010).

- *Tree replacement shall be conducted in accordance with a Natural Habitat Restoration and Enhancement Plan to be approved by the City's Natural Resources Manager.*
- *The Natural Habitat Restoration and Enhancement Plan shall prioritize the planting of replacement trees on-site where feasible, but shall allow that replacement trees may be planted off-site with approval of the City's Natural Resources Manager.*
- *Replacement trees may be planted in the fall or winter of the year in which trees were removed. All replacement trees will be planted no more than 1 year following the date upon which the native trees were removed.*

Where onsite mitigation through planting replacement trees is not feasible, mitigation shall be provided by one of the following methods:

- *Off-site mitigation shall be provided by planting no less than 10:1, at a suitable site that is restricted from development or is public parkland. The Applicant shall plant seedlings – less than 1-year old – in an area providing suitable habitat. In the case of oak trees, the seedlings shall be grown from acorns collected in the area; or*
- *An in-lieu fee shall be provided for the unavoidable impacts of the loss of native tree habitat. The fee shall be based on the type, size and age of the tree(s) removed.*

Plan Requirements and Timing. All requirements shall be included on final grading plans. The qualified biologist shall monitor for the health of trees during and following construction activities, for a period of up to 5 years if determined necessary by the City.

Monitoring. The qualified biologist shall monitor all construction activities, and if necessary, periodically monitor the placement and planting program. City staff shall monitor for the health of affected individuals to determine compliance and potential need for further mitigation.

Residual Impacts

With implementation of MM BIO-15, requiring a Native Tree Protection Plan which addresses avoidance of trees and requirement for replacement of affected trees, impacts would be avoided and/or reduced. Further, MM BIO-15 would ensure proposed development occurs consistent with the intent and requirements of COSE Policy 7.5.1. Residual impacts to native trees are *less than significant with mitigation.*

3.4.3.4 Cumulative Impacts

The proposed Project is one of several planned and/or proposed residential developments in undeveloped open or agricultural lands along edges of the City, such as the San Luis Ranch Specific Plan and Avila Ranch Development Project. Construction of the Project would incrementally contribute to the conversion of undeveloped agricultural land and open lands to developed urban uses, with resultant losses of open space and habitats, increases in impervious surfaces, night light, noise, and traffic that accompany such development. These changes would both directly and indirectly affect sensitive habitats and wildlife species.

Project development resulting in impacts to onsite wetlands and riparian habitat would contribute to cumulative losses of foraging/nesting habitat for several sensitive wildlife species in the region. Cumulative removal of habitat in the vicinity of the Project site reduces the amount of foraging and breeding habitat for other non-sensitive mammals, birds, and reptiles, particularly to wildlife corridors along Froom Creek, its tributaries, and the Irish Hills. Project impacts, when combined with other projects in the vicinity as represented in Table 3.0-1, such as the San Luis Ranch Specific Plan and Avila Ranch Development Project, would add to impervious surfaces and resultant pollutant loading in the Froom Creek and San Luis Creek watersheds. No cumulative development projects are located within the immediate vicinity of the Project that would contribute to adverse effects to biological resources onsite, along Froom Creek, adjacent to the site, or in the greater Irish Hills. Given no additional cumulative development has been identified near existing or ongoing projects near the Irish Hills development, the Project is not considered to have a localized cumulative impact on habitat adjacent to proposed development or the movement of wildlife through the site or surrounding area.

The Project would directly affect the Froom Creek corridor through realignment of the creek and would not contribute runoff and increased potential for pollutants to Froom Creek and downstream water bodies, assuming the project is implemented in compliance

with applicable regulations (refer to Impact HYD-1). Despite the proposed riparian buffer and dedication of open space within the Project site, Project contributions to increased levels of runoff (pollution and siltation) and waste material to downstream water bodies (San Luis Creek) would potentially impact the species that use and reside in and around Froom Creek and San Luis Creek. In the long-term, potential cumulative degradation of water quality and habitat in Froom Creek and downstream in San Luis Creek are of concern.

Project development would contribute to citywide and regional impacts to biological resources. Pending development projects in other cities within the County, and within unincorporated areas, could impact a range of biological resources, including riparian and wetland habitats, as well as special-status species. Construction of the Project, as well as reasonably foreseeable projects in the County, would result in further loss to natural land and other habitat that supports sensitive and listed species, and would contribute to the fragmentation of habitat by interrupting wildlife corridors. Within the City and its immediate planning area, full development permitted under the LUE would increase overall developed area in the City and further reduce natural habitat acreages within the City limits. Development under the LUCE would contribute to the removal or modification of natural habitats, decrease in native plant and animal species occurrences, increase in urban/wildland interface, and increase in ruderal/disturbed habitat areas. However, the LUCE EIR ultimately found that cumulative impacts to biological resources would be less than significant after implementation of both the existing General Plan policies and those proposed by the LUCE Update, as well as compliance with state and federal regulations.

Despite incorporation of all the Project-specific mitigation measures described above, the Project's contribution to regional cumulative impacts to biological resources would be cumulatively considerable due to inability for the Project to avoid or successfully mitigate all impacts associated with loss or disturbance of sensitive and regionally significant biological resources; therefore, cumulative impacts would be *significant and unavoidable*.

3.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

This section describes cultural and tribal cultural resources and analyzes the potential impacts on these resources from implementation of the Project. Cultural resources as defined in CEQA Section 15064.5 include prehistoric and historic archaeological resources, and historic-period resources (buildings, structures, area, place, or objects). Tribal cultural resources are defined in PRC Section 21074(a) as 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 that is either included or determined eligible for inclusion on the California Register of Historical Resources or included in a local register of historical resources, or other resources determined by the lead agency, in its discretion and supported by substantial evidence, to be significant tribal cultural resources.

3.5.1 Environmental Setting

3.5.1.1 Prehistoric and Ethnohistoric Setting

Archaeological resources reflect past human activity extending from Native American prehistoric cultures throughout the early 20th century.

The Project site was inhabited prehistorically by Obispeño Chumash for at least 10,000 years. The Obispeño were the northernmost Chumash group, occupying much of the County, including the Project vicinity. Obispeño Chumash neighbors were the Southern (Migueliño) Salinan, also known as *Te'po'ta'ahl*, who lived along the upper course of the Salinas River. Obispeño is derived from the Spanish mission San Luis Obispo de Tolosa where the indigenous community was baptized by Franciscan priests in the late 18th century. The Obispeño Chumash and the Migueliño Salinan tribes subsisted within several ecological settings, including coastal resources, oak studded valleys, foothill areas, and extensive grasslands (Appendix F).

Native American prehistory in the Project vicinity is divided into six periods (Appendix F):

1. **Paleoindian Period (11000–8500 Before Present [B.P.]).** The Paleoindian Period represents the earliest human occupations in the Central Coast region. Paleoindian sites throughout North America are known by the representative fluted projectile points, crescents, large bifaces used as tools as well as flake cores, and a distinctive assemblage of small flake tools. Relatively few sites have been dated to this Period in the Project vicinity, though many along the coast may have eroded into the ocean with sea level rise that began in the Early Holocene Period defined below.

2. **Early Holocene Period (8500–5500 B.P.).** More extensive evidence of human occupation has been recorded at sites along the Central Coast dating to the early Holocene. The most common artifacts in these assemblages are milling slabs (metates) and handstones (manos) used to grind hard seeds and process other vegetable matter. Obsidian stone tools and manufacturing waste flakes recovered from several sites dating to this period have been sourced to the east side of the Sierra Nevada, indicating that long-distance trade networks were established by this time.
3. **Early Period (5500–3000 B.P.).** Technological changes marking the transition into the Early Period include an abundance of contracting-stemmed, Rossi square-stemmed, large side-notched, and other large projectile points. Site occupants of the Central Coast appear to have been more sedentary; populations appear to have increasingly used sites for specific resource procurement activities, including hunting, fishing, and plant material processing.
4. **Middle Period (3000–1000 B.P.).** The Middle Period is defined by the continued specialization in resource exploitation and increased technological complexity. Mano and metate ground stone implements are replaced by mortars and pestles associated with oak tree acorn processing. This is due to a substantial change in climate, where oak woodland habitats expanded with greater rainfall. Additionally, expansion of trade is reflected by an increased quantity of obsidian, shell beads made on Santa Cruz Island, and sea otter bone. Circular shell fishhooks, which facilitated an increase in fishing, appeared for the first time.
5. **Middle to Late Transition Period (1000–700 B.P.).** The Middle to Late Transition Period represents a rapid change in artifact assemblage, as well as social and settlement organization. Archaeological evidence suggests a regional population decline that was affected by periodic drought conditions. Interregional trade items, such as obsidian, are less frequently observed. Artifacts associated with fishing and marine mammal hunting and associated bone are much less conspicuous; populations appear to have adapted to changing climate by relying on terrestrial resources, such as small mammals.
6. **Late Period (700 B.P.–to Missionization).** Populations on the Central Coast expanded in the Late Period. A wetter climate returned and provided for more extensive plant and marine resources to exploit. The major technological change during this time is the introduction of the bow and arrow by tribes to the east. This allowed for effective hunting of small game and birds. Permanent villages expanded in size, and social structure became more complex with the rise of powerful chiefs. Interaction between villages was strengthened by intermarriage and trade represented by shell beads used as monetary exchange.

3.5.1.2 Historical Setting

Historical resources are buildings, structures, objects, places, and areas that are eligible for listing on the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or the City's Master List of Historic Resources, have an

association with important persons, events in history, or cultural heritage, or have distinctive design or construction method.

The earliest recorded visit by a European to a Native American village in the County took place in 1595, when the Spanish sailed into San Luis Obispo Bay, near the large Obispeño village of *Sepjato*. In 1769, Gaspar de Portolà and Father Junipero Serra departed the newly established San Diego settlement and marched northward toward Monterey with the objective to secure the port and establish five missions along the route. The Portolà expedition passed through the present day County that same year. In 1772, the first mission located within Chumash territory, Mission San Luis Obispo de Tolosa, was founded beside San Luis Obispo Creek and adjacent to the village of Sepjato. This first mission gradually expanded in size and significance. Several historic Obispeño villages have been identified from mission records and informant interviews. The Obispeño area showed a somewhat dispersed settlement pattern as compared to intensive settlement and large village sizes found along the Santa Barbara Channel.

Spanish and Mexican influence greatly changed the aboriginal way of life. In its first decade, due to dissatisfaction with Mission San Luis Obispo de Tolosa, some Obispeño Chumash attempted to burn the mission down. Their attempt failed, and by the 1790s, the influence of the mission had increased. By 1803, mission records indicate that numerous Obispeño Chumash groups had moved away from traditional villages to the vicinity of Mission San Luis Obispo de Tolosa. The native people at the mission suffered and the population declined rapidly. In 1803, there was a peak of 919 Native Americans residing at the mission, but by 1838 the population had declined to 170. In 1822, California became a Mexican Territory, and the mission lands gradually became private ranchos via Mexican land grants. After the decline of the mission era in the late 1830s, San Luis Obispo gradually grew into a thriving town.

3.5.1.3 Project Site History

In the early 1800s, the Project site was part of ranch lands of the Mission San Luis Obispo (Laguna Rancho), and was regranted by the Mexican government in 1844. The land was confirmed by the American government in 1855 and was continually used by a series of farmers. In 1869, the property parcel was approximately 868 acres. A dairy was installed no later than 1883.

The Project site is historically associated with the Froom family, which operated a dairy onsite beginning in 1890. By 1905, the ranch consisted of approximately 413 acres.

Supported by the cattle and creamery, the Froom family lived within the structure attached to the creamery until approximately 1915, when the modern craftsman-style residence within the northwestern portion of the property was built. The Froom family operated the dairy for several decades until the Madonna family purchased the site in 1976. Dairy operations ceased in 1977 and the Madonna family raised beef cattle on the site for several years after that date, eventually using the site primarily as an office and equipment storage area, as well as operating a small onsite quarry (see Section 3.15, *Mineral Resources*) (Appendix F).

3.5.1.4 Documented Archaeological and Historical Resources

A records search of the 109.7-acre Specific Plan area and a 0.5-mile radius was conducted by FirstCarbon Solutions (2015) at the Central Coast Information Center (CCIC), University of California Santa Barbara on January 5, 2015. The search identified all recorded cultural resources and previous investigations within the Project site and a 0.5-mile radius of the Project site. Several data sources were referenced, including NRHP, CRHR, the list of California Historical Landmarks, the California Inventory of Historic Resources, and California Points of Historical Interest.

Five investigations have been conducted within the Project site and 36 within 0.5 mile. The investigations resulted in the recordation of two prehistoric sites and two historic-period sites within the Project site (see Table 3.5-1).

Table 3.5-1. Cultural Resources Recorded within the Project Site

Resource Number	Age	Date Recorded	Recorder(s)	Description
P-40-000783/CA-SLO-783	Prehistoric	1987	R. Gibson	Bedrock mortars
P-40-001195/CA-SLO-1195	Prehistoric	1987	R. Gibson	Stone tool manufacturing flakes, shellfish and animal bone fragment scatter; hearths/pits
P-40-040991	Historic-Period	1998	B. Bertando	Froom Ranch Dairy complex
P-40-001780/CA-SLO-1780	Historic-Period	1996	J. Parker	Building foundations/structure pads, privies/dumps/trash scatters

Source: Appendix F (note: confidential information has been excluded from the publicly-published appendix).

Two prehistoric sites, one historic-period site, and one prehistoric isolated artifact are recorded within 0.5 mile of the Project site (see Table 3.5-2).

Table 3.5-2. Cultural Resources Recorded within 0.5 Mile of the Project Site

Resource Number	Age	Date Recorded	Recorder(s)	Description
P-40-001365/CA-SLO-1365	Prehistoric	1988	R. Gibson	Prehistoric bedrock milling feature
P-40-002145/CA-SLO-2145	Prehistoric	1997	R. Gibson	Prehistoric lithic scatter site
P-40-038206	Prehistoric	1997	R. Gibson	Prehistoric isolate
P-40-001002/CA-SLO-1002H	Historic-Period	1989	C.E. Dills	Farm/ranch barn

Source: Appendix F (note: confidential information has been excluded from the publicly-published appendix).

Onsite Prehistoric Resources

A pedestrian ground surface survey was conducted by FirstCarbon Solutions archaeologists from January 6 to January 8, 2015 to observe recorded and potential new cultural resources. Transect spacing varied between approximately 10 to 15 meters, where possible. Surface soils and rodent burrows were examined for any signs of prehistoric archaeological or cultural materials, including seashell fragments, stone tools and fragments, stone flakes, bone, burnt rock, and similar materials. All prehistoric and historic resources and features encountered during the survey were documented, which entailed the acquisition of location coordinates and photographic documentation. Results are further discussed below.

P-40-000783: Bedrock Mortars. Four rock outcrops contain one to three bedrock mortar holes used to mill acorns. All eight mortar holes were found to be in good condition. The ground surface surrounding the bedrock mortars was examined. No additional archaeological features or cultural materials were found during this survey. However, the subsurface boundaries of the site have not been defined and may possibly be related to site P-40-001195.

P-40-001195: Lithic/Shell/Bone Scatter. This resource is a scatter of stone tool manufacturing flakes, shellfish fragments, and animal bone. It is recorded approximately 200 meters (650 feet) from P-40-000783. The site is considered to represent a temporary or seasonal campsite adjacent to an intermittent stream. One Franciscan chert biface, two chert cores, and approximately 12 to 15 chert waste flakes associated with stone tool manufacturing and reuse were found. The biface, cores, and some pieces of chert waste flakes were observed in concentration in the eastern portion of the site. In addition, shellfish and bone fragments were observed scattered across the ground surface of the Project site. The shellfish remains were highly weathered and fractured and were not identifiable as a

specific species. Highly weathered bone fragments included what is believed to be both deer and rabbit. The condition of the archaeological site remains was considered generally good.

Several isolate prehistoric cultural materials were discovered during the intensive ground surface archaeological survey (FirstCarbon Solutions 2015; Appendix F). Included in these unrecorded artifacts were a concentration of stone artifacts, including a projectile point, a chert core, and chert waste flake, found on a hilltop northeast of the bedrock mortar site (P-40-000783) in the southwestern portion of the Project site. Other isolate artifacts included a Franciscan chert biface, located southwest of the bedrock mortar site (P-40-000783), and a piece of Franciscan chert waste was located in the northeastern portion of the Project site, adjacent to the west bank of the existing Froom Creek alignment. The locations of isolate cultural materials were mapped and photographed.

The Project site received a reconnaissance-level site survey on January 18, 2018 to confirm and expand, as needed, on the findings of Applicant-prepared cultural resource technical studies. Applied EarthWorks, a third-party cultural resources firm, observed the recorded sites as well as the isolates mapped and photographed; however, upon observation, the three stone artifacts, including the projectile point, chert core, and chert flake, were clustered and associated to constitute a new archaeological resource site. Applied EarthWorks also observed additional artifacts not mapped or photographed in the Applicant-prepared studies that may contribute to this new site. This new site has not been evaluated or recorded to date, so the significance of the site is not known; however, based on the reconnaissance-level survey, it is possible the site may be a significant resource considering the significance level of known resource sites nearby, as described above.

In addition, a Supplemental Phase I Cultural Report was conducted by FirstCarbon Solutions (2018) for the 7.1-acre proposed stormwater detention basin area in August 2018. The study included an updated CCIC records search, updated Sacred Lands file search, Native American consultation, and pedestrian survey. No additional prehistoric resources were identified during this supplemental survey (Appendix F).

Onsite Historical Resources

P-40-040991: Froom Ranch Dairy Complex. FirstCarbon Solutions prepared a historic resource evaluation (HRE) to determine the significance of the onsite historic Froom Ranch Dairy complex (P-40-040991). The evaluation was updated in July 2017 with input from an historic architect and architectural historian from Chattel, Inc. who performed a site visit

and assessment (Appendix F). The site visit included an assessment of 10 structures on the property, including a main residence, "old" barn, bunkhouse, dairy barn, creamery/house, granary, shed/storage building, outhouse, storage building, and a water tower. The HRE includes descriptions of each of the structures, their history, evaluations against NRHP, CRHR, and City's Master List of Historic Resources criteria, historic themes, and the integrity of the buildings.

Of the ten structures within the Froom Ranch Dairy complex, seven of them have been determined to be contributing structures associated with the historic dairy and Froom family: the main residence, dairy barn, creamery, granary, the shed/storage building, old barn, and bunkhouse. The main residence and bunkhouse are examples of Craftsman architecture that exemplify intact and good examples of the style. Vernacular architecture is displayed within the dairy barn with a rounded front – the only such structure in the County. Additional early 20th century agricultural vernacular-style structures include the creamery and granary, which reflect the local farming and dairy industry development and predominant architectural styles of the early 1900s (Table 3.5-3). The main residence, dairy barn, creamery, and granary structures within the Froom Ranch Dairy complex have been determined eligible significant historic resources as individual structures.

These four structures, together with the three other contributing (though not individually significant) resources associated with the Froom Ranch Dairy complex (the shed/storage building, old barn, and bunkhouse), have also been determined eligible as a historic district under the criteria listed within the City's Historic Preservation Ordinance and CRHR. Though a precise boundary for this historic district has not been established, it includes the area encircling these seven contributing structures. The landscape and layout of structures is historically significant for its association with the Froom family and Bill Froom, and early 20th century ranching and the dairy activity in the region. The Froom Ranch Dairy Farm has retained good integrity (condition) of location, design, materials, workmanship, feeling, association, and overall historic integrity. Historic integrity of the seven contributing structures is associated with the historic development of the San Luis Obispo area and the dairy industry; the pioneering Froom family and for Bill Froom and his local contributions; and the Craftsman and vernacular architecture of the buildings located within the complex.[1]

[1] It should be noted that in 2019, as a result of heavy rains during the winter season, heavy damage and partial collapse has occurred at the creamery structure.

Three modern structures located in proximity to the Froom Ranch Dairy complex, the outhouse, storage building, and water tower, are not considered contributing features to this eligible historic district (see Table 3.5-3).

Table 3.5-3. Structures Associated with the Historic Froom Ranch Dairy

Structure	Year Built	CRHR Eligibility, Significance, & Features	Significance
Contributing Features to the Potential Historic District			
Main Residence	1915	Individually Eligible. Character defining features of this one-story Craftsman-style structure include its horizontal massing, low-pitched gable roof, wood exterior wall cladding, projected front porch, and sash windows that exemplify Craftsman architecture in the San Luis Obispo area. The structure served as the primary residence for the Froom family until 1998. The interior has been altered extensively over time and now serves as a commercial office.	
Creamery	Before 1915	Individually Eligible. The creamery is a one-story, irregularly shaped, vernacular-style building indicative to the local historic style of the area and its utilitarian function that dates to early period of the Froom Ranch Dairy Farm operation and served as both the dairy production area and the original residence on the site prior to 1915. The creamery has experienced heavy damage and partial collapse as a result of heavy rains in 2018-2019.	

Table 3.5-3. Structures Associated with the Historic Froom Ranch Dairy (Continued)

Structure	Year Built	CRHR Eligibility, Significance, & Features	Significance
Dairy Barn	1913	Individually Eligible. This 60-foot by 80-foot structure is irregularly shaped, contains a concrete foundation, vertical wood siding, and a gabled roof. The dairy barn represents a unique example of the local dairy industry vernacular construction and is the only barn in the County with a rounded façade, which was designed to facilitate the milking process and move cows through the barn efficiently.	
Granary	1913	Individually Eligible. The granary is a small one-story rectangular structure with wood pier foundation and vertical wood siding walls, used for grain storage, and has a unique construction to prevent damage from rodents and animals.	
Shed/Storage Building	1913	Not Individually Eligible. A one-story, irregularly shaped vernacular-style storage building with a steeply slanted roof. Built as part of the early Froom Ranch development and has served as a storage shed for the dairy complex.	

Table 3.5-3. Structures Associated with the Historic Froom Ranch Dairy (Continued)

Structure	Year Built	CRHR Eligibility, Significance, & Features	Significance
Bunkhouse	1915	Not Individually Eligible. Craftsman-style one-story building has a concrete foundation, wood horizontal shiplap siding, and shingled roof. Constructed by Hans Peterson, the bunkhouse was formerly used as a residence by a member of the Froom family, but was not integral to dairy farm functionality.	
Old Barn	1900	Not Individually Eligible. The old barn is a one-story rectangular, vernacular-style structure with a concrete floor, vertical wood siding, and gabled roof with corrugated metal roofing. The old barn was moved to the current location in the early 20th century and has been renovated extensively as a result of its deteriorating condition.	
Non-Contributing Structures			
Outhouse	Modern	Not Eligible. This small asymmetrical parking kiosk structure was relocated and repurposed as an outhouse for the John Madonna Construction Company staff.	
Storage Building	Modern	Not Eligible. Mobile storage unit moved to the site for use by the John Madonna Construction Company.	

Table 3.5-3. Structures Associated with the Historic Froom Ranch Dairy (Continued)

Structure	Year Built	CRHR Eligibility, Significance, & Features	Significance
Water Tower	Modern	Not Eligible. Modern-style Verizon stealth cell tower is shaped like a water tower to appear compatible with the ranch landscape.	

Foundation remains from a historic homestead site within the proposed stormwater detention basin area.

P-40-001780: Building Foundations/ Structure Pads. The historic building foundations/structure pads located within the proposed stormwater detention basin area were a part of Francisco Antonio Lima's (Frank Lima) farm, established in the latter half of the 19th century. The farm passed hands through a variety of families through the early 20th century, with the buildings operating as a homestead until all but one of the structures were demolished sometime between 1959 and 1965. By 1987, no structures remained onsite; however, the building foundations were in place. While the site contained some historic fragments (e.g., a stoneware bottle, a porcelain fragment), and two prehistoric lithics (e.g. chert scraper, materials produced during the production of chipped stone tools), the site was in a highly disturbed state from mechanical destruction sometime between the 1960s and 1987. Sometime after 2000 the site appears to have been bulldozed, and only portions of the foundations remain.

Due to the poor integrity of the soils surrounding the site as a result of the previous disturbance/demolition, the artifacts associated with P-40-001780 have lost their ability to address NRHP or CRHR eligibility criteria. This site is therefore not considered significant relative to historic-period resource criteria. The presence of prehistoric archaeological sites within the 0.5 mile research radius of the study area, the presence of large quantities of

chert in the area, and the proximity of the creek and seasonal ephemeral drainages are indicators that subsurface Native American cultural deposits may be present within the study area (Condor Country Consulting, Inc. 2018; Appendix F).

Froom Ranch - Linear Rock Features: Possible historical-age features were documented and mapped during the 2015 Project site survey, including four linear rock wall features located along the western Project boundary. The linear rock wall features contain natural rock outcroppings, as well as rocks that appear to be intentionally placed, although the purpose is unknown. A follow-up pedestrian survey to evaluate these features was conducted in May 2018, and an associated historical resource evaluation of these features was conducted in July 2018. A total of six linear features were evaluated within or immediately adjacent to the Specific Plan area. The features are made of local schist and serpentine ground stone cobbles, ranging from 158 to 380 feet in length, 6 to 8 feet in width, 1 to 2 feet in height, and oriented on a roughly northwest – southeast axis. While some of the features may have been intentionally placed, it is unclear for what purpose. At least two sets of the features are paired and appear to run in parallel or convergent lines. All of the stones appear to have been grouped on the surface, with no evidence of a subsurface component. They are not considered to be building foundations or collapsed rock walls. Due to the distance from the Froom Ranch Dairy complex, it is not likely that the linear rock wall features are associated with past dairy operations. The rocks may be aligned with previously existing fence lines, as regular wooden and/or metal channel stakes and sections of barbed wire fence were observed along sections of the features. A review of historic aerial photographs failed to provide a date or range of dates for the features. Though they may be the result of efforts to clear ground stone from the hillside up to, and along existing fence lines, no evidence exists to definitively date or determine the function of the features in relation to activities taking place at Froom Ranch. Therefore, these linear rock features do not meet NRHP, CRHR, or City listing criteria for historic resources (FirstCarbon Solutions, Inc. 2018; Appendix F).

One of six linear rock wall features located along the Project site's western boundary.

In addition to the linear rock wall features, a stone revetment/retaining wall feature was identified adjacent to the bedrock mortar prehistoric site (P-40-000783). This is likely a recent feature as the boards associated with it are painted. A recent rock fire pit located west of the prehistoric lithic site P-40-001195 was also identified, with modern trash discovered and unrelated to the lithic site. Lastly, a boulder containing a blasting hole was located southwest of the lithic site P-40-001195 in a cluster of oak trees, within the southwestern portion of the Project site. Overall, these historical features did not appear to have any historical significance or unique features, nor did they appear to be over 45 years old, although there was no way to definitively determine their exact age (FirstCarbon Solutions 2015; Appendix F).

Native American Consultation

FirstCarbon Solutions contacted the State Native American Heritage Commission (NAHC) on December 31, 2014 requesting a search of the Sacred Lands Inventory and a list of local Native American tribal representatives who may have knowledge of tribal cultural resources in the Project site and vicinity. The NAHC responded to this request on January 21, 2015 indicating that there were no sacred lands listed in the area and provided a list of 22 tribal representatives who could potentially have information on tribal cultural resources. FirstCarbon Solutions sent letters to the 22 tribal representatives (Appendix F). One response was received.

- Patti Dunton, Administrator of the Salinan Tribe of Monterey and San Luis Obispo Counties requested on January 28, 2015 that planned development stay clear of the two recorded sites and that all ground disturbing activities be monitored by an archaeologist and a culturally affiliated Playano Salinan monitor. Subsequent consultation with the Project architect, RRM Design Group, resulted in a decision to not move the bedrock mortars associated with site P-40-000783/CA-SLO-783. On February 17, 2015, Ms. Dunton responded that she had no additional comments on the Project.

Subsequently, the City initiated formal Native American consultation pursuant to the requirements of SB 18 (Government Code 655352.3) and Assembly Bill (AB) 52 (PRC Section 21080.3.1). The City contacted the NAHC on April 15, 2017 to identify any updates to the list of tribal representatives who could potentially have information on tribal cultural resources. Ten tribal contacts were identified by the NAHC in their response on April 24, 2017, who were contacted by the City on December 26, 2017 requesting consultation (Appendix F).

In compliance with AB 52, the City offered an opportunity to consult with the City on the potential effects of the Project on tribal cultural resources to 12 tribal representatives that had requested notification by the City on all CEQA projects. Letters were sent on December 22, 2017 and tribal representatives had 30 days from receipt of the City's letter to request consultation. Of the 12 unique groups and/or individuals contacted under AB 52, four responses were received from representatives of the Santa Ynez Band of Chumash Indians, Salinan Tribe, Northern Chumash Tribal Council, and Northern Chumash Tribe as follows:

- Mr. Freddy Romero of the Santa Ynez Band of Chumash Indians called and left a message on January 2, 2018, and the City returned the call and left a message on January 3, 2018. No formal consultation or comments regarding the Project were received by the Santa Ynez Band of Chumash Indians.
- Ms. Patti Dunton of the Salinan Tribe responded via email on January 3, 2018 requesting that all archeological sites, including bedrock outcroppings, be avoided within designated open space areas and that all ground disturbing activities be monitored by a qualified archeologist and cultural resource monitor of the Salinan tribe. Ms. Dunton did not request consultation with the City and did not identify any tribal cultural resources in the Project area.
- Mr. Fred Collins of the Northern Chumash Tribal Council (NCTC) contacted the City on January 30, 2018 and requested consultation under AB 52 and a copy of the Cultural Resource Assessment. A consultation meeting was held with the City on February 21, 2018. During the meeting Mr. Collins requested that intact archeological resources be preserved and avoided and requested that a Native American monitor be retained during ground disturbances. Subsequent cultural resources reports were provided to the NCTC, and additional comments have not yet been received specifically regarding the Project. The NCTC requested that

archaeological consultants contact tribal representatives prior to conducting surveys and assessment.

- Ms. Mona Olivas Tucker of the yak titᵛu titᵛu yak tiłhini (Northern Chumash Tribe) emailed the City on February 8, 2018 requesting a copy of the Cultural Resource Assessment. The City emailed the report on February 8, 2018. Subsequent cultural resources reports were provided to the Northern Chumash Tribe, and additional comments have not yet been received specifically regarding the Project.

3.5.2 Regulatory Setting

Cultural and tribal cultural resources are governed primarily by federal, state, and local laws that would apply to future development under the Project. Federal, state and local regulations that are relevant to the Project are summarized below.

3.5.2.1 Federal

No federal action is required for the Project, but related federal regulation is provided for background.

National Register of Historic Places

The NRHP was established by the National Historic Preservation Act (NHPA) of 1966 to help identify and protect properties that are significant cultural resources at the national, state, and/or local levels. Four criteria have been established to determine if a resource is significant to American history, architecture, archaeology, engineering, or culture and should be listed in the NRHP. These criteria include:

1. It is associated with events that have made a significant contribution to the broad patterns of our history;
2. It is associated with the lives of persons significant in our past;
3. It embodies 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; and
4. It yields, or may be likely to yield, information important in prehistory or history.

Districts, sites, buildings, structures, and objects of potential significance that are at least 50 years in age must meet one or more of the above criteria to be eligible for listing in the NRHP.

3.5.2.2 State

California Register of Historical Resources

PRC Section 5024.1 states that a resource may be eligible for inclusion in the CRHR if it:

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

Resources that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR, and thus are significant historical resources under CEQA (PRC Section 5024.1(d)(1)).

Assembly Bill 52

AB 52 amended PRC Section 5097.94 (CEQA) and added eight sections to the PRC related to California Native American tribes. It was passed and signed into law in 2014 and took effect on July 1, 2015. This law establishes a new category of resource called tribal cultural resources (PRC Section 21074) and establishes a process for consulting with Native American tribes and groups regarding those resources. The consultation process must be completed before a CEQA document can be certified. California Native American tribes to be included in the process are identified through consultation with NAHC (PRC Section 21080.3.1).

Tribal cultural resources are "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe…" (PRC Section 21074.1). A tribal cultural resource must be on, or eligible for, the CRHR as described above for historical resources or must be included in a local register of historical resources. Also, as discussed above for historical resources, the lead agency can determine that a tribal

cultural resource is significant even if it has not been evaluated as eligible for the CRHR or is not on a local register.

AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

Senate Bill 18

Passed in 2004, Senate Bill (SB) 18 requires cities and counties to consult with Native American tribes to help protect traditional tribal cultural places as part of a general plan adoption or amendment. Unlike AB 52, SB 18 is not an amendment to, or otherwise associated with, CEQA. Instead, SB 18 requires that, prior to the adoption or amendment of a city or county's general plan, the city or county must conduct consultations with California Native American tribes for the purpose of preserving specified places, features, and objects that are located within the city or county's jurisdiction. Under SB 18, cities and counties must notify the appropriate Native American tribe(s) of intended adoption or amendments to general plans and offer the opportunity for the tribe(s) to consult regarding traditional tribal cultural places within the proposed plan area. A Native American tribe is defined as "a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission" (Governor's Office of Planning and Research 2005:6). Traditional tribal cultural places are defined in PRC Sections 5097.9 and 5097.993 to include sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines, or any historic, cultural, or sacred site that is listed on or eligible for the CRHR including any historic or prehistoric ruins, burial grounds, or archaeological site (Governor's Office of Planning and Research 2005:4).

Codes Governing Human Remains

The disposition of human remains is governed by Section 7050.5 of the California Health and Safety Code and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to

Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans, so they can inspect the burial site and make recommendations for treatment or disposal.

3.5.2.3 Local

City of San Luis Obispo Archaeological Resource Preservation Program Guidelines

Developed by the City's Cultural Heritage Committee (CHC), the Archaeological Resource Preservation Program Guidelines (part of the City's Environmental Guidelines) regulate the identification, evaluation, and treatment of archaeological sites and Native American cultural landscapes within the City. They are used to help develop the information needed to evaluate a project's effects on archaeological sites and artifacts, and thus achieve compliance with the cultural resource provisions of CEQA. The guidelines include a three-step approach to historical resources: preparation of an Archaeological Resource Inventory (ARI); Subsurface Archaeological Resource Evaluation (SARE); and Archaeological Resource Impact Mitigation (ARIM).

City of San Luis Obispo Historic Preservation Ordinance and Guidelines

The Historic Preservation Program Guidelines were adopted by City Council Resolution No. 6158 (1987 Series) and amended in 2010 with the adoption of the Historic Preservation Ordinance (Chapter 14.01 of the Municipal Code). The guidelines discuss historic preservation benefits and services offered by the City, discuss the principles of historic preservation, and summarize the architectural review process. Additionally, the Historic Preservation Ordinance guidelines establish the roles and duties of the CHC, define historic resources and historic districts, outline procedures for adding properties to the City's Master List of Historic Resources, and outline procedures for amending or establishing Historic Preservation Districts. The list was last updated in December 2016.

City of San Luis Obispo Cultural Heritage Committee

The City's CHC is a seven-member advisory body for the City responsible for overseeing preservation and management of historical and cultural resources. The purpose of the CHC is to "promote the preservation of architectural, archaeological, historical and cultural resources in San Luis Obispo" (Advisory Body Handbook 2015). A historical resource or feature that is designated for preservation or alteration under a proposed project requires review by the CHC, per San Luis Obispo Municipal Code Chapter 14.01 Historic Preservation Ordinance.

City of San Luis Obispo General Plan

General Plan, Conservation and Open Space Element (COSE)

Proposed projects are evaluated for consistency with the City's following adopted goals and policies relating to cultural resources. The COSE of the General Plan addresses Historic and Architectural Resources with multiple goals and policies. The goals and policies discussed below focus on those relevant to cultural resources present on the Project site. Relevant goals and polices include:

Goal COS 3.2 Historic and Architectural Resources. The City will expand community understanding, appreciation, and support for historic and architectural resource preservation to ensure long-term protection of cultural resources.

Policy COS 3.3.1 Historic Preservation. Significant historic and architectural resources should be identified, preserved, and rehabilitated.

Policy COS 3.3.3 Historical Documentation. Buildings and other cultural features that are not historically significant, but which have historical or architectural value should be preserved or relocated where feasible. Where preservation or relocation is not feasible, the resources shall be documented, and the information retained in a secure but publicly accessible location. An acknowledgement of the resources should be incorporated within the site through historic signage and the reuse or display of historic material and artifacts.

Goal COS 3.4 Archaeological Resources. The City will expand community understanding, appreciation, and support for archaeological resource preservation.

Policy COS 3.5.1 Archaeological Resource Protection. The City shall provide for the protection of both known and potential archaeological resources. To avoid significant damage to important archaeological sites, all available measures, including purchase of the property in fee or easement, shall be explored at the time of a development proposal. Where such measures are not feasible, and development would adversely affect identified archaeological or paleontological resources, mitigation shall be required pursuant to the Archaeological Resource Preservation Program Guidelines.

Policy COS 3.5.2 Native American Sites. All Native American cultural and archaeological sites shall be protected as open space wherever possible.

Policy COS 3.5.4 Archaeological Sensitive Areas. Development within an archaeologically sensitive area shall require a preliminary site survey by a qualified

archaeologist knowledgeable in Native American cultures, prior to a determination of the potential environmental impacts of the project.

Policy COS 3.5.5 Archaeological Resources Present. Where a preliminary site survey finds substantial archaeological resources, before permitting construction, the City shall require a mitigation plan to protect the resources. Possible mitigation measures include: presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; excavation removal and curation in an appropriate facility under the direction of a qualified professional.

Policy COS 3.5.6. Qualified Archaeologist Present. Where substantial archaeological resources are discovered during construction or grading activities, all such activities in the immediate area of the find shall cease until a qualified archaeologist knowledgeable in Native American cultures can determine the significance of the resource and recommend alternative mitigation measures.

Policy COS 3.5.7 Native American Participant. Native American participation shall be included in the City's Guidelines for resource assessment and impact mitigation. Native American representatives should be present during archaeological excavation and during construction in an area likely to contain cultural resources. The Native American community shall be consulted as knowledge of cultural resources expands and as the City considered updates or significant changes to its General Plan.

Policy COS 3.5.8 Protection of Native American Cultural Sites. The City will ensure the protection of archaeological sites that may be culturally significant to Native Americans, even if they have lost their scientific or archaeological integrity through previous disturbance; sites that may have religious value, even though no artifacts are present; and sites that contain artifacts which may have intrinsic value, even though their archaeological context has been disturbed.

3.5.3 Environmental Impact Analysis

3.5.3.1 Thresholds of Significance

With respect to cultural resource impacts, applicable sections of Appendix G of the State CEQA Guidelines state that a significant impact would occur if a project would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or

c) Disturb any human remains, including those interred outside of formal cemeteries.

In addition, the Project would impact tribal cultural resources if it would cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as 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 that is:

d) Eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k); or

e) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

3.5.3.2 Impact Assessment Methodology

This analysis evaluates potential cultural resource and tribal cultural resource impacts associated with implementation of the Project. The impact analysis for cultural resources is based on review of information and analysis from cultural resources reports prepared for the Project, including:

- Froom Ranch/El Villaggio Specific Plan Section 106 Prehistoric Report San Luis Obispo prepared by FirstCarbon Solutions in 2015;
- Analysis of Historic Structures at Froom Ranch 12165 Los Osos Valley Road, San Luis Obispo, CA prepared by Stork, Wolfe and Associates in 2017;
- Froom Ranch Specific Plan Conformance Review prepared by Chattel, Inc. in 2017;
- Froom Ranch Specific Plan Historic Resource Assessment, San Luis Obispo, San Luis Obispo County, CA prepared by FirstCarbon Solutions and Chattel, Inc. in 2017;
- Froom Ranch Specific Plan Cultural Resource Assessment, San Luis Obispo, San Luis Obispo County, CA prepared by FirstCarbon Solutions and Chattel, Inc. in 2017;

- Froom Ranch Retention Basin and Land Exchange Areas Supplemental Phase I Cultural Resources Report prepared by FirstCarbon Solutions in 2018;
- Froom Ranch Limited Phase II Cultural Resources Assessment, Froom Ranch Storm Water Basin, County of San Luis Obispo, CA prepared by Condor Country Consulting, Inc. in 2018; and
- Linear Rock Features Historical Resource Evaluation, Froom Ranch, 12165 Los Osos Valley Road, San Luis Obispo, CA prepared by Chattel, Inc. in 2018.

This analysis also included review of cultural resource records, and consultation with tribal representatives. Additionally, Applied EarthWorks, a third-party cultural resources firm, conducted a reconnaissance-level site survey on January 18, 2019, then peer reviewed the cultural resource studies prepared by the Applicant (Appendix F). Taken together, this background research and the targeted assessment performed form the basis for this EIR analysis (Appendix F). Cultural resources impact assessment is based on a comparison of known resource locations with the placement of ground disturbing Project activities that have the potential to directly or indirectly remove, relocate, damage, or destroy the physical evidence of past cultural activities.

Historical Resources

A project is judged to have a significant effect on the environment if it may cause a substantial adverse change in the characteristics of a historical resource that convey its significance or justify its eligibility for inclusion in the CRHR or a local register, either through demolition, destruction, relocation, alteration, or other means (CEQA Guidelines, Section 15064.5[b]). For historical resources, impacts can generally be mitigated to a less than significant level through maintenance, repair, stabilization, restoration, preservation, conservation, or reconstruction in a manner consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (36 CFR 68) and/or the *Secretary of the Interior's Standards for Rehabilitation*. Alterations meeting these criteria generally would not have the potential to cause a substantial adverse change to any historic resources. In other words, a project that successfully incorporates the Secretary of the Interior's Standards would, for purposes of CEQA, be considered to have a less than significant impact on historic resources (CEQA Guidelines Sections 15126.4[b] and 15064.5[b][3]). The Secretary of the Interior's Standards define four options for the treatment of historic buildings: 1) preservation, 2) rehabilitation, 3) restoration, and 4) reconstruction. Generally:

1. Preservation involves the application of measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment (Weeks and Grimmer 1995).
2. Rehabilitation entails making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values (Weeks and Grimmer 1995).
3. Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period (Weeks and Grimmer 1995).
4. Reconstruction involves new construction to recreate the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period and in its historic location (Weeks and Grimmer 1995).

The Secretary of the Interior's Standards are not prescriptive, but instead provide general guidelines and are intended to be flexible and adaptable to specific project conditions, including aspects of adaptive use, functionality, and accessibility. The goal is to balance continuity and change and retain historic building fabric to the maximum extent feasible. Documentation of historic buildings and structures, including documentation to the standards of the Historic American Buildings Survey or Historic American Engineering Record (HABS/HAER), may lessen impacts but may not reduce them to less than significant levels.

The analysis in this EIR considers both direct impacts and indirect impacts on historic resources. Direct impacts may occur by:

1. Physically damaging, destroying, or altering all or part of the resource;
2. Altering characteristics of the surrounding environment that contribute to the resource's significance;
3. Neglecting the resource to the extent that it deteriorates or is destroyed; or
4. The incidental discovery of cultural resources without proper notification.

Removal, demolition, or alteration of historical resources can directly impact their significance by destroying the historic fabric of an archaeological site, structure, or historic district. Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations of historical resources within the area, assessing the significance of the resources that may be affected, and determining the appropriate mitigation.

Indirect impacts can result from blocking significant public views of a resource's defining character; isolating a resource from its setting or relationship to the streetscape; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance.

A key element in this impact assessment methodology involves consideration of the effectiveness of the Draft FRSP's proposed treatment and relocation of four historic structures within the Froom Ranch Dairy complex. The analysis below considers the efficacy and effectiveness of Project's proposed policies and development standards in avoiding or minimizing impacts to these historic resources.

Archaeological Resources

CEQA provides guidelines for mitigating impacts to archaeological resources in Section 15126.4. According to the CEQA Guidelines, public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered for a project involving potential archaeological resources:

A. Preservation in place (avoidance) is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
B. Preservation in place may be accomplished by, but is not limited to, the following:
    1. Planning construction to avoid archaeological sites;
    2. Incorporation of sites within parks, greenspace, or other open space;
    3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site; or
    4. Deeding the site into a permanent conservation easement.

C. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.

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

Typically, such measures will reduce impacts on archaeological resources to less than significant levels.

3.5.3.3 Project Impacts, Mitigation Measures, and Residual Impacts

During Project construction, direct impacts to cultural and tribal cultural resources may occur from disturbance or destruction. Impacts may also occur during Project operation through illicit artifact collection and site disturbances resulting from increased access to open space areas containing cultural resources. Table 3.5-4 below summarizes these impacts.

Table 3.5-4. Summary of Project Impacts

Cultural Resources Impacts	Mitigation Measures	Residual Significance
CR-1. Project grading and construction would occur within areas of prehistoric archaeological sensitivity with the potential to impact subsurface cultural or tribal cultural resources.	MM CR-1 MM CR-2 MM CR-3 MM CR-4 MM CR-5 MM CR-6 MM CR-7	Less than Significant with Mitigation
CR-2. Future resident recreational activities could impact archaeological resources located within proposed open space.	MM CR-8	Less than Significant with Mitigation
CR-3. The Project would result in relocation, demolition, disturbance, and/or removal of historic resources onsite, including individually eligible historic resources and a historic district.	MM CR-9 MM CR-10 MM CR-11 MM CR-12 MM CR-13 MM CR-14	Significant and Unavoidable

Impact CR-1 Project grading and construction would occur within areas of prehistoric archaeological sensitivity with the potential to impact subsurface cultural or tribal cultural resources (Less than Significant with Mitigation).

The Project would involve extensive ground disturbance to support development of Villaggio and Madonna Froom Ranch, including excavation of subterranean parking garages, building foundations, and utility installations. Installation of the proposed stormwater detention basin would also require extensive earthmoving and soil disturbance. Construction activities have the potential to unearth, damage, or destroy prehistoric archaeological resources within the site. There are three recorded prehistoric sites within the Project site, including two within Villaggio and one within the proposed stormwater detention basin area. There is also one unrecorded prehistoric site comprised of the three mapped stone artifacts (including a projectile point, chert core, and chert flake) observed through field investigation within Villaggio.[2]

The Project's proposed land use and conceptual development plan would avoid direct disturbance to the known prehistoric sites within the Project site; however, unknown resources associated with these sites or other prehistoric use of the Project vicinity would be vulnerable to impacts during construction (Appendix F). The City's Archeological Resource Preservation Program Guidelines defines "archaeologically sensitive" as "Areas inside or within 200 feet (61 meters) of the boundaries of an archaeological site shown on U.S. Geological Survey (USGS) topographic maps on file in the Community Development Department and/or recorded with the CCIC" (City of San Luis Obispo 2009). In archaeologically sensitive areas, the City may require a SARE, per the Guidelines. The purpose of the SARE is to verify the presence and location of archaeological resources, to determine the site's integrity and archaeological significance, and to determine a project's potential effects on the resources. Prehistoric sites are important to the contemporary Obispeño Chumash community. The Northern Chumash Tribal Council representative requested avoidance of these sites within a designated open space area during AB 52 and SB 18 consultation.

[2] This unrecorded prehistoric site consisting of three stone artifacts was first identified in the Froom Ranch/El Villaggio Specific Plan 106 Prehistoric Report (FirstCarbon Solutions 2015) but later considered to three isolate features and not comprising a site and were therefore not further evaluated. However, these isolate features were later identified as a prehistoric site, but were similarly not further evaluated due to their removal from the proposed area of development.

The recorded prehistoric sites P-40-000783 and P-40-001195, as well as the historic sites P-40-040991 and P-40-001780, are located either directly within or in close proximity to areas of proposed development under the Project.[3] In compliance with the requirements of the City's Archaeological Resources Reservation Program Guidelines, a Limited Phase II Cultural Resources Assessment meeting the requirements of a SARE was prepared for the Project by FirstCarbon Solutions in 2018 to verify the presence or absence of archeological resources within the vicinity of the known prehistoric site (P-40-001780), which would be directly impacted by development of the proposed stormwater detention basin; however, no Phase II SARE has been prepared for prehistoric sites P-40-000783 and P-40-001195, which would be within proposed Open Space areas and would not be directly impacted by construction of the Project. The other recorded site (P-40-040991) is the Froom Ranch Dairy Farm, which has been extensively evaluated as a historic resource and district.

Prehistoric site P-40-000783, consisting of prehistoric bedrock mortars, is located within a proposed private open space area in Villaggio adjacent to areas proposed for development and within 50 feet of potential earthmoving activities in the southern region of the Project site. A private recreational area for Villaggio residents is also proposed within 50 feet of P-40-000783. The boundary of P-40-000783 has not been defined through subsurface investigation, and there is potential for additional unknown buried resources associated with the site to be present. Prehistoric site P-40-001195, consisting of one Franciscan chert biface, two chert cores, and approximately 12 to 15 chert waste flakes chert flakes, dietary shellfish, and bone fragments, is located in proposed private open space at least 100 feet from proposed development.

The known resources recorded at these sites are located in proposed private open space within Villaggio and would not be directly modified or disturbed during Project construction. Based on the proximity of these sites to one another and the nature of the resources, it is possible that additional undiscovered subsurface cultural resources associated with these sites could exist and be located within the areas of proposed development. Therefore, proposed grading, excavation, trenching, and other earthwork for proposed roadways, utility lines, storm drainage features, and other earthmoving activities could occur in areas where undiscovered subsurface resources associated with these recorded sites may exist.

[3] Refer to Impact CR-2 for discussion of impacts to site P-40-040991 and other recorded historic resources potentially affected by the Project.

The Project includes construction of a stormwater detention basin within the southeastern region of the Project site, where archaeological site P-40-001780 is located. This site and a 200-foot buffer qualify as an archaeologically sensitive area by the City's Archaeological Resource Preservation Program Guidelines. The presence of two prehistoric artifacts at the site, in addition to the presence of prehistoric archaeological sites within the 0.5 mile research radius of the study area, the presence of large quantities of chert for making prehistoric stone tools in the area, and the proximity of the creek and seasonal ephemeral drainages, indicate that subsurface Native American cultural deposits may be present within the area of disturbance for the proposed stormwater detention basin. Based on the Phase II SARE prepared for this area of the Project site, there is a potential for additional prehistoric resources to be discovered during construction of the proposed stormwater detention basin feature.

In addition to those recorded archaeological sites, several prehistoric isolates including shellfish and animal bone fragments were identified during the intensive ground surface survey for the Project within Villaggio (Appendix F). Most of these materials did not include artifacts such as stone or seed grinding implements, and therefore do not represent important sources of research data and are not significant cultural resources as defined by CEQA. However, three mapped but unrecorded isolates located in the Upper Terrace of Villaggio include a projectile point, chert core, and chert flake.[4] This collection of stone resources constitutes a new archaeological resource site, which has not been mapped or recorded to date. For the purposes of this EIR analysis, this new site is assumed to be a significant archaeological resource subject to the City's Archaeological Guidelines for archaeologically sensitive areas; the Project has been designed to avoid these resources.

Further, the City's Archeological Resource Preservation Program Guidelines identify areas within 200 feet of the top of banks of Froom Creek as archeologically sensitive based on the distribution of prehistoric sites near the drainage. The Project would involve ground disturbance in areas that would be within 200 feet of Froom Creek's historic alignment, which indicates a potential for increased archaeological sensitivity in the area of the proposed Froom Creek realignment and Villaggio's Lower Area. Additionally, the cultural resource investigations conducted within the Project site and vicinity conclude there is potential for undiscovered buried sites to exist in areas where alluviation occurred during heavy episodes of precipitation within the alluvial plain between Froom and Prefumo

[4] The Cultural Resource Assessment for the Project (FirstCarbon Solutions 2015) concluded this concentration of stone artifacts, may comprise a small lithic scatter; however, the assessment did not include evaluation of these resources for significance.

creeks (Appendix F). The alluvium between these creeks was likely deposited throughout Holocene age flood events spanning the past 10,000 years, potentially burying prehistoric site landforms. While portions of the Project site near the existing Froom Creek alignment have been subject to soil disturbance, which reduces the potential for discovery of intact resources, the areas of the site where Froom Creek historically flowed appear to be relatively undisturbed based on historic aerial photography (Google Earth 2019). The Project would include excavation in this archaeologically sensitive area to realign Froom Creek to its historic location.

Per the City's Archeological Resource Preservation Program Guidelines, and as summarized above, there are five archaeologically sensitive areas within the Project site that are considered to have a higher likelihood of containing undiscovered cultural resources that could be impacted by Project construction. These include those areas within, surrounding, or between sites P-40-001195, P-40-000783, P-40-001780, the unrecorded prehistoric site within Villaggio, and the sensitive areas along the historic Froom Creek alignment. If development of the Project results in direct damage or loss of unknown significant archaeological resources in archaeologically sensitive areas around the four known prehistoric sites (three recorded and one unrecorded) or the historic alignment of Froom Creek, the impact on cultural resources would be *potentially significant*.

Mitigation Measures

MM CR-1 *A Phase 2 – Subsurface Archaeological Resource Evaluation (SARE) investigation shall be conducted prior to any grading or development proposed within 200 feet of the recorded P-40-000783 and P-40-001195 sites, or the unrecorded site comprising three mapped stone isolates, to evaluate the potential for unknown buried resources within these "archaeologically sensitive" areas, including but not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites, consistent with City Archeological Resource Preservation Program Guidelines. If discovery of unknown buried archaeological resources occurs through the SARE, a City-approved archaeologist shall evaluate the significance of the discovery pursuant to City Archaeological Resource Preservation Program Guidelines and CEQA. If the discovery is found to be a significant cultural resource, Project design shall be modified to avoid modification, disturbance, or destruction of the archeological resource. If the Phase 2*

SARE investigations do not discover unknown buried archaeological resources but conclude there is a possibility that cultural resources exist within the archaeologically sensitive areas that were evaluated, the Community Development Department Director shall require that the Applicant retain a City-approved archaeologist and local Native American observer to monitor construction activities to identify and protect archaeological resources in accordance with the Archaeological Monitoring Plan described in MM CR-3.

Plan Requirements and Timing. Any required Phase 2 SARE investigations shall be conducted by a City-approved archaeologist prior to approval of the VTM or Project entitlements. **Monitoring.** The City shall ensure the Phase 2 SARE investigations are completed by a City-approved archaeologist and consistent with City Archeological Resource Preservation Program Guidelines. Any potential modifications to the Project design shall be reviewed and approved by the City prior to approval of any subdivision map or other entitlement.

MM CR-2 *If any ground disturbing activities are proposed within 100 feet of the recorded sites P-40-000783, P-40-0011195, or the unrecorded site comprising three mapped stone isolates, on preparation of construction plans, the plans shall delineate a 50-foot buffer surrounding the boundaries of the recorded sites. The area shall be labeled as an "Environmentally Sensitive Area". Highly visible temporary construction fencing shall be installed along the boundary of the 50-foot buffer and shall remain in place until the archaeological monitor recommends removal. If feasible, no ground disturbance, construction worker foot traffic, storage of materials, or storage or use of equipment shall occur within the "Environmentally Sensitive Area". Archaeological monitoring shall occur during all construction activities occurring within 50 feet of the delineated boundary. Upon completion of archaeological monitoring, an archaeological monitoring report shall be prepared and submitted to the City Community Development Department and the Central Coast Information Center at the University of California Santa Barbara.*

Plan Requirements and Timing. Prior to recordation of the final VTM and issuance of grading permits, plans shall incorporate the delineation of the "Environmentally Sensitive Area" and associated protection measures.

Monitoring. The City shall verity that required elements are shown on the final VTM and grading permits. Compliance shall be verified pursuant to the approved Archaeological Monitoring Plan.

MM CR-3 *Prior to issuance of grading or building permits, and recordation of the final map, an Archaeological Monitoring Plan (AMP) shall be prepared. The AMP should include, but not be limited to, the following:*

a. A list of personnel involved in the monitoring activities;

b. Description of Native American involvement;

c. Description of how the monitoring shall occur;

d. Description of location and frequency of monitoring (e.g., full time, part time, spot checking);

e. Description of what resources are expected to be encountered;

f. Description of circumstances that would result in the halting of work at the project site;

g. Description of procedures for halting work on the site and notification procedures;

h. Description of monitoring reporting procedures; and

i. Provide specific, detailed protocols for what to do in the event of the discovery of human remains.

Plan Requirements and Timing. The AMP shall be prepared by a City-approved archaeologist prior to issuance of grading or building permits and recordation of the final map..

Monitoring. The City shall ensure the AMP is prepared by a City-approved archaeologist and consistent with City Archeological Resource Preservation Program Guidelines.

MM CR-4 *The Applicant shall retain a City-approved archaeologist and local Native American observer to monitor Project-related ground-disturbing activities that have the potential to encounter previously unidentified archaeological resources, as outlined in the AMP prepared to satisfy MM CR-1. Archaeological and tribal monitoring may cease only if the City-approved archaeologist determines in coordination with the Applicant, Community Development Director, and the Native American monitor that Project activities do not have the potential to encounter and/or disturb unknown resources.*

Requirements and Timing. The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with a qualified archaeologist and Native American monitor. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards, consistent with the City's Archeological Resource Preservation Guidelines.

Monitoring. City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery.

MM CR-5 *In the event of any inadvertent discovery of prehistoric archaeological resources, including but not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or historic-period archaeological resources, all work within 100 feet of the discovery shall immediately cease (or greater or lesser distance as needed to protect the discovery and determined in the field by the City-approved archaeologist). The Applicant and/or contractor shall immediately notify the City Community Development Department. The City-approved archaeologist shall evaluate the significance of the discovery pursuant to City Archaeological Resource Preservation Program Guidelines prior to resuming any activities that could impact the site/discovery. If the City-approved archaeologist or Native American monitor determine that the find may qualify for listing in the CRHR or as a*

tribal cultural resource, the site shall be avoided or shall be subject to a Phase II or III mitigation program consistent with City Archeological Resource Preservation Program Guidelines and funded by the Applicant. Work shall not resume until authorization is received from the City.

Plan Requirements and Timing. The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with identified Project archaeologist and Native American monitor. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards, consistent with the Archeological Resource Preservation Program Guidelines.

Monitoring. City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery.

MM CR-6 *Prior to construction of each phase, workers shall receive education regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources, during construction. Such training shall provide construction personnel with direction regarding the procedures to be followed in the unlikely event that previously unidentified archaeological materials, including Native American burials, are discovered during construction. Training shall also inform construction personnel that unauthorized collection or disturbance of artifacts or other cultural materials is not allowed. The training shall be prepared by a City-approved archaeologist and shall provide a description of the cultural resources that may be encountered in the Project site, specify areas of known sensitivity, outline steps to follow in the event that a discovery is made, and provide contact information for the City-approved archaeologist, Native American monitor, and appropriate City personnel. The training shall be conducted concurrent with other environmental or safety awareness and education programs for*

the Project, provided that the program elements pertaining to archaeological resources is provided by a qualified instructor meeting applicable professional standards.

Requirements and Timing. Prior to ground disturbance for each phase, construction workers shall participate in an educational program that will enable them to recognize and report possible buried cultural remains and protect all cultural resources, including prehistoric and historic resources. The educational program shall be outlined within the Archaeological Monitoring Plan and submitted to the City for approval prior to issuance of grading permits for each phase.

Monitoring. The City-approved archaeologist shall verify the training has been completed by all construction workers and shall ensure construction workers follow cultural resource discovery protocols.

MM CR-7 *If human remains are exposed during construction, the City Community Development Department shall be notified immediately. The Applicant and City shall comply with State Health and Safety Code Section 7050.5, which states that no further disturbance shall occur until the County Coroner has been notified and can make the necessary findings as to origin and disposition of the remains pursuant to PRC Section 5097.98. Construction shall halt around the discovery of human remains, the area shall be protected, and consultation and treatment shall occur as prescribed by law.*

Plan Requirements and Timing. The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans and reflected in the AMP.

Monitoring. City permit compliance staff shall confirm monitoring by the City-approved archaeologist and tribal representative and City grading inspectors shall spot check fieldwork. The Native American monitor and City-approved archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery.

Residual Impact

Implementation of MM CR-1 through -7 would ensure that appropriate precautions and protection measures are taken to avoid potentially significant impacts to unknown or undiscovered archaeological resources during construction activities. Therefore, residual impacts would be *less than significant with mitigation*.

Impact CR- 2 Future resident recreational activities could impact archaeological resources located within proposed open space (Less than Significant with Mitigation).

Prehistoric site P-40-001195, a concentration of chert flakes, dietary shellfish, and bone fragments, is located in an area of proposed open space at least 100 feet from area proposed for development. The resource would be generally inconspicuous from passive recreational users and the nearest residential structures within Villaggio would be enclosed by a security fence that would substantially limit access to the cultural resource. A separate private recreational area for Villaggio residents is also proposed within 50 feet of P-40-000783, a cluster of bedrock mortars. It is reasonable to assume that Villaggio residents would use open space areas and the private recreational area for passive recreation or to access the Irish Hills trails network. Increased passive recreational use of the open space by Project residential populations and domesticated animals could result in indirect adverse impacts to the prehistoric resource, including illicit artifact collection and erosion from hiking, dog walking, etc. These potential disturbances would be a *potentially significant* impact on cultural resources.

Mitigation Measures

MM CR-8 *No designated recreational areas, facilities, pedestrian paths, or roadways shall be located with 50 feet of a known prehistoric or tribal cultural resource site. All archaeological site soils within 100 feet of a known prehistoric or tribal cultural site shall be seeded with shallow rooted vegetation unless existing natural vegetation (i.e., existing grasslands) can screen the cultural resource from view.*

Requirements and Timing. The Draft FRSP shall be amended to incorporate these measures as they apply to P-40-000783 or P-40-001195 and the unrecorded site, prior to adoption of the Final FRSP.

Monitoring. A City-qualified archaeologist shall review and approve the established buffer between Project development and known cultural resource sites and review vegetation seeding covering the archaeological site boundaries prior to issuance of occupancy.

Residual Impact

Implementation of MM CR-8 would reduce impacts to sensitive cultural resources and soils, particularly as they apply to site P-40-000783 and P-40-001195, to *less than significant with mitigation.*

Impact CR-3 The Project would result in relocation, demolition, disturbance, and/or removal of historic resources onsite, including individually eligible historic resources and a historic district (Significant and Unavoidable).

As documented in Section 3.5.1.4, the Project site contains the historic Froom Ranch Dairy Farm (P-40-040991), including seven existing contributing structures associated with the historic dairy and Froom family. Four structures (i.e., main residence, creamery, dairy barn, and granary) are considered significant historic resources as individual structures. These four structures together with the three other contributing structures (i.e., the old barn, shed/storage building, and bunkhouse) constitute an eligible historic district under the City's Historic Preservation Ordinance and the CRHR. The landscape and layout of these seven buildings comprising the Froom Ranch Dairy complex is historically significant under CEQA.

The Project would relocate and adaptively reuse (within the proposed public park) four Froom Ranch Dairy buildings (i.e., main residence, creamery, dairy barn, and granary) that are eligible for listing on the NRHP, CRHR, and City's Master List of Historic Resources. The main residence would be relocated and rehabilitated, and the creamery, dairy barn, and granary would be disassembled, relocated, and reconstructed, while the shed, bunkhouse, old barn, and non-historic storage building and outhouse structures would be demolished (refer to Section 2.4.2.4, *Relocation and Reconstruction of Historic Structures*). Due to the presence of the Los Osos fault (refer to Section 3.6, *Geology and Soils*), which underlies the dairy barn at its existing location, the Project would relocate and reconstruct the dairy barn approximately 220 feet to the east, outside of the required fault setback. The main residence, creamery, and granary would also be relocated to maintain the relative horizontal configuration in relation to the dairy barn, in addition to grade changes to mimic the existing vertical relationship and visual hierarchy.

The proposed relocation and reconstruction of four of the Froom Ranch Dairy complex buildings would maintain the character-defining features of the four individually significant structures, including the existence, orientation, relative horizontal and vertical relationship of the main residence, creamery, dairy barn, and granary, and the relative open space and minimally landscaped setting. The viewshed from the main residence to the creamery, dairy barn, and granary would also be retained, as it would remain at the lowest elevation, the creamery at mid-elevation, and the dairy barn and granary at the highest elevation. The main residence would be rehabilitated consistent with the Rehabilitation Standards of the *Secretary of the Interior's Standards* and the creamery, dairy barn, and granary would be reconstructed consistent with the Reconstruction Standards of the *Secretary of the Interior's Standards*, requiring minimal changes to the distinctive materials, finishes, features, or construction techniques. Deteriorated historic features would also be repaired or replaced in-kind to match the existing structure. The character-defining features of each of the individually eligible historic structures would be retained. Continued review of the restoration and rehabilitation would ensure compliance with these standards during treatment and relocation of the Froom Ranch Dairy complex. However, there is a potential for conflict between the design and character of the surrounding Madonna Froom Ranch development and the rehabilitated main residence. Incompatible design of adjacent new development has the potential to reduce or inhibit the historic quality, character, and context of the relocated and rehabilitated main residence.

Further, there are several structures onsite that would be destroyed through Project implementation but are not considered significant historic resources. Within the Froom Ranch Dairy complex, the storage building and outhouse, which are non-contributing structures to the potential historic district, would be demolished; however, these structures were built after the period of significance and demolition of these structures would not affect the integrity of this potential historic district. Within the proposed stormwater detention basin area, the integrity of the historic-period component of site P-40-001780 consisting of the historic building foundations and structure pads was found to be substantially lost during the Limited Phase II Cultural Resources Assessment (Condor Country Consulting 2018), such that these materials are not historical resources or historical properties pursuant to Section 15064.5 of CEQA or under Section 106 of NHPA (36 CFR 800). Therefore, the Project would not cause a substantial adverse change in the significance of an historic-period archaeological resource. Lastly, the six linear rock wall features located along the western Project boundary were determined not eligible for the NRHP, CRHR, or the City's Master List of Historic Resources. The potential loss of these

features either through Project construction or operation would not contribute to the loss of a historical resource or contributing factor to the potential historic district (Chattel, Inc., 2018; Appendix F).

However, the Project would result in the demolition and permanent loss of three contributors to the potential Froom Ranch Dairy historic district (i.e., the shed, bunkhouse, and old barn). While these structures are not individually significant historic resources, they contribute to the historic setting and integrity of the Froom Ranch Dairy complex based upon their association with the Froom family, connection to the historic dairy operation, character-defining features of Craftsman-style or vernacular architecture, and good integrity. The Applicant-prepared HRE characterizes these structures as secondary contributors to the historic district and concludes their demolition would not affect the integrity or historic value of the historic district; however, per NRHP Bulletin 15, a district possesses a significant concentration, linkage, or continuity of site, buildings, structure, or objects united historically or aesthetically by plan or physical development. A district derives its importance from being a unified entity, even though it is often composed of a wide variety of resources both contributing and non-contributing. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or be an arrangement of historically or functionally related properties. A district can encompass both features that lack individual distinction (such as the shed, bunkhouse, and old barn) and individually distinctive features, such as the four individually eligible historic structures (U.S. Department of the Interior 1991).

The loss of the shed, bunkhouse, and old barn would reduce the concentration of physical features that make up the character and appearance of the Froom Ranch Dairy complex. While the proposal for relocation and reconstruction of the Froom Ranch Dairy complex would continue to retain sufficient integrity to convey its significant association with the dairy industry and the Froom family, the Project would result in the loss of historic materials and character defining features that existed during the resource's period of significance. With application of the City's Historic Preservation Guidelines criteria for historic resources, Section 14.01.070 (3)(C), demolition of the shed, bunkhouse, and old barn would reduce the degree to which the Froom Ranch Dairy complex retains its design, setting, workmanship, and "feeling" (aesthetic or historical sense of a particular period).

Additionally, relocation and reconstruction of the dairy barn away from a fault line, and reconstruction of the four structures would potentially preserve this cultural resource from future seismic impacts. However, grading and earthmoving would occur within 50 feet of

the Froom Ranch Dairy historic structures prior to their relocation and restoration. Relocation of the four significant historical structures would occur during Phase 3 of the Project construction period, exposing the structures to construction equipment vibration hazards throughout previous phases. Phase 4 construction vibration could potentially also impact the buildings after they are relocated. Ground vibrations could weaken the surrounding soils, causing adverse impacts to the existing building foundations and structural supports.

The Project would potentially damage existing historic buildings proposed to be relocated, rehabilitated, and reused and would substantially degrade the integrity of the potential Froom Ranch Dairy historic district through the loss of contributing structures. In addition, there is potential for incompatibility between the proposed adjacent development of the Madonna Froom Ranch and the relocated structures, resulting in potential effects on the character and quality of historic resources, particularly the main residence. Therefore, impacts to historic resources are *potentially significant*.

Mitigation Measures

MM CR-9 *The Applicant shall retain a qualified professional historic architect meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61) to review and comment on design and construction drawings and monitor construction to ensure conformance with the Secretary of the Interior's Standards. The role of the historic architect shall include collaboration on a range of items relating to materials selection, construction methods, design of exterior and interior alterations, and monitoring of construction activities. The historic architect and Applicant shall resolve any unforeseen circumstance in a manner that conforms with the Secretary of the Interior's Standards.*

The qualified professional historic architect shall work with the Applicant team to ensure:

a) Deteriorated historic features would be repaired to the greatest extent feasible. Where features are deteriorated beyond repair, they would be replaced to exactly match the old.

b) All character-defining features are retained.

c) *Physical treatments to historic material would use the gentlest means possible and would not damage material.*

d) *Reconstruction would be clearly identified as a contemporary re-creation.*

e) *Interpretative signage would clearly provide information regarding the history of the buildings and their reconstruction.*

Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings; the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication.

Requirements and Timing. The historic architect shall submit a report documenting conformance with the Secretary of the Interior's Standards to the City for review and approval prior to issuance of any building permits for the Project. Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings; the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication. The historic architect shall notify the Applicant if any unforeseen circumstance arises during construction that could potentially result in nonconformance with the Secretary of the Interior's Standards.

Monitoring. The City shall ensure the report is reviewed and approved prior to issuance of grading permits for Phase 3. The historic architect shall participate in a pre-construction meeting with the general contractor and subcontractors and periodically monitor construction to completion of construction.

MM CR-10 *The Applicant shall retain a qualified professional photographer to prepare Historic American Building Survey (HABS) Level II documentation. This documentation shall record the existing appearance of all seven contributing buildings in large and medium format HABS photographs. All*

documentation components shall be completed in accordance with the Guidelines for Architectural and Engineering Documentation (HABS standards). The photographs shall consist primarily of large format, 4-inch by 5-inch, black and white negatives (one set), contact prints (one set) and 8-inch by 10-inch prints (two sets), archivally processed and printed on fiber-based paper. The set of original negatives shall be made at the time the photographs are taken. The original, archivally-sound negatives and prints shall be and distributed as follows: (1) the Library of Congress in Washington, DC through the National Park Service (one set of negatives and contact prints).

Requirements and Timing. The draft documentation shall be assembled and submitted to the qualified professional historic architect and the City for review and approval prior to submittal to the repository. The HABS documentation shall be completed prior to the issuance of grading permits for Phase 1.

Monitoring. A digital copy of the HABS documentation shall be reviewed by the City and approved prior to the issuance of grading permits.

MM CR-11 *The Applicant shall work with the City to develop an interpretive project that documents the potential historic district and its cultural and architectural heritage by means of a pamphlet. This pamphlet will highlight the former Froom Ranch Dairy, both primary and secondary contributors, in a social (Froom family) and industrial (dairy industry) context, with an emphasis on how these buildings were used on the dairy farm, and how this property relates to the larger dairy farm context in San Luis Obispo, the Central Coast, and California. Five hundred copies of the pamphlet shall be published. These professionally researched, written and printed materials shall be offered at no cost through the local museums and heritage organizations, and at the trailhead park. After the initial distribution of printed brochures, digital copies shall be available. Throughout the park, interpretive signs that provide information on building history and function (extant and demolished) shall also be incorporated.*

Requirements and Timing. The Applicant shall prepare and submit draft documentation to the City and Cultural Heritage Committee (CHC) for review and approval prior to the issuance of grading permits for Phase 3.

Monitoring. The pamphlet and interpretive signage shall be reviewed by the CHC and approved by the Community Development Director. The Parks and Recreation Commission shall review any interpretive signage proposed to be located within the park. The City Community Development Department shall ensure park designs incorporate interpretive signage consistent with approved documentation.

MM CR-12 *The Applicant shall reuse original material to the greatest extent feasible in the proposed work on the contributing structures to be relocated and/or reconstructed within the proposed public park (main residence, dairy barn, creamery/house, and granary). The Applicant and historic architect shall work with the City to prepare a marketing plan to offer to the public any salvaged historic materials not used during rehabilitation and reconstruction of the primary contributors, and demolition of the secondary contributors. As appropriate, unused or unretained historic materials will be offered to local historical societies and museums, then offered to architectural recycling before being disposed.*

Requirements and Timing. The Applicant shall prepare and submit draft documentation to the City for review and approval by the Community Development Director prior to the issuance of grading permits for Phase 3.

Monitoring. The marketing plan shall be reviewed and approved by the Community Development Director.

MM CR-13 *The Applicant and historic architect shall prepare design guidelines and a review process for new construction proximate to the main residence. New construction shall be undertaken in such a manner that the essential form and integrity of the main residence and its setting would be unimpaired. The design guidelines and review by City Community Development Director shall ensure new construction is compatible with main residence in material, features, size, scale and proportion, and massing.*

Requirements and Timing. The Applicant shall prepare and submit draft design guidelines to the City and CHC for review and approval prior to approval of entitlements and the issuance of grading permits for Phase 1.

Monitoring. The design guidelines shall be reviewed by the CHC and approved by the Community Development Director.

MM CR-14 *Prior to commencement of Phase 1 construction, a City-approved qualified structural engineer and historical architect shall survey the existing foundations and other structural aspects of the main residence, creamery, dairy barn, and granary, and develop a preservation plan to protect the historic buildings from potential damage during construction activities.*

The qualified structural engineer shall identify any necessary temporary structural bracing for the historic structures to avoid damage to these resources during the duration of construction. The qualified structural engineer shall prepare a temporary historic structure stabilization plan identifying these techniques as necessary.

Requirements and Timing. The Applicant shall submit the preservation plan and temporary historic structure stabilization plan to the City for review and approval prior to recordation of the final map and issuance of grading and building permits for Phase 1 of construction. Prior to the issuance of Phase 4 building and grading permits, the Applicant shall submit the final Historic Structures Plan and temporary historic structure stabilization plan, with incorporation of any additional recommendations for repair, to the City for review and approval.

Monitoring. The City engineer shall review and approve the preservation plan prior to recordation of the final map and issuance of grading permits for Phase 1. The City-approved structural engineer shall periodically monitor vibration during vibration-causing construction activities to ensure excessive vibration does not occur and that temporary historic structure stabilization plan strategies are effective at avoiding vibration damage. The structural engineer shall halt construction activity if he/she deems construction activity may harm historical resources and shall modify or augment the temporary historic structure stabilization plan strategies accordingly.

Residual Impact

Implementation of MM CR-9 through -13 would ensure relocation and restoration of the four individually eligible historical resources would conform to the Secretary of the Interior's Standards, and MM CR-14 would address potential for construction vibration to disturb these buildings. Additionally, these measures would lessen impacts to the potential historic district by ensuring that relocation and reconstruction of the main residence, dairy barn, creamery, and granary would retain character-defining features that convey the district's historical significance, and that demolished historic structures would be thoroughly documented and curated. However, because the demolition of a portion of a historical district and relocation of a historical district represents an irreversible change to the historical resource, these impacts would remain *significant and unavoidable*.

3.5.3.4 Cumulative Impacts

For cultural resources, the geographic extent of cumulative impacts encompasses a relatively broad area as the significance or importance of any individual resource can only be judged in terms of its regional context and relationship to other resources. Thus, the significance of impacts on any given resource or group of resources must be examined in light of the integrity of the regional resource base. Because the number of cultural resources is finite, limited, and nonrenewable, any assessment of cumulative impacts must take into consideration the impacts of the Project on resources within the Project site; the extent to which those impacts degrade the integrity of the regional resource base; and impacts other projects may have on the regional resource base. If these effects, taken together, result in a collective degradation of the resources base, then those impacts are considered cumulatively considerable.

The cultural resource region of influence is the Obispeño Chumash culture area and historic context that encompasses the City and County. In this EIR, the cumulative impact analysis includes the Project and the list of past and future projects identified in Table 3.0-1, Cumulative Projects List, in Section 3.0, *Environmental Impact Analysis and Mitigation Measures*.

Trends that have led to degradation of the regional archeological and historical resource base, which are expected to continue in the future, include continuing urban development in the County. Cumulative development would result in the permanent loss of known archeological resources and historical structures, including those located within the Avila Ranch Specific Plan and San Luis Ranch Specific Plan areas. In addition, cumulative

development such as that anticipated under the projects listed within Table 3.0-1 may uncover previously undisturbed archeological resources and could potentially result in damage or loss of such resources. However, in most cases project-specific impacts would be addressed on a project-by-project basis.

Cumulative projects would be required to comply with General Plan Policies COSE 3.5.5, 3.5.6, and 3.5.7, described in Section 3.5.3, *Regulatory Setting*, and would be subject to review by the CHC for conformance with guidelines for cultural resources protection. Further, cumulative projects would be subject to environmental review under CEQA, which requires avoidance of significant cultural resources whenever feasible; if avoidance is not feasible, then appropriate mitigation measures would be applied (CEQA Guidelines Section 15126.4).

The Project would result in a significant and unavoidable impact associated with the removal, relocation, and reconstruction of features associated with the historic Froom Ranch Dairy complex. As such, the Project would contribute to the cumulative loss of historic resources in the City, resulting in *significant and unavoidable* cumulative impacts.

3.6 GEOLOGY AND SOILS

This section describes the existing geologic conditions and analyzes the potential for impacts from geologic and soils hazards to occur through implementation of the Project. Geologic resources consist of all soil, bedrock materials, mineral deposits, important landforms and underlying or regional tectonic features that may create seismic hazards (i.e., earthquake faults). These resources can present hazards or obstacles to new development and may also have scientific and economic value. Paleontological resources (fossils) are also identified as geological resources in the State CEQA Guidelines Appendix G under Geology and Soils. Paleontological resources are most commonly encountered below the ground surface and may be discovered or disturbed during Project implementation.

3.6.1 Environmental Setting

3.6.1.1 Regional Setting

The City is in a geologically complex and seismically active region within the Coast Range Geomorphic Province. This region extends along the coastline from central California to Oregon and consists of a series of northwest-southeast trending mountain ranges and intervening valleys that are generally separated by faults. The eastern boundary of the Coast Range Geomorphic Province is the Central Valley, the western boundary is offshore in the Pacific Ocean, and the Santa Ynez Valley is the southern boundary. The geology of the province is dominated by long surface blocks adjacent to major faults that run approximately parallel to the San Andreas Fault. Typically, the layers within each of these blocks have been intensely folded and faulted (Dibblee 2004).

The Project site is located east of and adjacent to the Irish Hills at the southern flank of the Santa Lucia Mountain Range in the San Luis Obispo Valley, a northeast-southwest trending stream valley that is carved into underlying bedrock and filled with alluvial sediments. Much of the region is situated within low-lying valley areas that are predominantly underlain by varying thicknesses of recent-age alluvium. The surrounding hills are comprised of the Franciscan and Monterey Formations and Quaternary-aged non-marine terrace deposits. The alluvium is derived from the surrounding upland areas and is composed primarily of clayey sands and gravels (GeoSolutions, Inc. 2017; refer to

Appendix G). The area historically supported chromite and chromium mining activities, though all mining ceased more than 50 years ago.

3.6.1.2 Site Topography

The Project site consists of level to rolling topography with natural drainages that rise to the steep, rocky Irish Hills in the southwestern portion of the site. The site is "U" shaped and generally aligned in an east-west orientation. Onsite topography rises gently from an average surface elevation of approximately 110 feet above mean sea level (msl) in the east to over 300 feet above msl in the southwest. The southern portion of the site consists of a relatively level terrace with a surface elevation of approximately 200 feet above msl. Within the proposed Villaggio area of the Project site, slopes range from 0 to 75 percent, but are more commonly between 15 and 30 percent. Within the Madonna Froom Ranch portion of site, slopes range from 0 to 30 percent, though slopes are most commonly less than 15 percent.

The Project site consists of level topography in the lower elevations which gradually rises up to the base of the Irish Hills. Slopes generally range between 0 and 30 percent, while some steeper areas contain up to 75 percent slopes.

3.6.1.3 Project Site Soils and Formational Units

The Project site lies within Jurassic and Cretaceous-age geology (205-63 million years before present), primarily consisting of Franciscan Complex formational units overlain by alluvial soil material. The Franciscan Complex rock at the site varies from fresh to very intensely weathered, very hard to very soft, and massive to slightly bedded. Additional soil types at the site include fill, colluvium, landslide deposits, stream deposits, and alluvial deposits (Appendix G).

The Project site generally contains surface soils comprised of fine-grained and nearly impervious material with slow to very slow infiltration rates with high runoff potential, soils with high water tables, and soils that are shallow over nearly impervious material (such as the above-described Franciscan Complex rock) (Table 3.6-1). Surface materials

in the eastern, lower elevations of the site generally consists of soft, wet clay. The soil texture and colors are very dark grayish brown sandy clay and dark gray clay at various depths depending on location. Underlying the surface soils of the western upper-elevation areas are formational units of the Franciscan Complex. Localized hard to very hard rock conditions (chert, serpentite) are beneath top soils in the upper-elevation areas. Per subsurface investigations within the Project site, groundwater within the eastern lower portions of the site adjacent to the Calle Joaquin wetlands is generally encountered at an approximate depth of 1.5 to 4.0 feet below ground surface (bgs). In the northeastern portions of the site, near Irish Hills Plaza, groundwater was not encountered at a depth of 10 feet bgs. Groundwater was not observed in the western upper-elevations of the site though natural springs were mapped in the Upper Terrace of Villaggio (Appendix G).

Table 3.6-1. Project Site Soils Characterization

Soil Symbol	Soil Name	Acreages in Project Site	Slope %	Surface Runoff Potential
Specific Plan Area				
127	Cropley clay	43.8 (40.3%)	0 to 2	Medium
130	Diablo and Cibo clays	16.0 (14.7%)	9 to 15	Very high
131	Diablo and Cibo clays	7.3 (6.7%)	15 to 30	Very high
162	Los Osos – Diablo complex	1.8 (1.6%)	5 to 9	Very high
164	Los Osos – Diablo complex	14.5 (13.3%)	15 to 30	Very high
183	Obispo – Rock outcrop complex	21.8 (20.0%)	15 to 75	Very high
221	Xerets – Xerolls – Urban land complex	0.7 (0.6%)	0 to 15	Very high
300	Corducci – Typic Xerofluvents	2.9 (2.7%)	0 to 5	Very low
Proposed Stormwater Detention Basin Area				
127	Cropley clay	0.1 (1.8%)	0 to 2	Medium
197	Salinas silty clay loam	3.7 (62.2%)	0 to 2	Negligible
221	Xerets – Xerolls – Urban land complex	2.2 (36.0%)	0 to 15	Very high

Source: NRCS 2018.

3.6.1.4 Geologic Hazards

Regional Faulting, Seismicity, and Earthquakes

The City lies in a seismically active region of California. The California Central Coast has a history of damaging earthquakes, primarily associated with the San Andreas Fault. In addition, there have been a number of magnitude 5.0 to 6.5 earthquakes on other faults which have also affected large portions of the Central Coast. Recent events include the 6.5-magnitude San Simeon Earthquake in December 2003 and the 6.0-magnitude Parkfield

Earthquake in September 2004 (Earthquake Track 2018). Earthquake magnitudes are quantified using the Richter scale, which is a logarithmic scale whereby each whole number increase in Richter magnitude represents a tenfold increase in the amplitude of the seismic wave generated by an earthquake. For example, at the same distance from a fault, the shaking during a 5.0-magnitude earthquake will be 10 times larger than a 4.0-magnitude earthquake while the amount of energy released would increase by a factor of 32. Earthquakes of Richter magnitude 6.0 to 6.9 are classified as moderate, those between 7.0 and 7.9 are classified as major, and those of 8.0 or more are classified as great.

There are several faults in the vicinity of the Project site that are capable of producing strong ground motion, including the onshore Los Osos and San Andreas faults, and the offshore Hosgri Fault. These active fault zones are considered to have a high probability of producing a major earthquake within an average human lifespan. With respect to seismically induced ground shaking, the areas with the highest risk are those located in valleys where relatively thick sections of unconsolidated alluvium have accumulated (City of San Luis Obispo 2000). During an earthquake along any of the proximate faults, seismic shaking would be anticipated to occur in the vicinity of the Project.

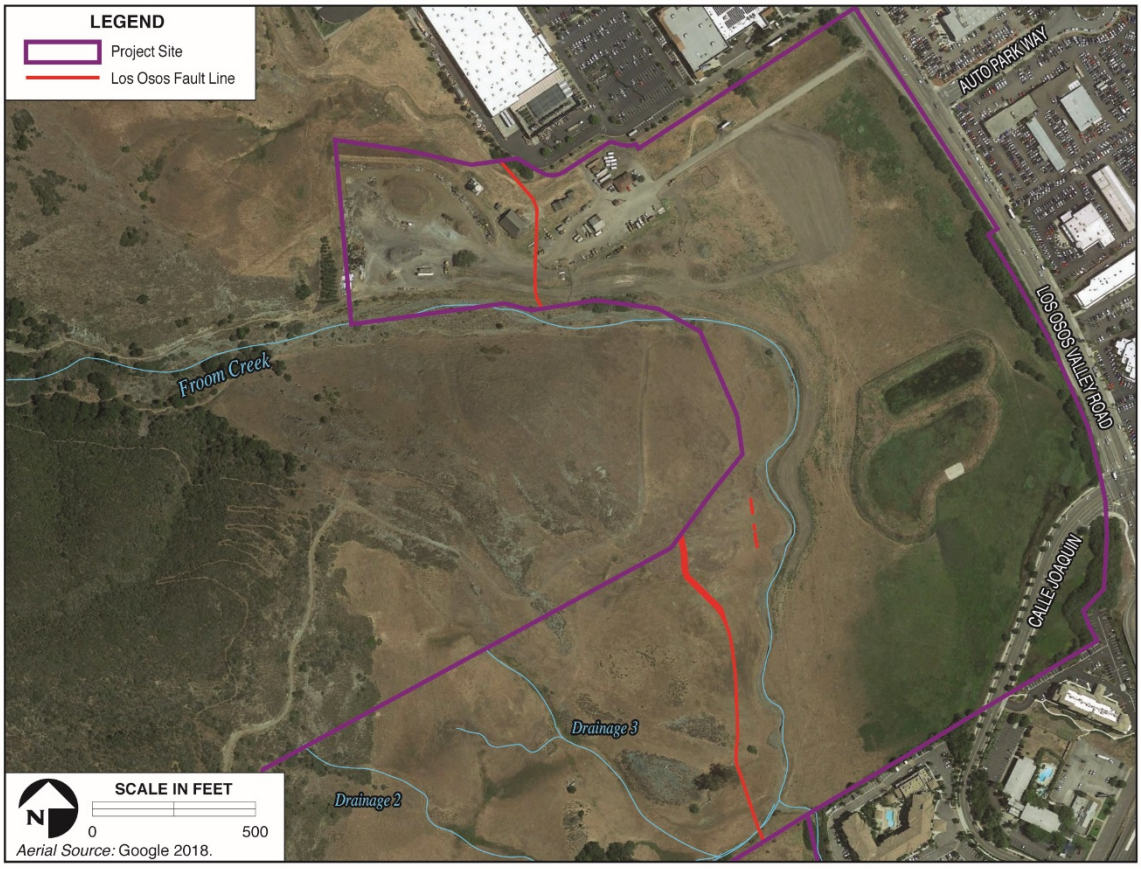
A list of the seismic parameters for active faults most likely to affect the Project site is presented in Table 3.6-2. Based on the maximum probable earthquake magnitude for each active fault, the seismic events that would generate the highest estimated ground accelerations at the site would likely be earthquakes of close to magnitude 7.0 along the Los Osos Fault. Consequent ground acceleration associated with this type of seismic event has the potential to cause severe damage to buildings and infrastructure. Local subsurface conditions such as the presence of unconsolidated, saturated alluvium may intensify seismic shaking or result in other seismic hazards.

Table 3.6-2. Seismic Parameters for Active Faults near the Project Site

Fault	Fault-to-Site Distance (miles)	Maximum Probable Earthquake[1,2] (Richter Magnitude)
Los Osos	1.5	7.0
Hosgri	8	7.5
San Andreas	38	8.0

[1]Maximum Probable Earthquake = the maximum earthquake likely to occur over a 100-year period.
[2]The parameters presented in this table are intended for planning purposes only and should not be used as a basis for design.
Source: Appendix G.

The closest active fault to the Project site is the Los Osos Fault, located west of the City on the south side of the Los Osos Valley. The Los Osos Fault Zone is a 31.1-mile-long, 0.75-mile-wide system of discontinuous fault traces extending from Estero Bay on the north to an intersection with the West Huasna Fault southeast of the City. The full Irish Hills segment is about 10 to 12 miles long and extends from the Pacific Ocean near Los Osos eastward to San Luis Creek, including through the Project site (Figure 3.6-1). A two-mile fault section of the Irish Hills segment west of Laguna Lake and 1.5 miles northwest of the Project site is considered active according to Alquist-Priolo zoning by the State of California (Appendix G). The potential for ground rupture during ground shaking is considered moderate due to the presence of the Los Osos Fault through the Project site, further detailed below.



wood.

Active Fault Lines at the Project Site

FIGURE 3.6-1

Los Osos Fault

While the Project site is not located within the mapped Alquist-Priolo designated Earthquake Fault Zone of the Los Osos Fault, other maps have indicated the Project site is located within active traces of the Los Osos Fault, approximately 1.5 miles southeast of the designated Alquist-Priolo area. Therefore, a Subsurface Fault Investigation was conducted and a Development Setback Map was prepared (Appendix G) to establish development setbacks from the trace of the Los Osos Fault through the site.

The Los Osos Fault at the site exhibited characteristics of active movement (movement within the last 11,000 years before present or Holocene in age, offset in colluvial sediments), Quaternary age movement (last 2 million years before present), and pre-Quaternary movement (movement prior to 2 million years before present). Additional maps identify the Los Osos Fault through the site as a "Late Quaternary fault", involving displacement during the past 700,000 years. Comparing the faulting characteristics with observed faulting characteristics within fault trenches excavated at the Project site, the site generally shows a southwest-oriented fault that is broken by discontinuous faults, extending first across the northwestern extension of the Project site from near Costco to the Irish Hills Natural Reserve, and continuing again across the southwestern extension of the Project site from the Irish Hills Natural Reserve to the base of the hill below Mountainbrook Church (Appendix G).

Surface Rupture

Surface rupture involves the displacement and cracking of the ground surface along a fault trace. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two, typically confined to a narrow zone along the fault. Surface rupture is more likely to occur in conjunction with active fault segments where earthquakes are large, or where the location of the movement (earthquake hypocenter) is shallow. The Los Osos Fault Zone, located along the southwestern border of the City, is identified as a high rupture hazard to development and facilities in the Los Osos Valley, including the Project site, in the City's General Plan Safety Element (SE).

Liquefaction

The Project site has high groundwater in the southeastern corner which contributes to known liquefaction potential, though the potential to result in liquefaction is low with implementation of geotechnical recommendations.

Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. Liquefaction is defined as the transformation of a granular material from a solid state into a liquefied state as a consequence of increased pore pressure, which results in the loss of grain-to-grain contact. Unconsolidated silts, sands, and silty sands are most susceptible to liquefaction, along with areas of high groundwater. Almost any saturated granular soil can induce an increase in pore water pressures when shaken, and subsequently, these excess pore water pressures can lead to liquefaction if the intensity and duration of earthquake shaking are great enough. During large earthquakes in which liquefaction occurs, structures that are most vulnerable to liquefaction include buildings with shallow foundations, railways, buried structures, retaining walls, port structures, utility poles, and towers.

The General Plan SE identifies the lower-elevation areas of Project site as areas of high liquefaction potential. In areas that have the potential for liquefaction, site-specific investigations are required, including subsurface sampling to determine the actual risk of settlement or liquefaction. The Preliminary Soils Engineering Report (GeoSolutions, Inc. 2016) and the Preliminary Engineering Geology Investigation (GeoSolutions, Inc. 2017) prepared for the Project concluded that the liquefaction hazard at the site is considered low in the upper elevations of the site. In the lower-elevation areas, based on the consistency and relative density of the existing soils, the potential for seismic liquefaction of soils is also low. The potential for seismically induced settlement and differential settlement at the site is low with implementation of geotechnical recommendations (Appendix G).

Landslides and Slope Instability

The stability of slopes is affected by rock and soil type, amount of water present, and amount of vegetation present. Sudden movements can cause a slope to fail, such as during

a seismic event, modification (i.e., grading) of the slope, undercutting caused by erosion, and changes in hydrologic characteristics, including heavy rains that can saturate the soil.

The General Plan SE classifies the upper-elevation areas of the Project site as having moderate landslide potential. Slopes within the Project site are topped with a layer of colluvium or alluvium, which may be subject to erosion. Just beneath this layer lies the Franciscan Complex geologic unit, which is hard and stable rock. This geologic arrangement indicates that the western upper-elevation portion of the property is generally stable. Additionally, the potential for slope failure due to a seismic event is considered low. While evidence of a small landslide (surface slump) was found along the eastern boundary of the Project site, no significant landslide event was found on published geologic maps or through air photo analysis. Finally, the potential for ridgetop instability is considered moderate if structures are located at the top of local ridges or peaks. Overall, the potential for slope instability (that is not caused by a seismic event) is considered low (Appendix G).

Expansive Soils

Expansive soils tend to swell with seasonal increases in soil moisture in the winter months and shrink as soils become drier in the summer months. Repeated shrinking and swelling of the soil can lead to stress and damage of structures, foundations, fill slopes and other associated facilities. Soil expansion potential at the site was determined to be moderate to very high based on laboratory testing. The expansion potential is classified based on tested expansion index values of very low (values 0 to 20), low (21 to 50), medium (51 to 90), high (91 to 130), and very high (greater than 130)(FEMA 2011). Expansion index tests conducted on soil samples collected from the Project site yielded values of 79 to 186. The values indicate that the soils tested have moderate to very high potential for expansion per California Building Code (CBC) (Appendix G).

Subsidence

Subsidence is the downward shift of the ground surface relative to a datum, such as sea level or groundwater level. Subsidence may be caused by mineral dissolution, earth extraction activities, geological faulting, seasonal effects that cause changes in soil moisture content, or the withdrawal of pressurized fluids (e.g., groundwater, oil, or gas) from subsurface aquifers. Deep subsidence and hydrocompaction are two types of subsidence that occur most frequently in the western U.S. Deep subsidence is the slow

downward movement of land caused by the withdrawal of pressurized fluids from the subsurface, including groundwater pumped from confined aquifers and fluids pumped from oil and gas reservoirs, such as within the California Central Valley (NASA 2016). Much of the western U.S. is characterized by geologic conditions that are susceptible to hydrocompaction. Hydrocompaction is the subsidence of shallow soils as a result of adding water, and is generally associated with dry regions where agriculture relies on irrigation. Irrigated agricultural practices have not been recorded on the Project site historically, as it has primarily been used as grazing land.

There is potential for subsidence within the Project site due to its location within the San Luis Obispo Valley above a groundwater basin and the loose, moist, clayey soils that exist within the lower-elevation areas of the site (County of San Luis Obispo 2016). The potential for subsidence at the site is considered to be low with implementation of geotechnical recommendations (Appendix G).

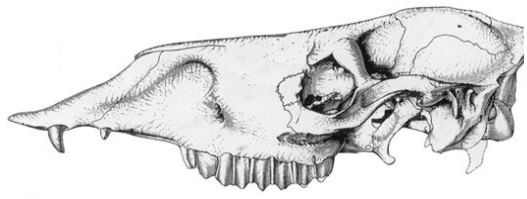
Differential Settlement

Differential settlement is the process whereby soils settle non-uniformly, potentially resulting in stress and damage to utility pipelines, building foundations, or other overlying structures. Such movement can occur in the absence of seismically induced ground failure, due to improper grading and soil compaction or discontinuity of underlying fill and naturally occurring soils. Strong ground shaking often greatly exacerbates soil conditions already prone to differential settlement, resulting in distress to overlying structures. Elongated structures, such as pipelines, are especially susceptible to damage as a result of differential settlement.

According to the General Plan SE and the results of the Preliminary Soils Engineering Report, there is a low potential for seismically induced settlement in the western elevated topographic areas at the site based upon the depth to Franciscan Complex units and densities within the subsurface. However, there is a potential for seismically induced settlement in the eastern lower-topographic areas at the Project site based upon the depth of the sediments and densities within the subsurface (Appendix G)

3.6.1.5 Paleontological Resources

Paleontological resources are the evidence of once-living organisms as preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). In general, fossils are considered to be older than recorded human history or greater than 5,000 years old and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions(Society of Vertebrate Paleontology [SVP] 2010). Sources of information for this section include museum collections records, geologic mapping, and geotechnical investigation reports completed for the Project (Appendix G).



Geologic units that have low potential to contain significant paleontological resources underlie the Project site. While they have a low potential, similar geologic units within the County have produced fossils including those of an extinct camel (Camelops hesternus) found in Quaternary-aged sediments in the County. While rare, such resources may be present within the Project site.

The geologic setting is key to understanding the potential for important paleontological resources to be located in the Project site (Table 3.6-3). The Project site is located in the vicinity of the San Luis Range of the Coast Range Geomorphic Province of California (Appendix G). The Coast Ranges lie between the Pacific Ocean and the Sacramento-San Joaquin Valley and trend northwesterly along the California Coast for approximately 600 miles between Santa Maria and the Oregon border. Locally, the Project site is located along the southwestern flank of the Santa Lucia Mountain Range and east of the adjacent Irish Hills. Paleontological resources have been discovered throughout the County and include extensive collections of marine invertebrates from rocks of Cretaceous to Recent age; marine vertebrates from rocks of Miocene to Pliocene age along the Pacific Coast, and terrestrial vertebrates from rocks of Oligocene to Miocene age from the eastern part of the County (University of California Museum of Paleontology [UCMP] 2018; Jefferson et al. 1992).

Table 3.6-3. Geologic Units and Paleontological Potential Within Project Vicinity

Geologic Unit Label	Geologic Unit Name	Age	Paleontological Potential
AF	Artificial Fill	Present	None
Qls	Landslide Deposits	Quaternary-Present	Low
Qf	Alluvial Fan Deposits	Quaternary-Present	Low
Qal	Stream Deposits	Holocene	Low
KJfmv	Franciscan Complex – Metavolcanics	Jurassic-Cretaceous	Low
KJfs	Franciscan Complex - Serpentinite	Jurassic-Cretaceous	Low

Source: California Department of Conservation 2010.

Paleontological resources are found within the geologic deposits or bedrock that underlie the soil layer. A search of UCMP's public locality database along with the Paleobiology Database (paleodb.org) was conducted to identify information on paleontological localities within and near the Project site and to determine if fossil resources have been recovered from geologic formations similar to those present in the Project vicinity.

Museum records indicate that no previously recorded vertebrate paleontological localities are recorded within the boundaries of the Project site. The UCMP database records a total of 2,003 specimens from the County, including 427 invertebrate fossils, 1,114 microfossils, 320 plant fossils, and 142 vertebrate fossils. Of the 142 vertebrate fossil specimens, two were recovered from rocks of similar type and age as those that occur on the Project site. The first, a camel astragalus (ankle bone), was recovered from indeterminate Quaternary-aged units near San Miguel; the second specimen, two vertebrae of the aquatic reptile *Plesiosaurus hesternus*, was identified in metamorphosed sedimentary units of the Franciscan Complex near Oakley Ranch located near Highway 166, approximately 27 miles southeast of the Project site (UCMP Collections Database 2018). Other Pleistocene-aged vertebrate collections from the County are listed in Table 3.6-4.

Table 3.6-4. Non-UCMP Pleistocene Localities of San Luis Obispo County

Locality Name	Recovered Fauna
Arborgast Ranch, Salinas River Valley	Mammoth, horse, antique bison
Carizzo Plains School	Mastodon, mammoth, camel, long-horned bison
Chorro Creek, Morro Bay	Mammoth
Cayucos	Squirrel
Creston	Mammoth
Crowbar Canyon (Montana del Oro State Park)	Cod
Irish Canyon, Point San Luis area	Horse, antique bison
Mankin, Ranchita Cattle Company	Mammoth
Pecho Creek, Diablo Canyon area	Horse, giant ground sloth, camel
Point San Luis	Indeterminate whale or dolphin
Salinas River Sand Site	Mammoth
San Miguel, Salinas River Valley	California condor, puffin, auklet, flightless sea duck, bald eagle, barn owl, vole, mammoth, camel, sea otter

Source: Jefferson et al. 1992.

3.6.2 Regulatory Setting

Geologic resources, paleontological resources, and geotechnical hazards are governed primarily by local jurisdictions, although federal and state laws would apply to future development under the Project. Federal, state, and local regulations, including the CBC, that are directly relevant to the Project are summarized below.

3.6.2.1 Federal

Federal Soil Conservation Law (16 USGS 590a)

By Congressional policy, this law provides permanently for the control and prevention of soil erosion by preventative measures, including but not limited to engineering operations, methods of cultivation, growing of vegetation, and changes in land use.

Clean Water Act Section 402 (Erosion Control)

The Clean Water Act (CWA) was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA 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)

permit process (CWA Section 402). Projects that disturb one acre of soil or more, or are part of a common plan that in total disturbs more than one acre, are required to obtain NPDES coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit), Order No. 2009-0009-DWQ. The General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes Best Management Practices (BMPs) to protect stormwater runoff, including measures to prevent soil erosion.

3.6.2.2 State

California Building Code

The State of California provides minimum standards for building design through the CBC. In accordance with the CBC, a grading permit is required if more than 50 cubic yards of soil are moved during implementation of a project. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures. Chapter 18 of the CBC contains standards and regulations relating to soil stability, design standards for seismic safety, and construction standards for building foundations. Specific regulations in Section 1803 require geotechnical investigations or preliminary soil reports as a condition of building permit approval. Section 1804 provides regulations on the siting of structures and site grading based on the soils and slope stability of a site. Section 1808 establishes regulations for the design and construction of building foundations, with emphasis on stability (i.e., issues pertaining to shifting soils, seismic overturning and expansive soils) and design loads.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. In accordance with this law, the California Geological Survey maps active faults and designates Earthquake Fault Zones along mapped faults. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive. These classifications are qualified by the conditions that a fault must be shown to be "sufficiently active" and "well defined" by detailed site-specific geologic explorations in order to determine whether building setbacks should be established. Any project that involves the construction of

buildings or structures for human occupancy, such as an operation and maintenance building, is subject to review under the Alquist-Priolo Earthquake Fault Zoning Act, and any structures for human occupancy must be located at least 50 feet from any active fault.

Seismic Hazards Mapping Act & Mapping Regulations

These regulations were promulgated for the purpose of promoting public safety by protecting against the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. The Act requires that site- specific geotechnical investigations be conducted identifying the hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy. Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, from the California Division of Mines and Geology constitutes the guidelines for evaluating seismic hazards other than surface fault-rupture, and for recommending mitigation measures as required by PRC Section 2695, subdivision (a).

3.6.2.3 Local

City of San Luis Obispo General Plan

Safety Element (SE)

Policy 4.5 Avoiding Faults. Development shall not be located atop known faults. Applications for the following types of discretionary approvals within 100 meters (330 feet) of any fault that is previously known or discovered during site evaluation shall be subject to review and recommendation by a state-registered engineering geologist: change to a more intensive land-use designation; subdivision into five or more parcels; development of multifamily, commercial, industrial, or institutional buildings.

Policy 4.6 Avoiding Slope Instability. Development shall not be located on or immediately below unstable slopes, or contribute to slope instability. Any development proposed in an area of moderate or high landslide potential shall be subject to review and recommendation by a state-registered engineering geologist.

Policy 4.7 Avoiding Liquefaction Hazards. Development may be located in areas of high liquefaction potential only if a site-specific investigation by a qualified professional determines that the proposed development will not be at risk of damage from liquefaction.

The Chief Building Official may waive this requirement upon determining that previous studies in the immediate area provide sufficient information.

Policy 9.18 Safety of Structures and Facilities. Existing and new structures and facilities should reflect adopted safety standards. Within this policy, the City has developed programs for reducing structural hazards, development review, and conducting safety inspections.

Land Use Element (LUE)

Policy 6.4.3 Hillside Policies – Development Standards. San Luis Obispo wants to keep open its steeper, higher, and most visible hillsides. Some of the lower and less steep hillside areas; however, are seen as suitable for development, particularly where development is coupled with permanent open space protection of the more sensitive areas. This policy focuses on where and how some hillsides may be developed. Topics include standards and policies for hillside development for aesthetics, open space, and directing development away from areas with hazards such as landslides, wildland fires, flooding, and erosion.

Conservation and Open Space Element (COSE)

Policy COSE 3.5.1 Archaeological Resource Protection. The City shall provide for the protection of both known and potential archaeological resources. To avoid significant damage to important archaeological sites, all available measures, including purchase of the property in fee or easement, shall be explored at the time of a development proposal. Where such measures are not feasible, and development would adversely affect identified archaeological or paleontological resources, mitigation shall be required pursuant to the Archaeological Resource Preservation Program Guidelines.

City of San Luis Obispo Municipal Code

The City Municipal Code, Title 16 Subdivisions, establishes minimum submittal requirements for the submittal of a tentative map and establishes a process for review of plans by licensed professionals. This includes technical reports on faulting, slope analysis, soils, and engineering geology. Further, Title 15 Building and Construction, provides standards for grading and development on expansive soils. Coupled with development standards within the CBC, standards within Title 15 and 16 are intended to ensure the safety of life and property through the regulation of development.

San Luis Obispo County General Plan Safety Element

The County's General Plan SE describes geologic conditions that occur in the County and provides policies and implementation measures to minimize the potential for loss of life and property resulting from geologic and seismic hazards.

Per the County's Interactive Maps database (Land Use View), the western upper portions of the Project site are within a mapped Geologic Study Area combining designation.

3.6.3 Environmental Impact Analysis

3.6.3.1 Thresholds of Significance

With respect to geologic and soils impacts, 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) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

   i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42;

   ii. Strong seismic ground shaking;

   iii. Seismic-related ground failure, including liquefaction; or

   iv. Landslides.

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

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse.

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

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Non-Applicable Thresholds

- Threshold (e) (*Septic Systems*): Development in accordance with the Project would not involve the use or development of septic tanks or alternative wastewater disposal systems, since sewer system and wastewater treatment facilities are available for the disposal of wastewater at the Project site. As such, there would be no potentially significant adverse impacts related to septic systems and this issue will not be analyzed further in this EIR. Wastewater treatment and infrastructure impacts are addressed in Section 3.14, *Utilities and Energy Conservation*.

3.6.3.2 Impact Assessment Methodology

Geology and Soils

This analysis evaluates the potential impacts to local and regional geologic hazards (e.g., fault rupture, seismic shaking, liquefaction, landslides, expansive soils) resulting from the Project, including soil erosion or loss of top soil. Existing conditions, including the configuration of the Project site, current operations, and present geologic setting were established based on site-specific information obtained from the General Plan SE, U.S. Geological Survey (USGS) data, and reports prepared by GeoSolutions, Inc. and peer reviewed by Wood, Environment and Infrastructure Solutions, Inc. (Wood). These reports include the Applicant-prepared Preliminary Soils Engineering Report (2016), Preliminary Engineering Geology Investigation (2017), and Subsurface Fault Investigation and Development Setback Map (2017) to assess geologic conditions within the site. These reports describe geologic conditions based on literature review, field reconnaissance, subsurface exploration, including soil boring, soil laboratory testing, geologic surface mapping, and fault investigations to classify subsurface soil and formational units and to supplement regional geologic mapping. These reports and investigations were prepared in the absence of final development plans, and consequently provide only general recommendations regarding geologic site suitability for planning-level analysis. Recommendations from the site-specific reports will be incorporated into the Project, as required by the General Plan SE. These reports are provided as Appendix G of this EIR.

Paleontological Resources

The SVP (2010) guidelines were used for the assessment of potential for paleontological resources to occur within the Project site. According to CEQA, the threshold of significance for impacts to paleontological resources is reached when a project would disturb or destroy scientifically important fossil remains, as defined by the SVP. Significant paleontological resources are defined as "identifiable" vertebrate fossils, uncommon invertebrate, plant, and trace fossils that provide taphonomic (i.e., the study of what happens to an organism after its death and until its discovery as a fossil), taxonomic, phylogenetic, paleoecologic, stratigraphic, or biochronological data. These data are important because they are used to examine evolutionary relationships, provide insight on the development of and interaction between biological communities, establish time scales for geologic studies, and for many other scientific purposes(Scott and Springer 2003; SVP 2010). A literature review was conducted on museum collections records maintained by the UCMP, USGS published geologic mapping of the San Luis Obispo 7.5' Quadrangle by various authors and compiled by Wiegers and Gutierrez (California Department of Conservation 2010), and various geotechnical investigation reports completed for the Project (Appendix G).

3.6.3.3 Project Impacts and Mitigation Measures

Implementation of the Project has the potential to result in direct impacts to soils from erosion and grading, and impacts related to geologic hazards onsite and in the vicinity, including seismic hazards. Potential impacts related to geologic hazards and soils are discussed further below and summarized in Table 3.6-5.

Table 3.6-5. Summary of Project Impacts

Geological Resources Impacts	Mitigation Measures	Residual Significance
GEO-1. The Project would expose people or structures to adverse effects from earthquakes and seismically induced hazards.	None required	Less than Significant
GEO-2. The Project has the potential to exacerbate potential soils hazards, including expansive soils, differential settlement, and subsidence.	None required	Less than Significant
GEO-3. The Project would potentially cause erosion, landslides, and rockfall.	None required	Less than Significant
GEO-4. The Project would include subterranean parking in Villaggio and may require groundwater dewatering in areas with high groundwater.	None required	Less than Significant
GEO-5. Project construction could uncover paleontological resources in geologic deposits during earthwork activities. If improperly handled, such resources could be adversely impacted.	MM GEO-1	Less than Significant with Mitigation

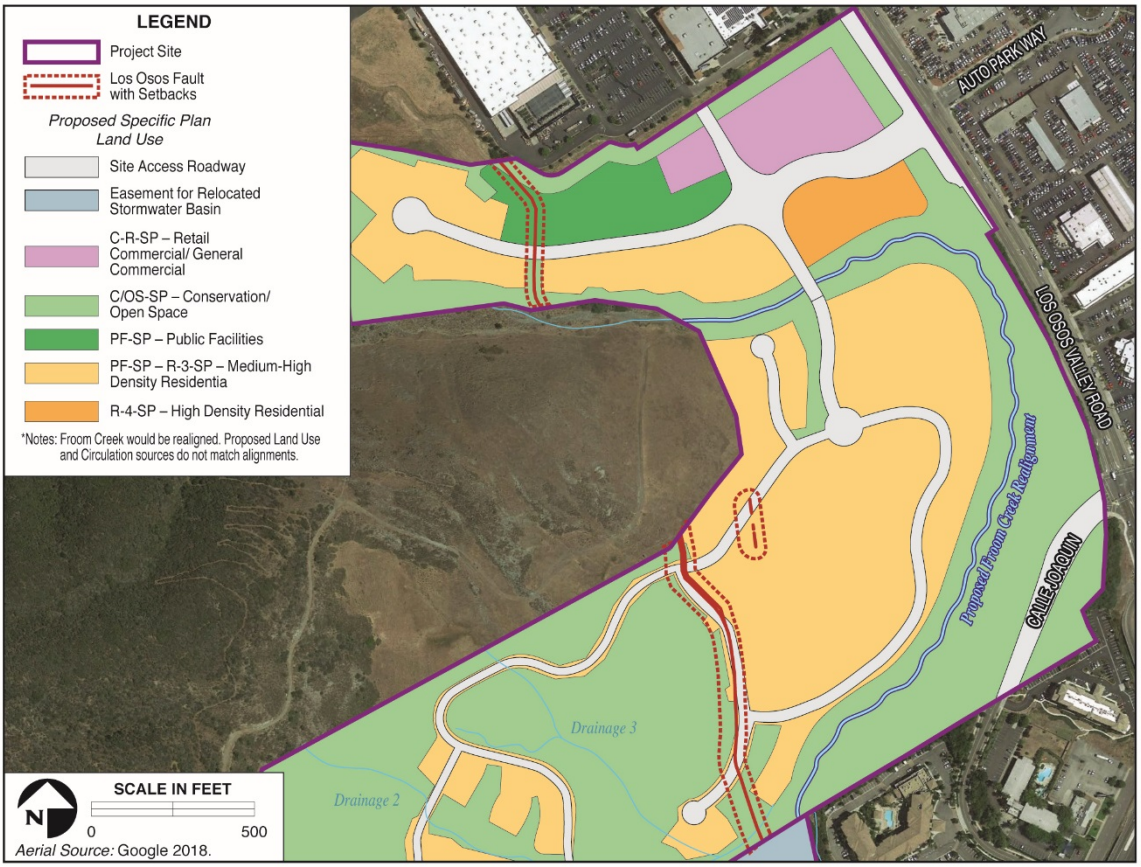
Impact GEO-1 The Project would expose people or structures to adverse effects from earthquakes and seismically induced hazards (Less than Significant).

The Project site is located in a seismically active region of California's Central Coast. While regional faulting (e.g., San Andres Fault) may generate seismic shaking at the Project site, the strongest potential ground shaking event for the site is anticipated to occur from a rupture of the Los Osos Fault. Ground acceleration at the site associated with an event on the Los Osos Fault or a moderate-to-large earthquake on any of the other local and regional faults has the potential to cause severe damage to buildings and infrastructure and threaten life and property.

A section of the Los Osos Fault runs through both the Madonna Froom Ranch and Villaggio portions of the site (refer to Figure 3.6-1). The Los Osos Fault Zone mapped at the Project site is not continuous, and portions in the Madonna Froom Ranch area of the site have not been active since the Quaternary age (i.e., over 700,000 years ago). However, fault segments in the Villaggio area have been active more recently in the Holocene age (approximately 11,000 years ago). If development were placed on the existing fault line and a seismic event occurred that resulted in faulting or rupturing, damage would occur to people and property in the immediate vicinity.

Based on the proposed land use plan, the Los Osos Fault would cross residential (R-3-SP), open space (C/OS-SP), and public facility (PF-SP) land uses (Figure 3.6-2). The fault and/or associated setback area underlays areas that are proposed for the development of segments of Local Roads "A" and "C", walking paths, the trailhead park, and the trailhead park parking lot. To reduce impacts to development, the Subsurface Fault Investigation (2017) conducted for the Project site conservatively recommends a development setback from the Los Osos Fault segments onsite. For the part of the fault crossing the northern portion of the site, a 25-foot setback on either side of the mapped fault is recommended by the investigation and will be incorporated into the Project. For the fault portion crossing the southern region of the site, a 50-foot setback along the western edge of the fault and a 30-foot setback along the eastern edge of the fault are recommended. In accordance, Section 3.2.3, Fault Lines, of the Draft FRSP incorporates these recommendations of the Subsurface Fault Investigation (Appendix G), including development standards to ensure habitable structures (structures occupied more than 2,000 hours per year) are constructed outside the recommended setbacks (of 25 feet, 30 feet, and 50 feet; refer to Figure 3.6-2).

The design and construction of proposed land uses would be subject to several requirements and regulations to ensure structural integrity in seismically active areas. As stated in Section 3.2.3, Fault Lines, of the proposed Draft FRSP, development plans would be required to be designed in accordance with applicable state and local standards for development near fault traces, including adherence to the International Building Code (IBC), the CBC, and the City Municipal Code, in addition to compliance with the General Plan SE Policy 4.5, Avoiding Faults. Planning-level recommendations within the Subsurface Fault Investigation and Development Setback Map (2017) for site preparation, grading, backfill, and foundations would be required for incorporation into the Project design. Further, because the Project does not propose or permit deep subsurface construction, and would be required to comply with applicable state and local standards for development near fault traces, the Project would not exacerbate the existing faulting hazards onsite.



wood.

Active Faults and Recommended Setback at the Project Site

FIGURE 3.6-2

Although the probability of a larger-than-expected earthquake with corresponding high ground acceleration is generally low, any structure built in California is susceptible to failure during significant seismic events. Such impacts are common throughout California and nothing can be done to absolutely ensure that structures do not fail during significant seismic events. However, impacts of structural failure and risks to life and property due to seismic shaking and seismic-related ground failure can be reduced by locating development outside of fault setbacks and implementing the most current industry standards for structural design. Through the incorporation of proper engineering measures in accordance with existing regulations (i.e., IBC, CBC, General Plan SE, and City Municipal Code), and application of Draft FRSP Section 3.2.3, Fault Lines, risks to life and property would be minimized. Recommendations from the Preliminary Engineering Geology Investigation and Subsurface Fault Investigation for site preparation, grading, backfill, and foundations would be required for incorporation into the Project design. In addition, subsequent

development within the Project area may be subject to site-specific geotechnical investigations and further recommendations to minimize hazards near a known fault per the General Plan SE.

Seismically induced hazards include ground surface ruptures, tsunamis and seiches, settlement and slope failure, or liquefaction that occur as a result of ground shaking or earthquake events. Based on the geotechnical investigations conducted for the Project site, although the site is transected by a fault line, the site is not located within an Earthquake Fault Zone and is not subject to a moderate or high threat of ground surface rupture. Additionally, based on the consistency and relative density of in-situ soils at the Project site, the potential for liquefaction of soils at the Project site is low.

Despite the limited probability for other seismically induced hazards, given the depth of sediments and densities within the subsurface, the lower-elevation areas of the Project site contain a low potential for liquefaction-induced failures. The Preliminary Soils Engineering Report (Appendix G) includes recommendations that address liquefaction, including a recommendation that all of the foundations are established on equally competent uniform material. Future development under the Draft FRSP may continue to be subject to risk from liquefaction or settlement of soils in the event of ground shaking. However, consistency with Title 15 of the City Municipal Code and General Plan SE Policy 4.7, Avoiding Liquefaction Hazards, would require site-specific investigations and a determination that proposed development would not be at risk of damage from liquefaction.

Impacts of structural failure and risks to life and property due to seismic shaking and seismically induced hazards can largely be reduced by complying with state and local building regulations for site preparation and structural design. Therefore, compliance with federal, state, and local regulations, in addition to the recommendations of the Subsurface Fault Investigation and Preliminary Engineering Geology Investigation (Appendix G) would reduce the impacts associated with seismicity or seismically induced hazards to *less than significant*.

Impact GEO-2 The Project has the potential to exacerbate potential soils hazards, including expansive soils, differential settlement, and subsidence (Less than Significant).

The soil zone within the upper two to three 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 (i.e., Froom Creek) can result in geologic hazards from expansive soils, especially within the lower-elevation areas of the site where shallow groundwater is present (ranging between 1.5 to 4.0 feet bgs). 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 roadways, structures, parking lots, commercial buildings, and the hydrology of realigned Froom Creek, should the proposed structural shoring and foundations not be properly designed and constructed. The potential for subsidence to occur with or without the Project is low. The Project does not propose any actions that would cause or exacerbate subsidence (e.g., withdrawal of groundwater/oil, hydrocompaction).

Construction of the Project site would involve large amounts of grading, earthmoving, and the import of engineered fill foundation in the lower-elevation areas. Fill material used for building pads would be compacted and would reduce the amount of loose alluvial soils that are in direct contact with structural foundations constructed within the Project site. This would reduce the amount of loose and saturated soils that may be expansive after the buildings are constructed. Further, the Project's Preliminary Soils Engineering Report includes recommendations that address expansion and differential settlement. The report recommends that all foundations are established on equally competent uniform material, to address the potential for differential settlement occurring when foundations supported on two soil materials have different settlement characteristics. In combination with the use of engineered fill foundation in lower-elevation areas of the Project site, uniform foundations would reduce risks associated with expansion and differential settlement.

Implementation of recommendations outlined in the Preliminary Soils Engineering Report and the geotechnical recommendations included therein would reduce impacts related to construction and operation of the Project on soils that are loose, saturated, and expansive. Additionally, compliance with federal, state, and local regulations (i.e., IBC, CBC, the

General Plan SE, and the City Municipal Code) would reduce impacts associated with expansive soils, differential settlement, and subsidence as a result of the Project. Impacts would be *less than significant*.

Impact GEO-3 The Project would potentially cause erosion, landslides, and rockfall (Less than Significant).

The Project includes the excavation of approximately 160,000 cubic yards of soil and rock. Grading for site development has the potential to expose undocumented fill and existing soft alluvium soils, which may erode or slide. During construction, due to the topography and proposed disturbances along the base of steep slopes, loose alluvium soils would temporarily be subject to erosion, especially on upper-elevation areas (e.g., Upper Terrace). Beneath the loose alluvial soils, the presence of shallow and hard bedrock materials within the Upper Terrace may result in hard digging and excavation conditions. These conditions are anticipated in some areas during building pad preparation and underground utility construction on the hillsides and would contribute to the disturbance of topsoil. These excavation activities would be entirely located within the Project site; therefore, potential erosion is largely anticipated to be contained within the Project site and not affect surrounding areas.

While there is the potential for limited slope instability to occur during excavation and construction activities, implementation of the CBC and compliance with federal, state, and local regulations would reduce the potential for erosion and long-term impacts during construction of the Project. Additionally, because more than one acre of land would be disturbed during the construction phase, the applicant would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and obtain a storm water permit from the RWQCB. Refer to Section 3.7, *Hazards, Hazardous Materials, and Wildfires*, and Section 3.8, *Hydrology and Water Quality,* for additional information on stormwater permit requirements and erosion control measures. Compliance with permit conditions would require implementation of erosion control Best Management Practices (BMPs). Based on the relatively short period of time that soils would be susceptible to erosion, and because construction activities would require implementation of erosion control measures as recommended by the Preliminary Soils Engineering Report, impacts associated with erosion would be low. Further, the Preliminary Engineering Geology Investigation (Appendix G) establishes planning-level recommendations that would help to reduce

impacts on the Project site's slopes. Therefore, the potential for significant erosion hazards during the construction phase would be low.

Potential for landslides to occur at the Project site is considered low, and slopes at the Project site are generally stable due to the presence of shallow and hard bedrock materials within the Upper Terrace that provides a solid base for development. Implementation of the Project is not anticipated to cause or be subject to landslide hazards due to the slope stability of the site. Further, the potential for rockfall overall at the site is considered low, although one area has been identified as a potential rockfall hazard area in the Upper Terrace. Based on the conceptual land use plan for the Project, the area of potential rockfall hazard is proposed for development of private access roadways and medium-high density residential uses. The development within or downslope of the potential rockfall hazard area may be affected if the slope is disturbed (see Impact GEO-1 for a discussion of seismic hazards).

Implementation of recommendations outlined in the Preliminary Soils Engineering Report and Preliminary Engineering Geology Investigation (Appendix G) and included therein, would reduce impacts related to development of the Project on soils that are steep and potentially unstable. Additionally, compliance with federal, state, and local regulations (i.e., IBC, CBC, the General Plan SE, and the City Municipal Code) would reduce impacts associated with erosion, landslides, and rockfall hazards. Impacts would be *less than significant*.

Impact GEO-4 The Project would include subterranean parking in Villaggio and may require groundwater dewatering in areas with high groundwater (Less than Significant).

As previously discussed, most soils within the Project site are alluvial soils with high groundwater levels, especially within Villaggio where site topography is level and at a lower elevation. Several subsurface parking structures are anticipated to be constructed within the Villaggio adjacent to the proposed Froom Creek realignment. These parking structures may be excavated up to 12 feet bgs. According to the Project's geology and soils reports, shallow groundwater levels were observed at a depth of 1.5 to 4.0 feet bgs. Subsurface construction in this area may encounter groundwater or saturated soils. Additionally, the Project would import engineered fill material, and natural seepage could

occur at the interface of the native soils and engineered fill resulting in soil saturation. Further, if designed incorrectly, the intrusion of groundwater into these structures may occur. Where subterranean structures are proposed, shoring and groundwater dewatering may be necessary to support construction of these structures. In cases where the floor of subterranean parking foundations encounters the groundwater table, ongoing groundwater dewatering may be necessary to prevent the percolation or inflow of groundwater into excavation pits and future garage/basement levels.

To prevent groundwater from entering into and potentially damaging the Project, the Preliminary Engineering Geology Investigation recommends that as a minimum, the upper 36 inches (three feet) of the development area should consist of a select import material on top of existing grade or in replacement of the existing surficial soils. This would allow for support of mat foundations for the proposed structures. An increase in thickness of the select import material to a minimum of five feet would allow for the use of conventional foundation systems. Additional recommendations are provided to ensure the perimeter of the excavation would act as an impermeable barrier to groundwater infiltration through shoring in accordance with Occupational Safety and Health Administration (OSHA) regulations.

To limit potential for saturated soils or groundwater intrusion, the Project would import engineered fill material to elevate the lower-elevation areas of the Project site to a finished grade of at least one foot above the 100-year floodplain. Further, realignment of Froom Creek and alteration of the 100-year floodplain would change the site topography to ensure development avoids groundwater intrusion. Where necessary, the finished grade may be raised several feet above the existing grade. Implementation of the above measures and compliance with federal, state, and local regulations would reduce impacts associated with development on an area of potential shallow groundwater to *less than significant*.

Impact GEO-5 Project construction could uncover paleontological resources in geologic deposits during earthwork activities. If damaged or improperly handled, such resources could be adversely impacted (Less than Significant with Mitigation).

As documented in Section 3.6.1.5, the geologic deposits underlying the Project site, including Quaternary-aged alluvial deposits and meta-sediments of the Franciscan

Complex, have a low potential for containing paleontological resources in accordance to criteria set forth by the SVP (2010). Surficial deposits of Holocene age or previously disturbed sediments are determined to have a low paleontological sensitivity because they are either too young or unlikely to preserve fossilized remains. However, if paleontological resources were uncovered during Project construction and were then improperly handled, such unknown paleontological resources could be damaged or destroyed resulting in a *potentially significant* impact.

Mitigation Measures

MM GEO-1 *Prior to construction of each phase, workers shall receive education regarding the recognition of possible paleontological resources, during grading and excavation. Such training shall provide construction personnel with direction regarding the procedures to be followed in the unlikely event that previously unidentified paleontological materials are discovered during construction. Training shall also inform construction personnel that unauthorized collection or disturbance of paleontological resources is not allowed. The training shall be prepared by a City-approved paleontologist and shall provide a description of paleontological resources that may be encountered in the Project site, outline steps to follow in the event that a discovery is made, and provide contact information for the Project paleontologist and appropriate City personnel. The training shall be conducted concurrent with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to paleontological resources is provided by a qualified instructor meeting applicable professional qualifications standards. In order to prevent inadvertent potential significant impacts to paleontological resources that may be encountered during ground disturbance or construction activities, in the event of any inadvertent discovery of paleontological resources during construction, all work within the vicinity of the resource established by the City-approved paleontologist shall temporarily cease. If a paleontological resource is discovered, the City-approved paleontologist shall be notified to assess the significance of the find and provide recommendations as necessary for its proper disposition.*

Requirements and Timing. Prior to ground disturbance for each phase, construction workers shall participate in an educational program that will enable them to recognize and report possible paleontological resources. The conditions for treatment of discoveries shall be printed on all grading plans. The City shall be notified immediately after the unanticipated discovery of a paleontological resource. Paleontological reports shall be reviewed and approved prior to issuance of occupancy. In the event that any potentially significant paleontological resources are uncovered during ground disturbance or construction activities:

a. Temporarily cease grading in the vicinity of the resource established by the City-approved paleontologist and redirect activity elsewhere to ensure the preservation of the resource in which the discovery was made;

b. Immediately notify the City of San Luis Obispo Community Development Department regarding the resource and redirected grading activity;

c. Obtain the services of a City-approved professional paleontologist who shall assess the significance of the find and provide recommendations as necessary for its proper disposition for review and approval by City of San Luis Obispo Community Development Department.

d. Complete all significance assessment and mitigation of impacts to the paleontological resource and verification reviewed and approved by City of San Luis Obispo Community Development Department prior to resuming grading in the area of the find.

Monitoring. Paleontological reports prepared for the Project site in response to an unanticipated discovery shall be maintained by the City of San Luis Obispo Community Development Department.

Residual Impact

The protection of potential paleontological resources would be assured through implementation of mitigation measure MM GEO-1. The qualified paleontologist would ensure that if an inadvertent paleontological discovery were to occur, adequate steps would be taken to document and preserve the paleontological resource, resulting in impacts that are *less than significant with mitigation*.

3.6.3.4 Cumulative Impacts

Cumulative impacts related to geology and soils would result if Project impacts, when combined with other past, present, and future projects, would cumulatively increase the potential for geologic hazards, such as ground shaking, or increased soil impacts, such as erosion. Although the probability of a larger-than-expected earthquake with corresponding high ground acceleration is low, it is not zero. Consequently, any structure built in the seismically active region of the Central Coast is inherently at risk to damage during major seismic events. The majority of structures on properties bordering the site were constructed within the past 30 years, including the hotels along Calle Joaquin, Mountainbrook Church, and Irish Hills Plaza. These structures were required to meet CBC standards to prevent them from hazardous conditions to public safety due to soil instability during an earthquake.

Cumulative development such as that anticipated under the projects listed within Table 3.0-1 may uncover previously undisturbed paleontological resources and could potentially result in damage or loss of such resources. However, in most cases project-specific impacts would be addressed on a project-by-project basis. Additionally, in accordance with the City Municipal Code and the General Plan SE, all discretionary development within the City, including development projects listed in Table 3.0-1 in Section 3.0, *Environmental Impact Analysis and Mitigation Measures,* would be required to undergo analysis of each site's geological and soil conditions prior to construction. This analysis would include investigations of native soils onsite and the structural stability of any proposed subterranean structures to ensure each individual project is designed and engineered to withstand reasonably foreseeable seismic activity or unstable soil conditions and would meet the most current and stringent building safety requirements. Further, because all projects would be required to undergo an analysis of site-specific geological and soil conditions, and because restrictions on development would be applied in the event that

geological or soil conditions pose a risk to safety, it is anticipated that the Project's contribution to cumulative impacts associated with seismic activity, soil instability, subsidence, collapse, and/or expansive soil would be *less than significant*.

3.7 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

This section describes the existing conditions related to hazards, hazardous materials, and wildfire in the vicinity of the Project site and analyzes the potential for hazards, hazardous materials, and wildfire impacts to occur as a result of implementation of the Project. Hazards may include exposure to both natural and man-made hazards. These could include wildfire in the adjacent Irish Hills, hazards associated with aircraft operations at the nearby San Luis Obispo County Regional Airport (Airport), or exposure to hazardous materials.

Hazardous materials are defined as substances with physical and chemical properties of ignitability, corrosivity, reactivity, or toxicity, which may pose a threat to human health or the environment. The term "hazardous materials" is used in this section to generally describe chemical materials, such as petroleum products, solvents, pesticides, herbicides, paints, metals, asbestos, and other regulated chemical materials. Additionally, the term "release" as used in this section includes known historical spills, leaks, illegal dumping, or other methods of release of hazardous materials to soil, sediment, groundwater, or surface water. If a historical release exists, then there is a risk associated with planned development disturbing the release area. Potential future releases of hazardous materials that could occur from development under the Project also are included in the analysis.

3.7.1 Environmental Setting

3.7.1.1 Regional Setting

The Project site is located on unincorporated County land at the southwestern border of the City where urban development transitions to natural open space and agricultural areas. The nearest school to the Project site is Pacific Beach High School located approximately 0.25-mile northwest. The Airport is located approximately 1.8 miles east of the Project site.

3.7.1.2 Project Site

The Project site has historically been used for dairy cow, beef cattle, and horse grazing, and an existing quarry area in the site's northwest corner is currently used as a construction materials storage yard and for grazing. The Project site is largely undeveloped. Historical aerials indicate that development has been limited to ranch buildings, including the farm house and agricultural accessory structures located in the northwestern portion of the Project site. In the Project vicinity, chromium mining operations briefly occurred over 50 years ago, as further described in Section 3.5, *Cultural Resources*; however, there is no

evidence of this historical operation occurring onsite or on any Department of Conservation mine maps within the Project site (California Department of Conservation 2016).

Structures onsite include the historic ranch buildings, a construction materials storage yard and red rock quarry in the northwestern portion of the site, and a stormwater detention basin located in the central portion of the site. The onsite construction materials storage yard may involve intermittent use or handling of hazardous materials associated with the use and storage of construction equipment and materials (i.e., fuels, lubricants, cleaning solutions). While grazing operations do not frequently involve the use of hazardous materials, historical use of the dairy barn, the creamery, the granary, and the horse barn may have included use of some commercial materials such as pesticides, herbicides, and cleaning liquids. Additionally, the existing stormwater detention basin has provided onsite water infiltration for runoff from the adjacent Irish Hills Plaza parking lots for at least ten years, with potential for accumulation of pollutants associated with vehicle liquids, such as motor oil, which have undergone biofiltration within the basin.

3.7.1.3 Wildfire Risk

Regional Wildfire Conditions and Hazards

The Project site is within Moderate and Very High Wildland Fire Hazard Severity Zones (FHSZ) and contains open grasslands, tree canopy, and riparian vegetation that include biofuels for wildfires.

In central California, the fire season usually extends from roughly May through October.[1] The duration of the fire season is influenced by a combination of climatic, vegetative, and physiographic conditions, including rainfall totals, distribution, and/or drought conditions that may affect the duration of this period. Structural losses or damage from wildfires often result from inappropriate siting of structures within or adjacent to high fire hazard areas, use of inappropriate construction materials or flammable landscaping, and accessory structures. Fire hazard is the composition of fuels within an area that affect its potential for flammability and energy

[1] Recent events may indicate that wildfire behavior, frequency, and the duration of the fire season are changing in California; for example, the 250,000-acre 2017 Thomas Fire in neighboring Santa Barbara and Ventura counties was the largest wildfire in California history and it occurred in December. These issues are discussed more fully in Section 3.7.3.4, *Cumulative Impacts*.

release, whereas fire risk is the probability that a fire would ignite, spread, and potentially affect one or more resources valued by people (such as structures or life).

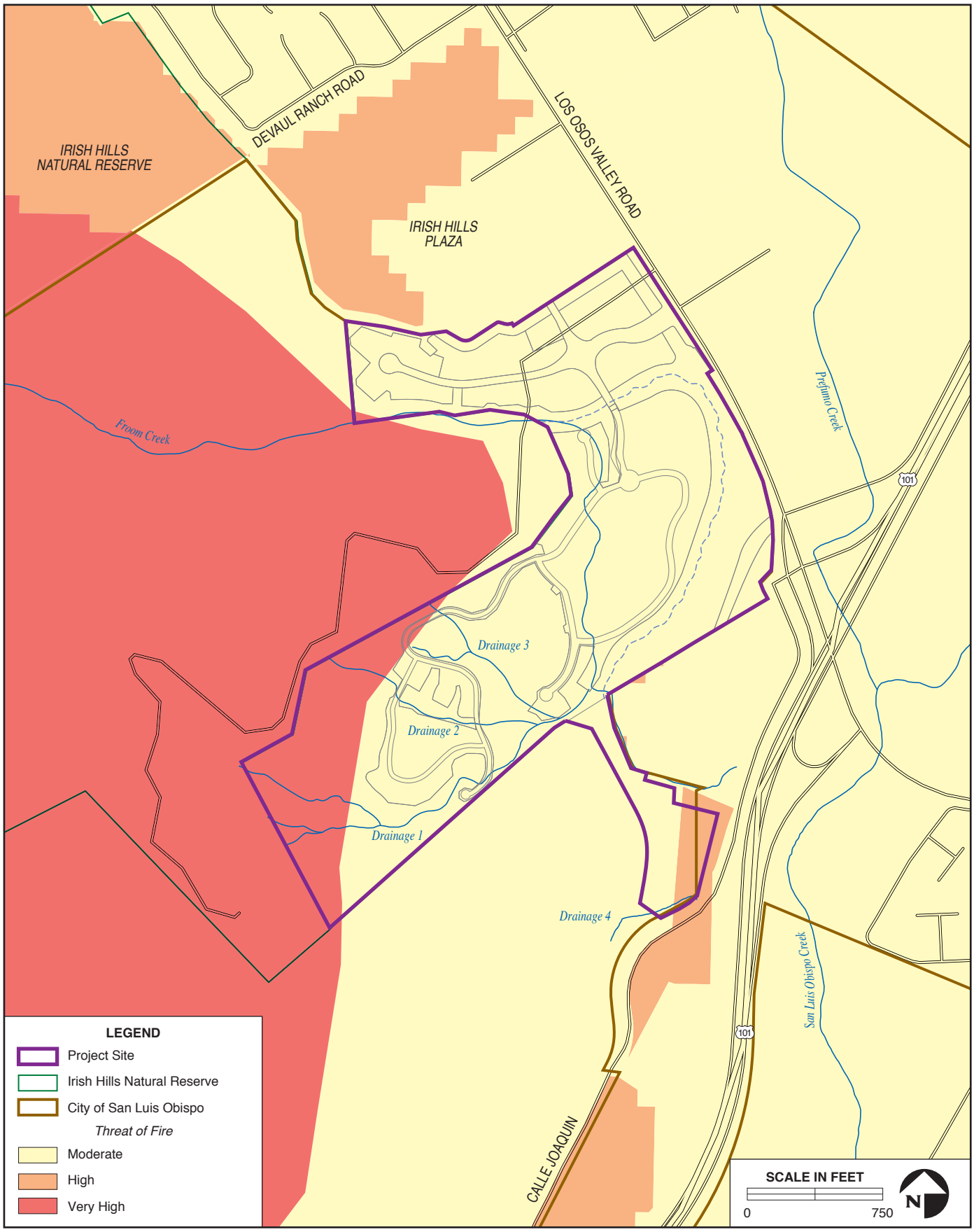
Climate change has the potential to affect fire frequencies, intensities, and total burn area. For instance, a warmer climate may result in increased fire frequency by facilitating the increased drying of fine surface fuels, allowing more potential ignitions to become actual ignitions that become wildfires. Fire intensity is more closely related to biomass management; however, large intense fires have nonetheless become more common in California throughout the past 20 years. Increased temperature and decreased precipitation influence the size of forest and woodlands, while arid forests and woodlands in the southwest primarily influence the size of a fire by the production of fuels in the year prior to fire and secondarily by drought in the year of fire. While the frequency, intensity, and burn area of a fire is subject to a variety of factors, it is accepted that the general increase in temperature is correlated to a higher risk of fire hazard (U.S. Forest Service 2012).

Fire Hazard Severity Zones

Fire Hazard Severity Zones (FHSZ) are defined by the California Department of Forestry and Fire Protection (CALFIRE) based on the presence of fire-prone vegetation, climate, topography, assets at risk (e.g., high population centers), and a fire protection agency's ability to provide service to the area. Approximately 102 acres of the site is designated as a Moderate FHSZ, and approximately 13 acres within the Upper Terrace are located within a Very High FHSZ (see Figure 3.7-1; CALFIRE 2007). Further, it should be noted that the site borders a Very High FHSZ within the Irish Hills Natural Reserve, with this border extending adjacent to and within the site's northern and western boundaries for approximately 0.75 mile. As the Project site is located both within Moderate to Very High FHSZ areas and at the edge of the wildland-urban interface, it has potential to be exposed to wildfire hazards.

The Project site is located within a CALFIRE State Responsibility Area (SRA); however, about one acre of the proposed stormwater detention basin area of the Project site falls within the Local Responsibility Area (LRA).[2]

[2] The SRA is the area where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The LRA is an area where local agencies have primary financial responsibility for fire suppression.



wood.

Fire Hazard Severity Zones

FIGURE 3.7-1

Slope and Topography

Topography influences wildland fire to such an extent that slope conditions can often become a critical wildland fire factor. Conditions such as the length and steepness of slopes, direction of exposure, and/or overall ruggedness of terrain influence the potential intensity and behavior of wildland fires and/or the rates at which they may spread. Of these, the most important factor is the influence of slope steepness and prevailing wind direction on the speed at which a fire may spread (Barros et al. 2013). Nevertheless, flat terrain may still experience intense fire patterns. For example, the 2017 Santa Rosa Tubbs Fire traveled from flatlands over mountain ranges and back to flatlands, destroying over 5,600 structures in the process, many of them located within developed areas of Santa Rosa's downtown.

Lower-elevation portions of the Project site are generally flat (0-15 percent slopes). However, the Project site includes moderate to steep slopes (i.e., 15 to 75 percent) surrounding the site's Upper Terrace and western perimeters. Further, the Project site is bordered by upward sloping lands to the west into the Irish Hills Natural Reserve. Slope steepness and the ruggedness of terrain may affect both fire behavior and firefighting access (Table 3.7-1). As slope gradients increase, hand crews are less likely to establish fire-containment lines in areas of excessively steep slopes due to the lack of accessibility and safety concerns. The development of spot fires ahead of fire-lines and the hazards of rolling and blowing firebrands (i.e., ember showers) become progressively more serious as slope increases. The steep slopes with chaparral vegetation along the site's western perimeter presents severe wildland fire hazards. In addition, prevailing winds range from northwest to west-northwest, blowing inland from the Pacific Ocean up valleys such as the Los Osos Valley (Western Regional Climate Center 2018). Thus, prevailing winds, steep slopes, and the presence of dense old growth, highly flammable vegetation within portions of the Irish Hills Natural Reserve present a substantial wildland fire hazard along the site's 1-mile-long interface with these open lands.

Table 3.7-1. Potential for Firefighting Success and Tactics on Steep Slopes

Slope Class	Potential for Firefighting Success and Tactics
< 20%	Optimal chances for success of combating fires utilizing direct attack methods with all-wheel-drive fire trucks, bulldozers, hand crews, and aerial resources, including fixed-wing tankers.
21 – 40%	Moderate feasibility for controlling fires by direct attack with all-wheel-drive fire trucks, bulldozers, hand crews, and helicopters. Use of fixed-wing aerial tankers limited by ruggedness of terrain.
41 – 60%	Limited feasibility for controlling fires as slopes are typically beyond operating capability of all-wheel-drive fire trucks. Direct firefighting tactics are possible, but become increasingly difficult with increases in slope. Use of fixed-wing aerial tankers becomes highly restricted.
> 60%	Low feasibility for controlling fires. Slope gradients largely beyond operating capability of bulldozers. Attack methods become more indirect. Hand crews and helicopters become primary tools.

Source: County of Los Angeles 2011.

Vegetation and Fuel Biomass

Within the Project vicinity, open grasslands and coast live oak woodlands on and adjacent to the site, along with chaparral vegetation found in areas of the Irish Hills Natural Reserve, can quickly burn during the dry fire season, particularly under conditions of strong, dry winds such as the Santa Anas. The grassland and coastal scrub/chaparral plant communities that dominate the slopes of the Irish Hills have various chemical, physical, and physiological characteristics that contribute to the frequency and potential of local wildland fires. These vegetation communities have a propensity to burn on an intermittent basis, with grassland fires particularly susceptible to expand quickly. Consequently, recurrent fire has developed into an ecological factor necessary for the survival of some grassland, coastal scrub, and chaparral species. Some grassland and chaparral species require a "fire cue" such as intense heat, smoke, or charring of bark before seed germination can occur, and some have reproductive systems that allow for fast germination after fire. However, the grassland and chaparral ecosystems do not appear to require fire to remain healthy. According to recent studies, some California chaparral is extraordinarily resilient to very long periods without fire (Keeley and Borchert 2005) and generally continues to maintain productive growth throughout pre-fire conditions (Hubbard 1986; Larigauderie, Hubbard, and Stafford 1990). Unlike chaparral habitat, coastal sage scrub has less standing biomass and litter accumulation, and constituent shrub species are capable of continual reproduction by seed. In general, fire frequency tends to be highest within areas that are covered by coastal sage scrub communities, as they tend to accumulate more herbaceous plants annually than do areas containing woody chaparral shrubs.

Historic Wildland Fires and Return Interval

Past wildland fires in the County demonstrate that major wildland fires occur on average every 10 years within and north of the Santa Lucia Mountains; however, no major wildland fires have been recorded in recent history south of this mountain range and within the coastal portions of the County, nor have any been recorded within the vicinity of the Project site. The nearest historic wildfires in the area include the 1985 Las Pilitas Fire approximately 2.3 miles east, the 2005 Bishop A Fire approximately 3.3 miles north, and the 1984 Swift LE-7 Fire approximately 4.0 miles northwest (Fire Resource and Assessment Program 2017). The lack of recorded wildland fires within the immediate Project vicinity may indicate a high degree of fuel loading and increased risk of wildfire, particularly within the Irish Hills Natural Reserve (County of San Luis Obispo Fire Department 2018). Depending on weather conditions, plant types, and fire management policies, the Irish Hills and surrounding area have a very high risk of wildland fire and the majority of the area is identified as a Very High FHSZ by CALFIRE. Consequently, structures and residences located in this area are at risk from wildland fire.

Wildland Firefighting Strategies

Typical strategies for managing wildland fire hazards involve three parts, including ongoing fuel management activities, fuel reduction near structures, and suppression of active fires. Fuel management includes fire crews removing dried vegetation, creating fuel breaks where all vegetation is removed, and conducting prescribed burns. Fuel modification reduces the radiant and convective heat generated by wildfire and provides valuable defensible space for firefighters to take an effective stand against an approaching fire front and firebrands (i.e., ember showers). While these strategies may prove to be effective in preventing the spread of large fires and reducing risk to life and structures, they may also fragment and damage ecosystems and cause visual changes in the process (Los Angeles County Fire Department 2012).

When a wildfire occurs, an important factor for life, property, and the environment comes from passive protection measures, such as defensible space, fire-resistive landscaping, and fire-resistive construction. The sum effect of passive protection measures substantially increases the effectiveness of fire suppression activities. Inadequate or unreliable water supply, inadequate ingress and egress, inadequate structural safeguards, and inadequate vegetation management are the factors that lead to major structural-related fire losses in areas adjacent to wildlands (Cohen 1999). In addition, the inability of residents to shelter-

in-place in their homes can also create evacuation and fire department access problems in these areas (U.S. Forest Service 2000).

3.7.1.4 Hazardous Materials

Potential for Hazardous Materials on the Project Site

The Project site is largely undeveloped and has historically supported and continues to support grazing operations. There is no evidence of storage or use of hazardous materials associated with the grazing operations. Historical grazing and dairy operations may have resulted in limited amounts of pesticides and herbicides in low concentrations near the soil surface; however, these substances are not generally regulated as hazardous materials/site contamination and there is little risk associated with residual presence of pesticides in site soils. However, the northwestern portion of the site is developed with historic ranch buildings and a red rock quarry primarily used as a storage yard for construction materials and equipment/vehicles. Typical hazardous materials used, stored, or handled at the construction materials storage yard include fuels, fertilizers, and construction materials. Storage of these materials can pose potential hazards where leaks can contaminate air, water, and soil, or generate fire. There are no known contaminated sites recorded within the Project site, but use of portions of the site for construction storage may have resulted in soil contamination.

In addition to typical hazards and hazardous materials associated with storage of construction equipment and materials and grazing operations, radon is considered to have a moderate risk in some geologic formations and soils in the County. Radon is a naturally occurring gas produced by the breakdown of traces of uranium in certain soils and rocks and can pose a significant health problem. Within the region, only 3 of 173 tests for radon in homes contain over 4 picocuries per liter (pCi/L), 'the highest' rating, and radon is not considered to be a substantial local hazard (City of San Luis Obispo 2014). Further, the presence of a transformer on any of the adjacent Pacific Gas and Electric Company (PG&E) power poles that run along the northeastern property line could possibly contain polychlorinated biphenyls (PCBs). However, the possibility of a PG&E transformer to contain PCBs is very low, as PG&E discontinued use of PCBs in transformers in the 1980s (Grisanti & Associates 2011).

Inspection of the Project site indicates minimal presence of debris from the adjacent Irish Hills Plaza within onsite drainages and some non-hazardous solid waste from residual homeless campsites adjacent to Froom Creek.

Hazardous Materials Site Listings

There is no evidence of aboveground storage tanks (ASTs) or underground storage tanks (USTs) within the Project site. In addition to the lack of ASTs and USTs, the Project site is not currently or has not historically been associated with any bulk fuel storage or fixed dispensing equipment.

Records indicate that at least 10 inactive Leaking Underground Storage Tanks (LUSTs) sites are located within 0.5 mile of the Project site (Table 3.7-2; SWRCB 2018). There is one active SWRCB cleanup assessment site and one Department of Toxic Substances Control (DTSC) backlog cleanup assessment site that were identified approximately 0.2 mile southeast of the Project site across U.S. 101. These sites are undergoing assessments for potential contaminants of concern that affected soils, groundwater, and surface water.

Offsite cleanup sites located near the Project site or hydraulically up-gradient could be a concern if contaminants migrate to the Project site. Given the location of known sites with potential contamination and associated soil and groundwater affected and their distance from the Project site, there is a low potential for migration of contaminants to the Project site.

3.7.1.5 Airport Safety Hazards

San Luis Obispo County Regional Airport

The Airport provides commuter, charter, and private aviation service to the area. The primary hazard associated with land uses near the Airport is the risk of aircraft incidents on approach and takeoff. Aircraft flight operations are determined largely by the physical layout of the Airport and rules of the Federal Aviation Administration (FAA) (City of San Luis Obispo 2014). There are two runways at the Airport with parallel taxiways. Runway 11-29 is utilized for the majority of aircraft operations, with 97 percent of all aircraft operating at the Airport using this runway for departures and arrivals, as well as touch-and-go flights. Runway 7-25 is mostly used by small, light, general aviation aircrafts during crosswind conditions and is utilized for the remaining 3 percent of aircraft flights, only for general aviation propeller aircraft.[3] The Project site is not located in the path of the

[3] General aviation is all civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.

Table 3.7-2. USTs and Cleanup Sites within a 0.5 mile-Radius of the Project Site

Hazardous Site Record	Location	Potential for Migration to the Project site
Laguna Lake Shell LUST Inactive Cleanup Site	Madonna Road and LOVR intersection, 0.5 mile north of Project site	Very Low – An inactive cleanup site associated with gasoline and other fuel oxygenate contaminants which was completed and closed in 2013.
Perry Ford, Lincoln LUST Inactive Cleanup Site	LOVR, 0.1 mile northeast of Project site	Very Low – An inactive cleanup site associated with waste, motor, hydraulic, and lubricating oil contaminants which was completed and closed in 2008.
Sunset Honda LUST Inactive Cleanup Site	LOVR, 0.1 mile northeast of Project site	Very Low – An inactive cleanup site associated with waste, motor, hydraulic, and lubricating oil contaminants which was completed and closed in 2000.
Kimball Motors LUST Inactive Cleanup Site	LOVR, 0.2 mile northeast of Project site	Very Low – An inactive cleanup site associated with benzene, gasoline, and tetrachloroethylene contaminants which was completed and closed in 2012.
Shell (former Texaco) LUST Inactive Cleanup Site	LOVR, 0.1 mile east of Project site	Very Low – An inactive cleanup site associated with gasoline and other fuel oxygenate contaminants which was completed and closed in 2009.
ARCO #6038 LUST Inactive Cleanup Site (A)	LOVR, 0.1 mile east of Project site	Very Low – An inactive cleanup site associated with diesel contaminants which was completed and closed in 1993.
ARCO #6038 LUST Inactive Cleanup Site (B)	LOVR, 0.1 mile east of Project site	Very Low – An inactive cleanup site associated with gasoline and other fuel oxygenate contaminants which was completed and closed in 2010.
Chevron USA LUST Inactive Cleanup Site	Calle Joaquin, 0.1 mile east of Project site	Very Low – An inactive cleanup site associated with gasoline contaminants which was completed and closed in 1996.
San Luis Obispo Tetrachloroethylene (PCE) Plume State Response Cleanup Site	LOVR, 0.2 mile east of Project site	Low – Active cleanup site since 2010. Groundwater was potentially impacted by PCE from the site's previous dry-cleaning use. The extent of PCE contamination is unknown, and further investigative work is needed for locating PCE source areas; the extent of concern is limited to areas north of LOVR up to Marsh Street.

Table 3.7-2. USTs and Cleanup Sites within a 0.5 mile-Radius of the Project Site (Continued)

Hazardous Site Record	Location	Potential for Migration to the Project site
Conoco Phillips Site #5143 Cleanup Program Site	LOVR, 0.2 mile east of Project site	Low – Active cleanup site and initial assessment initiated in 2010. Soils were contaminated with crude oil, diesel and gasoline. Due to the separation by U.S. 101 and the potential for soil to migrate, potential for contaminate migration to the Project site is low.

Source: SWRCB 2018; DTSC 2018.

arrival/departure pattern for either runway and is not located within a Runway Protection Zone. A majority of the Project site is located within Aviation Safety Area S-2, while a small portion of the eastern area of the Project site is located with Aviation Safety Sub-Area S-1c (SLO County ALUC 2005).

Airport Safety Areas

The Project site is approximately 1.7 miles west of the Airport and falls within the jurisdiction of the Airport Land Use Plan (ALUP) adopted by the Airport Land Use Commission (ALUC) in 1973 and updated in 2005. The ALUP is currently in the process of being updated. The ALUC oversees development subject to the ALUP to ensure safety. Allowable types and intensity of development and potential airport safety hazards are identified within each Aviation Safety Area defined by the ALUP. Under the 2005 ALUP, a portion of the Project site overlaps Aviation Safety Sub-Areas S-1B and S-1C. However, more recent analysis of Airport hazards indicates the safety risks may differ from the 2005 ALUP. Using the criteria in Caltrans' California Airport Land Use Planning Handbook, the Project site falls outside of the Aviation Safety Areas (Johnson Aviation 2014). Further, the ALUC conceptually reviewed the Project on April 19, 2017. While the 2005 ALUP Safety Area maps are adopted by the ALUC, the City has consistently deferred to the San Luis Obispo Airport Land Use Compatibility Report prepared by Johnson Aviation in 2014 as the more accurate assessment of Airport hazards in the City. The report uses the Caltrans' California Airport Land Use Planning Handbook, which provides a more current and appropriate methodology for assessing aviation safety risks. The City has relied on the report during adoption hearings for recent planning and development projects, including the San Luis Ranch Specific Plan project and the Avila Ranch Specific Plan project.

Aviation Accidents at San Luis Obispo County Regional Airport

According to the California Airport Land Use Planning Handbook Accident Study, 68 percent of aviation accidents occur over or within an airport, and accident sites tend to occur fairly close to the extended runway centerline (Johnson Aviation 2014). There had been a total of 33 aviation accidents or incidents associated with the Airport, six of which resulted in fatalities, between 1984 and 2014. Of these, five incidents resulted in emergency landings within LUCE- defined Airport Overlay Zones (AOZs) between 1984 and 2014, none of which resulted in an on-ground fatality or occurred within or adjacent to the Project site (Table 3.7-3).

Table 3.7-3. Fatal Aircraft Accidents within the Vicinity of San Luis Obispo County Regional Airport

Flight Date	ALUP Safety Area
9/24/1990	S-2
8/7/1994	S-1B
1/16/2001	S-1C
8/1/2005	S-2
6/24/2013	S-1B

Source: Johnson Aviation 2014.
Note: Accident site placement for the ALUP Safety Areas were based on visual determination of Figure 4-3 from the Johnson Aviation Land Use Compatibility Report.

3.7.2 Regulatory Setting

Hazardous materials and hazards safety are governed by local jurisdictions, although federal and state laws which apply to local jurisdictions would also apply to future development under the Project. Regulations that are directly relevant to the Project are summarized below.

3.7.2.1 Federal

Federal Occupational Safety and Health Administration (OSHA) – Process Safety Management Standard (29 CFR 1910.119)

OSHA's mission is to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA standards are listed in 29 CFR 1910, including Process Safety and Management. This standard includes requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Some of the requirements

of this standard include: all information pertaining to the hazardous chemicals shall be available to the employees; employees shall be given training on the operation of equipment with hazardous materials; and, the employer is required to perform a process hazard analysis.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

SLO County APCD is delegated authority by the U.S. Environmental Protection Agency (USEPA) to implement the Federal Asbestos NESHAP regulations specified in 40 CFR 61, Subpart M. There are specific requirements and procedures delineated in this regulation which pertain to certain demolition and renovation projects. All non-residential demolitions of any kind of structure or asbestos containing material disturbance are required to be approved in advance by SLO County APCD. Requirements for an owner/operator subject to this regulation include conducting a thorough inspection for the presence of asbestos by a Certified Asbestos Consultant (CAC) and written notification to SLO County APCD of the demolition or renovation at least 10 working days prior to the start of the job.

3.7.2.2 State

California Fire Code

The California Fire Code (CFC) lists specific requirements for emergency water supply, access roads and turnarounds, roofing, construction techniques, hazard abatement, and event inspection and safety. The CFC 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 aboveground 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 (PRC) 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.

Hazardous Materials Transportation

The transport of hazardous materials within the State of California is subject to federal, state, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose unless the use of the highway is required to permit delivery or the loading of such materials (California Vehicle Code, Sections 31602(b) and 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transport of hazardous materials. The transport of hazardous materials is restricted to such routes except in cases where travel from these routes is required to deliver or receive hazardous materials.

California Air Resources Board (CARB) Airborne Toxics Control Measure (ATCM for Construction, Grading, Quarrying, and Surface Mining Operations (Section 93105)

This CARB ATCM regulation applies to any area to be disturbed that is located in a geographic ultramafic rock unit, or to any area where NOA or serpentine would be disturbed. Projects that require grading within an area where an NOA may be present are required to demonstrate adequate dust control measures with the SLO County APCD. For example, for projects that require grading of 1 acre or more in serpentine, a geologic evaluation and Asbestos Dust Mitigation Plan must be submitted to the SLO County APCD.

The Project site lies within the NOA buffer area per the SLO County APCD's NOA map, and is therefore subject to CARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations. CARB has identified asbestos as a TAC that if inhaled may result in the development of lung cancer or cause other health hazards. NOA can be found in serpentine rock and can be released into the air when it is broken or crushed. In the County, serpentine rock is located in many regions, including the Project site. Work in serpentine areas requires a SLO County APCD pre-approved dust control plan and may include asbestos air monitoring. Prior to any grading activities at a site within an area potentially containing NOA, the Applicant is required to comply with the applicable sections contained in the NOA ATCM, including the California Code of Regulations (CCR) Title 17, Section 93105. Refer also to Section 3.3, *Air Quality and Greenhouse Gas Emissions.*

Department of Toxic Substance Control (DTSC)

DTSC, a department of CalEPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal Resource Conservation and Recovery Act (RCRA) and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

U.S. Code (USC) 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, Department of Health Services (DHS) lists of contaminated drinking water wells, sites listed by SWRCB as having UST leaks or

discharges of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

3.7.2.3 Local

City of San Luis Obispo General Plan

Safety Element (SE)

The City's General Plan guides the use and protection of various resources to meet community purposes. The General Plan SE focuses on achieving acceptable levels of risk through decisions on land use and the form of development, with consideration for the closely related factor of transportation. The General Plan SE includes policies that describe an approach to achieving the goals of the General Plan. In terms of hazards/hazardous materials, there are three policies included in the General Plan SE:

Policy 3.1 Wildland Fire Safety.

> G. New subdivisions shall be prohibited in areas of "Very High" wildland fire hazard unless part of conservation or open space acquisition program. Development of existing parcels shall require a development plan to manage fuels, maintain a buffer zone, and provide adequate fire protection to the approval of the Chief Building Official. The development plan must be consistent with Policies required by the General Plan COSE.
>
> H. The City of San Luis Obispo is considered a "Community at Risk" due to the threat of wildfire impacting the urban community. The City shall continue to enhance the fire safety and construction codes for new buildings in order to reduce the risk of urban fires that may result from wildfires. Citywide building code enhancements should include: Fire resistant exterior wall coverings; Sprinkler protection in attic areas; and Ember resistant vent systems for attics and under floor areas and other provisions identified in California Building Code (CBC) Chapter 7A.

Policy 5.2 Minimizing Hazardous Materials Exposure. People's exposure to hazardous substances should be minimized.

Policy 9.18 Safety of Structures and Facilities. Existing and new structures and facilities should reflect adopted safety standards. Within this policy, the City has developed a program, Program S 8.6.5 Required Inspections, whereby the City will conduct safety

inspections for hazardous materials in commercial, industrial, and multifamily residential buildings.

Land Use Element (LUE)

The General Plan LUE, the associated LUCE Update EIR, and technical studies such as the 2014 San Luis Obispo Airport Land Use Compatibility Report (Johnson Aviation) address the issues of airport hazards in detail. Based on this analysis, the LUE set forth both policies and programs to address Airport safety, which are summarized below and discussed in more detail in Section 3.9, *Land Use and Planning.*

Policy 7.4 Airport Safety Zones. Density and allowed uses within the Airport Safety Zones shall be consistent with the San Luis Obispo County Regional Airport ALUP unless the City overrides a determination of inconsistency in accordance with Section 21676 and 21676.5 et seq. of the Public Utilities Code. If the City overrides a determination, all land uses shall be consistent with the State Aeronautics Act and guidance provided in the California Airport Land Use Planning Handbook guidelines, City policies, and noise standards as substantiated by the San Luis Obispo County Regional Airport Master Plan activity forecasts as used for noise planning purposes.

City of San Luis Obispo Municipal Code – Demolition and Moving of Buildings Section 115 Public Safety Requirements

The City Municipal Code includes general requirements for building demolition activities, permitting for such activities, hauling operations, and routes for moving materials. In addition, there are subsections included for dust and debris, fire safety, and removal and disposal of demolition materials.

City of San Luis Obispo Municipal Code – Site Development Standards

23.05.080 - Fire Safety

Any proposed use that requires land use permit approval is subject to the provisions of Sections 23.05.082 and 23.05.086. The purpose of these standards is to provide for precautions to minimize hazards to life and property in the event of fire.

23.05.082 - Fire Safety Plan

The purpose of a fire safety plan is to enable a fire protection agency that has jurisdiction over a proposed site to evaluate the adequacy of proposed fire protection measures, and to keep itself informed of new developments to evaluate their effect upon the ability of the

agency to provide continuing service. The approval of a fire safety plan does not imply a commitment by any agency to an increased level of service.

This section details where fire safety plans are required, and the required content of the fire safety plan is described, including what is necessary for projects within urban and village areas and rural areas. Exceptions are provided to the content, such as in the case where the applicable fire protection agency determines that information provided with the project application and plans is sufficient to enable fire safety review without the need for a separate fire safety plan. Finally, fire safety plan review is required, and the timing and effect of review are detailed.

23.05.086 - Fire Safety Standards

In areas where fire protection is provided by the San Luis Obispo County Fire Department/California Department of Forestry and Fire Protection, new uses are required to comply with applicable provisions of the Uniform Fire Code, 1988 Edition, or such later edition as adopted by an ordinance of the County.

Airport Land Use Plan for the San Luis Obispo County Regional Airport

State law requires an independent, countywide ALUC to adopt an ALUP for each airport. This plan establishes zones based on flight patterns, with the aim of having future development be compatible with airport operations, considering safety and noise exposure. The ALUP contains several safety-related policies to address future development:

4.4.6 Safety Policies. Notwithstanding any other provision of this ALUP except for the specific provisions set forth in Section 6 (Specific Land Use Provisions for the Margarita Area), a proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed project or local action:

> c. **Policy S-3.** Would permit or fail to adequately prohibit any future development project which specifies, entails, or would result in a greater building coverage than permitted by ALUP Table 7 (see Table 3.8-3 in Section 3.9, *Land Use and Planning*).

4.4.3.2 Aviation Safety Areas. Three fundamental areas are delineated with respect to aviation safety risks, of which Safety Area S-1 and S-2 overlay the Project site:

b. **Safety Area S-1** – The area within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes equal to or less than 500 feet above ground level.

c. **Safety Area S-2** – The area, within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes between 501 and 1000 feet above ground level. Aviation safety hazards to be considered in this area include mechanical failures, fuel exhaustion, loss of control during turns from downwind to base legs or from base to final legs of the traffic pattern, stall/spin incidents during engine-out maneuvers in twin engine aircraft, and midair collisions. Operational factors of concern include circle-to-land instrument approaches south of Runway 11-29, extensive "pattern work" by student pilots in fixed-wing aircraft (predominantly, but not exclusively to the south and west of the airport), and extensive practice flight by students in rotary-wing aircraft to the north of the airport. Nonetheless, because aircraft in Area S-2 are at greater altitude and are less densely concentrated than in other portions of the Airport Planning Area, the overall level of aviation safety risk is considered to be lower than that in Area S-1 or the Runway Protection Zones.

4.4.4.2 Aviation Safety Sub-Areas. In consideration of the above, the ALUC has established and adopted sub-areas within Aviation Safety Area S-1. The following description is for Aviation Safety Sub-Area S-1C, which applies to the Project site:

c. **Safety Area S-1C** – Those portions of Safety Area S-1 which are not included in Safety Areas S-1A or S-1B, but are adjacent to (within 0.5 nautical miles) frequent or low-visibility aircraft operations at less than 500 feet above ground level. Aviation safety hazards to be considered in this area include mechanical failures, deviation from localizer or VHF omnidirectional range during Instrument Flight Rules operations (due to pilot error or equipment malfunction), stall/spin incidents during engine-out maneuvers in multi-engine aircraft, loss of control during "go around" or missed approach procedures, and loss of visual references by aircraft performing circle-to-land procedures.

4.5.3 Airspace Protection Policies. Notwithstanding any other provision of this ALUP, any proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed local action:

a. **Policy A-1** – Lacks sufficient provisions to ensure that no structure, landscaping, apparatus, or other feature, whether temporary or permanent in nature shall constitute an obstruction to air navigation or a hazard to air navigation, as defined above.

These policies are linked to designated Airport runway safety zones which encompass the Project site and are discussed more fully in Section 3.9, *Land Use and Planning*.

CALFIRE and San Luis Obispo County Fire Department Strategic Fire Plan 2017

The Strategic Fire Plan collaboratively addresses fire protection planning efforts within the County and provides a planning level framework for hazardous fuel assessment and strategies to reduce the potential for wildfire ignition. The goals of the plan include coordination between multiple jurisdictions within the County and improvement of fire suppression capabilities.

City of San Luis Obispo Emergency Operations Plan 2011

The City Emergency Operations Plan (EOP) addresses the planned response to emergencies in, or affecting the City. The EOP identifies the emergency management organization to coordinate response to emergencies or disasters, describes procedures, and establishes framework for preparedness and response actions.

3.7.3 Environmental Impact Analysis

3.7.3.1 Thresholds of Significance

The Project would have a significant impact if it would create a public health hazard or cause harm to the environment. The significance criteria for this hazards, hazardous materials, and wildfire analysis are based on Appendix G of the State CEQA Guidelines. A potential impact related to hazards, hazardous materials, or wildfire is considered significant if the Project 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 0.25 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 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 2 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; or

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Additionally, since the Project site is located in or near state responsibility areas or lands classified as very high fire hazard severity zones, wildfire impact is considered significant if the Project 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; or

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.

Non-Applicable Thresholds

- Threshold (c) (*Hazardous Materials Emission Near Schools*): There is one school located approximately 0.25 mile from the Project site, separated by existing urban development that includes commercial businesses and residential uses. The Project proposes residential and commercial uses that would not generate hazardous materials. Typical materials (e.g., cleaning soaps, solvents and pesticides) used in the residential and commercial development would be similar in nature to those used at the school. Accordingly, there would be no potentially significant adverse impact to schools with implementation of the Project and this issue will not be analyzed further in this EIR.

3.7.3.2 Impact Assessment Methodology

This assessment includes review of existing adopted plans, public databases, recent studies and EIRs, to assess the potential presence of hazards and hazardous materials sites within the Project site and vicinity. The Project site was evaluated for the presence of hazardous materials based on a review the LUCE Update EIR, and integrated current information for contaminated sites from U.S. EPA's EnviroFacts, DTSC's EnviroStor, and SWRCB's GeoTracker databases. Additionally, information for this section was gathered from information provided by the General Plan SE, ALUP, historical reports, the DTSC data management system, and Project site information on file with the City.

Risk associated with wildfire is assessed based on numerous items, including the CALFIRE FHSZ determination, an assessment of the fuel biomass that is within and adjacent to the Project site, historic wildland fires in the vicinity, slope, winds, vegetation age and composition, and changes that may result after implementation of the Project.

Analysis of potential airport-related hazards included review of the State Aeronautics Act, the FAA regulations, and guidance provided in Caltrans' California Airport Land Use Planning Handbook. In addition, policy consistency with the ALUP Safety Areas is provided in Section 3.9, *Land Use and Planning.* For the purposes of this section, the California Airport Land Use Planning Handbook is used for hazards impacts, consistent with City guidance and the LUCE Update EIR methodology.

To evaluate potential for post-fire impacts, such as debris flows, flooding, or slope instability, this section incorporates an assessment of impacts of the Project associated with downstream flooding as a result of runoff, post-fire slope instability, or drainage changes as presented in Section 3.8, *Hydrology and Water Quality.* Regarding impacts associated

with increased potential for landslide under these same conditions, please refer to Section 3.6, *Geology and Soils.*

3.7.3.3 Project Impacts and Mitigation Measures

The Project would place residential and commercial development in a location that is vulnerable to wildfires. The Project would also have a limited potential for release of hazardous materials during construction and operation. Potential impacts related to hazardous materials, airport operations, and wildfire are discussed further below and summarized in Table 3.7-4.

Table 3.7-4. Summary of Project Impacts

Hazards and Hazardous Materials Impacts	Mitigation Measures	Residual Significance
HAZ-1. The Project would exacerbate wildfire risks, thereby exposing occupants to wildfire hazards, and impair emergency response, and would require wildfire fuel management in the Irish Hills Natural Reserve.	MM HAZ-1 MM HAZ-2 MM HAZ-3 MM HAZ-4 MM HAZ-5	Significant and Unavoidable
HAZ-2. The Project would potentially expose persons to toxic, hazardous, or otherwise harmful chemicals through accidental conditions involving the release of hazardous materials into the environment.	None required	Less than Significant
HAZ-3. The Project site is located within the ALUP Safety Areas and would potentially result in an airport-related safety hazard for people residing or working in the Project site.	None required	Less than Significant

Impact HAZ-1 The Project would exacerbate wildfire risks, exposing occupants to wildfire hazards and impairing emergency response, and would require wildfire fuel management in the Irish Hills Natural Reserve (Significant and Unavoidable).

As described in Section 3.7.1.3, *Wildfire Risk*, the Project site is located in a region with very high to moderate fire hazard potential, including the western 1-mile-long perimeter of the site that borders and includes very high fire hazard areas. Adjacent grassland, coastal sage scrub, oak woodland and chaparral vegetation within the Irish Hills Natural Reserve provides substantial flammable natural fuels for future potential wildfires. The Project site also lies at the base of the Froom Creek watershed with steep slopes in the Irish Hills Natural Reserve creating wind channels; prevailing winds generally blow northwest up the slopes but periodically reverse and blow southeast downslope toward the Project site (Western Regional Climate Center 2018). In addition, grasslands and vegetation along

slopes and within drainage channels within the Project site serve as fuels that contribute to potential fire hazards for future development. As part of the Project, 39.1 acres of residential uses, 3.1 acres of commercial uses, and 2.9 acres of public facilities are proposed within the CALFIRE-designated Moderate FHSZ. While approximately 13 acres of the Very High FHSZ exist within the Project site, no development is proposed within this zone; proposed development within the Upper Terrace of Villaggio are approximately 200 feet from the Very High FHSZ. Further, along approximately 1,000 feet of the Project site's western perimeter, residential land uses within Madonna Froom Ranch are proposed directly adjacent to Very High FHSZ within the Irish Hills Natural Reserve, though these residential uses would be buffered by the existing Froom Creek alignment.

Project Construction

The Project would allow for construction activities to occur on approximately 58 acres of the site over multiple years. Project site construction activities would occur on and adjacent to grasslands in a Moderate FHSZ and immediately adjacent to a Very High FHSZ where the risk of fire ignition is heightened, especially during critical fire weather conditions with warm temperatures, low humidity, and strong winds. Operation of construction equipment, such as saws, welders, generators, and heavy machinery, would temporarily introduce new ignition sources into the area. Flammable solids involved in construction include plastic and fiberglass components, and the accumulation of material from work equipment. Flammable liquids include gasoline or diesel fuel, hydraulic oil, engine oil, and engine coolant.

While the chance of accidental ignition by such heavy equipment may seem improbable, several wildland fires in Southern California have been ignited by such equipment.[4] For example, the nearly 85,000-acre Las Pilitas Fire in 1985 was ignited by equipment use and burned wildland areas to the east of the City (County of San Luis Obispo Fire Department 2018). As construction would occur over a period of several years, the risk of fire ignition from construction activities immediately adjacent to the Very High FHSZ constitutes a potentially significant adverse impact, especially during periods of high fire risk. While adherence to the City's Municipal Code Sections 23.05.080, 23.05.082, and 23.05.086 and associated compliance with CFC and CBC construction requirements would minimize the

[4] The 2014 Rancho Bernardo suburb fire in San Diego that burned 1,500 acres was caused by construction equipment, and the 2009 Jesusita Fire in Santa Barbara, which burned almost 9,000 acres and destroyed 80 homes, was ignited by landscape equipment during a trail maintenance operation.

risk from accidental construction-related wildfires, the risk would not be eliminated given the setting of the Project site. Associated impacts would be *potentially significant.*

Project Operation

There is the potential for a fire ignition within the Irish Hills or elsewhere within a Very High FHSZ, which would potentially affect the Project site and surrounding development, infrastructure, and natural resource areas. Project operation could also increase the potential to ignite wildfires. Activities such as barbeques, smoking, vehicle maintenance, and landscaping activities, etc., could introduce new ignition sources into the area, including within the Project site and within the Irish Hills Natural Reserve, considering potential increased activities from Project residents. Fueled by prevailing northwest winds, fire ignition from the Project site may spread rapidly up the Irish Hills.

When southeast winds prevail, wildfire may burn downslope onto the Project site. The rugged, sloped terrain of the Irish Hills make firefighting challenging and the Project would eliminate the existing buffer between the Irish Hills and urban development in the southern portion of the City and block direct access to the Irish Hills in this area.

The Project would exacerbate wildfire risks by developing residential uses in a high fire hazard area, thereby placing structures and people in a high risk place and contributing to wildfire hazards that would affect existing people and property, including pollutant concentrations from a wildfire, uncontrolled spread of wildfire, and post-fire flooding, debris flows, and drainage changes. The Project would substantially increase the total number of people and structures within an area designated Moderate FHSZ and adjacent to a High FHSZ. During periods of maximum occupancy, 1,231 persons could be onsite within the residential and commercial areas (i.e., employees and residents). Further, although no development is proposed in the Very High FHSZ, the risk of wildfire remains high due to Project location at the wildland-urban interface at the base of steep slopes and ravines in the Irish Hills.

The fact that the Project site itself lies in the Moderate FHSZ does not eliminate the wildfire risk associated with the Project given its setting in the Irish Hills. For example, the 2017 Thomas Fire in Ventura resulted in the loss of nearly 1,000 homes, including many that were not within a designated High FHSZ but topographically located in wildfire-susceptible areas. Additionally, based on the conceptual site plan (see Figure 2-5), approximately 16 structures within Madonna Froom Ranch and approximately 14 structures within Villaggio would be immediately adjacent to vegetation of Moderate and

Very High FHSZ areas. Accounting for those structures within the Project site that are adjacent to open space areas (that do not necessarily face the Irish Hills), the total number of structures located within the Moderate FHSZ and thereby subject to wildfire risk would be approximately 62 structures. These structures would be at risk of fires igniting in the Irish Hills or elsewhere and burning through Very High FHSZ downslope onto the Project site, especially considering slopes, prevailing winds and biofuels that have not recently burned.

Following a wildfire in the Irish Hills, there would be a potential for people and structures to be exposed to significant risks associated with potential flooding, sedimentation, and debris flow. Following the 2017 Thomas Fire in Montecito, debris flows flooded creeks, reshaped watersheds, and resulted in substantial loss of life and property. The Project site is located at the base of the Froom Creek watershed and the Irish Hills. Denuded hillsides adjacent to the site in the Irish Hills Natural Reserve and in the headwaters of the Froom Creek watershed may become unstable in post-fire conditions, when rainfall could mobilize debris to cause landslides, mudflows, and flooding onsite and in the vicinity. In additional to the direct impact to structures and people, this impact could manifest as changes to site hydrology, as further analyzed in Section 3.8, *Hydrology & Water Quality*.

Compliance with Policies 3.1 and 9.18 within the General Plan SE, development standards with the CFC, and the City Municipal Code would reduce the risk of damage or injury by ensuring the Project would minimize the potential for ignition and increase structural resistance to fire. Further, compliance with PRC Section 4291 would require the Project to establish a 100-foot clearance between structures and highly flammable vegetation to create a defensible space. This defensible space typically involves fuel modification within a buffer zone where combustible native or ornamental vegetation is modified or replaced with drought-tolerant, low-fuel-volume plants. Under the currently proposed Project land use plan (refer to Figure 2-4 and Figure 2-5), approximately 1,000 feet of medium-high density residential (R-3-SP) immediately borders the Irish Hills Natural Reserve within Villaggio. Additionally, there is approximately 1,651 feet of R-3-SP within 100 feet of the Project boundary, which averages approximately 75 feet from the boundary edge (especially along the Madonna Froom Ranch edge). Considering the minimum 5-foot backyard setback and the 100-foot defensible space required of PRC 4291, defensible space would potentially extend up to 95 feet into the adjacent Irish Hills Natural Reserve along portions that border the Reserve, and average approximately 20 feet into the Reserve along the portion that averages the R-3-SP land use approximately 75 feet from the boundary edge. Compliance with these measures, particularly implementation of defensible space

buffers, would ensure impacts associated with the proposed development's wildfire risk would be substantially reduced to a *less than significant* level.

While defensible space requirements would decrease risks associated with wildfire, there may be secondary impacts to biological resources, potentially impacting several acres of Irish Hills Natural Reserve habitats. The potential vegetation clearance up to 95 feet outside the Project site would potentially occur along a 1,000-foot segment of R-3-SP that borders the Irish Hills Natural Reserve, which would potentially modify approximately 2.18 acres of existing vegetation (Figures 3.7-2 and 3.7-3). Vegetation clearance up to 75 feet outside the Project site, along a 1,651-foot segment of R-3-SP that borders the Reserve, would potentially modify approximately 0.76 acres of existing vegetation. Additionally, within Villaggio, fire buffer clearance within existing grasslands and riparian habitats in the Upper Terrace to the southwest and along the western boundary of the Lower Terrace would likely also require additional vegetation clearance. Therefore, fire buffer clearance requirements would result in potential secondary impacts to biological resources both on and off the Project site, including potentially rare and sensitive habitats, such as serpentine native bunch grasslands and areas supporting rare plant species. See Section 3.4, *Biological Resources* for a more complete discussion of such impacts.

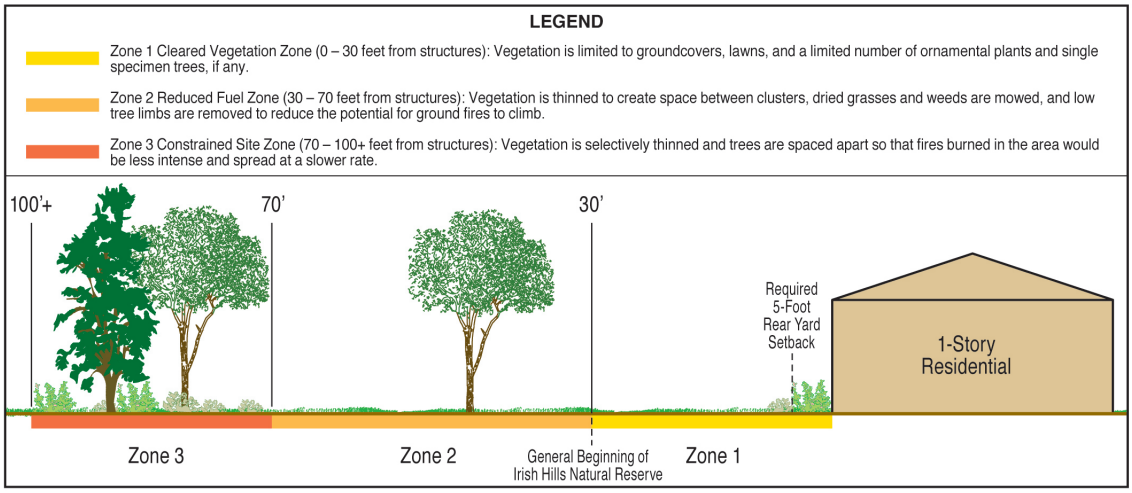
Emergency Evacuation

The Project would substantially increase the total number of people that may be subject to evacuation during a wildfire. The Project's proposed intersection at LOVR is the primary access and egress route to the site for private vehicles and evacuation. During wildfire, residents, employees, hotel guests, and potentially visitors may all need to evacuate the site. Vehicles would contribute to congestion on evacuation routes along LOVR and U.S. 101, contributing to probable evacuation-related congestion, potential road closures, and exposure of evacuees to traffic-related hazards during evacuation. In extreme events, evacuees could also be exposed to smoke, flames, ash and embers, and/or downed power lines and trees. During emergency conditions when a threat such as a wildland fire is imminent, it may be difficult for the healthcare center to guide panicked individuals to fire meeting points and shelter-in-place locations as detailed within the Draft FRSP Program 7.4.1a, especially if site conditions quickly change. Further, residents of Villaggio would constitute a special needs population under the City's EOP and would require special care services and resources. Therefore, the Project could impair the implementation of an existing EOP, a *potentially significant* impact. See also Impact Section 3.13, *Transportation and Traffic* regarding emergency evacuation.

wood.

Minimum Defensible Space Area

FIGURE 3.7-2



wood.

Illustrative Defensible Space Setback Cross Section

FIGURE 3.7-3

Emergency Response

The Project would eliminate the existing buffer between the Irish Hills and urban development in the southern portion of the City and block direct access to the Irish Hills in this area, forcing responders to navigate through Madonna Froom Ranch or the Upper Terrace. To respond to a wildfire, emergency vehicle access to the adjacent slopes of the Irish Hills Natural Reserve under the Project would be limited and would restrict the ability of firefighters to protect structures within the direct line of fire from damage. As detailed above, approximately 30 residential units within Villaggio and R-3 units within Madonna Froom Ranch are proposed adjacent to the Project site boundary with the Irish Hills Natural Reserve. These units would be especially vulnerable to any wildfire originating from the hillside. Proposed security fencing and retaining walls along the western edge of the Project site would potentially limit access for firefighters to attack fires within the Irish Hills Natural Reserve, which would leave the Project site vulnerable, a *potentially significant* impact.

In accordance with the City's Municipal Code, the City of San Luis Obispo Fire Department (SLOFD) is required to review the Project for compliance with SLOFD requirements for emergency access. Based on communication with Fire Chief Garret Olson on June 27, 2018, SLOFD would require fire access routes in two locations from the Project site to the Irish Hills Natural Reserve on at least 12-foot wide paths, one extending from Villaggio, and one from Madonna Froom Ranch. See also, Section 3.13, *Transportation and Traffic* regarding emergency access.

Taken together, the Project would result in substantial adverse impacts associated with the exacerbation of wildfire hazards, considering the surrounding terrain, prevailing winds, presence of biofuels, and known high fire risk areas. The Project would also impair emergency evacuation and response. As a result, the Project would result in an increased risk that people would be exposed to pollutant concentrations from a wildfire, uncontrolled spread of a wildfire, or post-fire hazards resulting in potential for structural damage, injuries, or loss of life due to wildfires. Therefore, *potentially significant* impacts would occur.

Mitigation Measures

MM HAZ-1 The Applicant shall prepare and submit a Construction Impact Management Plan to the City of San Luis Obispo Fire Department (SLOFD) prior to the issuance of grading permits. The Plan shall list measures taken during construction to reduce the potential for brush or grass fires from use of heavy equipment, welding, vehicles with catalytic converters, and other potential activities. The Plan shall include SLOFD recommended measures including, but not limited to the following:

- *All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle;*
- *In coordination with SLOFD, personnel shall be briefed on the dangers of wildfire and be able to respond accordingly should the need arise;*
- *Onsite supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire;*
- *All dead and decadent vegetation immediately surrounding the development area shall be removed to a minimum perimeter of 30 feet;*
- *Smoking shall only occur in a designated area;*
- *A water tender will be available on each construction site during the entire phase of construction; and*
- *A water tender operator shall be available onsite during all construction and remain onsite a minimum of 30 minutes after all construction has finished for the day.*

Plan Requirements and Timing. The Applicant shall prepare a Construction Impact Management Plan in coordination with SLOFD, the San Luis Obispo County Fire Department, and the City, and submit the Plan to the SLOFD for approval prior to the issuance of grading permits. Provisions for fire protection shall be restated on all grading and building plans. Fire protection measures shall be implemented throughout construction and draw upon the CALFIRE and San Luis Obispo County Fire Department Strategic Fire Plan. The name and telephone number of an onsite supervisor shall be provided to SLOFD prior to commencement of construction or grading activities.

Monitoring. The SLOFD shall review the Construction Impact Management Plan and provide recommended measures as necessary. The City permit processing planner shall ensure measures are integrated into the final grading and building plans prior to permit approval. City monitoring staff shall spot check for compliance during construction for each phase of development.

MM HAZ-2 *In accordance with PRC Section 4291, the Applicant shall hire a City-qualified team that consists of appropriate specialists (i.e., fire management professionals, biologists) to prepare a Community Fire Protection Plan to design the creation and maintenance of required fire buffers and fuel management zones around developable areas and detail methods for achieving fire safety around new buildings while preserving the integrity and function of affected native plant communities to the maximum extent feasible, and that ensures that consistent fire fuel management practices are applied throughout the City. The Plan shall incorporate management strategies in coordination with adjacent property owners, including Mountainbrook Church and the Irish Hills Natural Reserve. The Plan shall outline the removal and control of invasive, non-native vegetation, and conservation of sensitive habitats and rare species, while developing fire fuel management practices that will discourage or prevent non-native grasses and other non-native invasive species from dominating surrounding areas. Landscaping shall be maintained by the Applicant and periodically inspected by the SLOFD during fire inspections in each of the fuel management zones to avoid the buildup of deadwood and leaf litter, which, if left to accumulate, would reduce the mitigating effect of the Plan.*

Specifically, the Plan shall include, but not be limited to, the following elements:

- *Vegetation coverage and type;*
- *Setbacks between structures, sensitive wildlife species, and access routes;*
- *Development plan landscaping and planting standards within the setback areas;*
- *Native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place;*
- *All allowable weed abatement techniques, qualifications, and requirements for weed abatement contractors, as well as measures and techniques that ensure the required fuel management and vegetation clearance, shall be designed and implemented to provide adequate structure protection and avoid degradation of sensitive biological habitat; and*
- *Invasive species shall be removed and controlled.*

Plan Requirements and Timing. Prior to approval of the final development plan, the Community Fire Protection Plan shall be prepared and submitted to the City Natural Resources Manager and SLOFD for review and approval, with coordination from the San Luis Obispo County Fire Department. The Plan shall be implemented consistent with the approved maintenance schedule.

Monitoring. The City-qualified biologist shall submit a monitoring report to the City Natural Resources Manager and SLOFD at the end of the first year following Project occupancy documenting the fuel management activities that took place. Conformance with the Community Fire Protection Plan shall be demonstrated through the submittal of annual photo documentation by the Applicant or site visits as necessary at the discretion of the Compliance monitoring staff.

MM HAZ-3 *The Froom Ranch Specific Plan (FRSP) shall designate smoking areas, located away from onsite fire hazards areas and within acceptable locations*

consistent with Chapter 8.16, Smoking Prohibition and Secondhand Smoke Control, of the City Municipal Code. Otherwise, smoking shall be prohibited onsite. The Applicant shall amend the FRSP to include policies to requiring the allowed use of fire resistant landscaping and hardscaping in areas to reduce mulch/gorilla hair, which is the receptive embers, if determined appropriate by SLOFD.

Plan Requirements and Timing. Prior to adoption of the Final FRSP, the Applicant shall amend the Final FRSP to include these policies. The Applicant shall coordinate with SLOFD to identify appropriate locations for designated smoking areas and appropriate fire resistant landscaping and hardscaping features within the Project site.

Monitoring. The Final FRSP shall be reviewed by the SLOFD and City for inclusion of the above measure.

MM HAZ-4 *The Applicant shall prepare and implement an Evacuation Plan, which shall address both Villaggio and Madonna Froom Ranch areas. The Evacuation Plan shall be subject to review by the City and SLOFD, and shall include, but not be limited to:*

- *Accommodation for assisted living and special care individuals;*
- *Shelter-in-place accommodations;*
- *Specified quantity and capacity of vehicles required to accommodate residents and employees of Villaggio, and maintenance of those vehicles;*
- *Signage that clearly indicates evacuation routes and meeting areas;*
- *Specified egress points for transportation vehicles;*
- *A relocation plan from the Project site to a secondary facility, with associated transportation;*
- *Contingency plans for changes to the construction schedule or phasing plan that would affect the primary evacuation plan and routes;*
- *Periodic updates that would consider potential redevelopment activities or other roadway alterations; and*

- *Regular practice drills (e.g., one per year) for implementation of the Evacuation Plan.*

Plan Requirements and Timing. The above Evacuation Plan shall be prepared in coordination with the SLOFD and the San Luis Obispo County Fire Department and submitted for approval to the City and SLOFD prior to adoption of the Final VTTM. The Applicant shall resubmit the Plan to the City and SLOFD prior to the construction of each phase of development. Prior to occupancy of the first residential unit, the Applicant shall implement measures within the Evacuation Plan.

Monitoring. The City and SLOFD shall review the Evacuation Plan and ensure all recommendations are incorporated. The City Fire Marshall shall inspect the Project site for compliance prior to the occupancy of the first residential unit for each phase.

MM HAZ-5 *The Froom Ranch Specific Plan (FRSP) shall designate fire access routes in at least two locations from the Project site to the Irish Hills Natural Reserve on at least 12-foot wide paths, one extending from Villaggio and one from Madonna Froom Ranch. Fire access routes shall be designed to allow emergency response to wildland area in the Irish Hills to support direct access for firefighting personnel and equipment.*

Plan Requirements and Timing. Prior to adoption of the Final FRSP, the Applicant shall amend the Final FRSP to include the required accessway, in coordination with SLOFD to identify appropriate locations within the Project site.

Monitoring. The Final FRSP shall be reviewed by the SLOFD and City for inclusion of the above measure.

Residual Impacts

Exacerbated fire hazards that could occur during construction and operation of the Project would require implementation of MM HAZ-1 through MM HAZ-5 to reduce potentially significant impacts. MM HAZ-1 would be required to reduce impacts from the risk of fire ignition from construction activities, limiting the potential for fires ignited by construction activities to the furthest extent feasible. Implementation of mitigating fire protection measures during construction phases would reduce the risk of fire caused by construction

activities through personnel briefings and provision of fire safety equipment such as extinguishers, designated smoking areas, and access to water tenders during construction. MM HAZ-2 would reduce the potential impacts of Project introduction to an area with biofuels that may cause a wildfire incident, reducing fire hazards associated with vegetation and biofuel mass. This would require defensible space around the Project's habitable structures, which has the potential to affect the adjacent Irish Hills Natural Reserve if the defensible space is not confined to the Project site. Implementation of MM HAZ-3 would be required to reduce the risk of wildfire from smoking by residents of the Project. This mitigation would maintain consistency with the City-wide smoking policies, ensuring that smoking within privately and publicly maintained spaces does not occur adjacent to areas with high fire hazards (City Municipal Code Section 8.16).

To ensure that the Project would not substantially impair an emergency operation or evacuation plan, MM HAZ-4 would require the development and implementation of a Project-specific Evacuation Plan, ensuring resources are available to safely evacuate persons within the Project site, with consideration for changes to the anticipated construction schedule or potential development activities. Finally, MM HAZ-5 would ensure emergency responders can directly access the Irish Hills through the Project site in the event of wildfire, including personnel and equipment. However, compared to existing conditions in which firefighters are currently able to stage at the Project site and are allowed full, unhindered access to the Irish Hills, the Project with incorporation of this measure would continue to impair access for fire fighting personnel.

These measures would reduce the range of wildfire risks associated with the Project. However, given the location of the site at the base of the Irish Hills with slopes, vegetation, and winds that put the Project site and surrounding areas at risk for wildfire impacts, the mitigation measures would not reduce the potentially impact to a level of insignificance. Occupants would still be exposed to wildfire hazards and secondary impacts to the Irish Hills would continue to occur from offsite fuel management (refer to Section 3.4, *Biological Resources*), and emergency response to wildfire in the Irish Hills would continue to be impaired by the Project as currently designed . Therefore, with implementation of the above mitigation, impacts related to wildland fires with associated threat of damage to structures and loss of life, would be *significant and unavoidable*.

Impact HAZ-2 The Project would potentially expose persons to toxic, hazardous, or otherwise harmful chemicals through accidental release of hazardous materials into the environment (Less than Significant).

Large quantities of hazardous materials would not be introduced to the area as a result of potential land use changes anticipated to occur under the Project. As detailed below, the Project would not create new significant hazardous conditions or exacerbate existing hazardous conditions.

Transport of Hazardous Materials

The transport of potentially hazardous materials would continue to occur on arterial roads in the area, such as U.S. 101 or LOVR. The transport of large quantities of hazardous materials is subject to applicable federal, state, and local regulations to reduce the risk of accidental spills, leaks, fire, or other hazardous conditions. Future land uses under the Project are not anticipated to involve the transport of unusually high volumes of hazardous materials. Further, documentation for all hazardous materials that are transported for individual Project site activities would be provided as required for compliance with existing federal and state hazardous materials regulations. The U.S. Department of Transportation Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials. Compliance with applicable regulations, as well as oversight by the appropriate federal, state, and local agencies tasked with hazardous materials management, would minimize the risk of hazardous materials exposure during transport.

Use and Storage of Hazardous Materials

New residential and commercial uses in the Project site would involve the routine use and storage of common types of hazardous materials for cleaning and maintenance operations, such as paints, fuels, solvents, and cleaning products, as well as limited medical supplies and waste. Potentially hazardous materials that would be used and stored within the Project site would be typical of those found in urban areas (e.g., paints, fuels/lubricants, cleaning solvents, adhesives, sealers, and pesticides/herbicides); however, these hazardous materials would not pose a significant risk to the public or the environment and would be used in limited quantities associated with residential and general commercial land uses.

Further, any business that handles or uses hazardous materials above regulatory levels would be required to comply with federal, state, and local regulations and standards established by the U.S. EPA, CalEPA, the County, and the City to protect the public health and safety. Businesses are required to comply with health and safety and environmental protection laws and regulations, including the City's Municipal Code.

Disposal of Hazardous Materials

Because no ASTs or USTs are known to exist within the Project site, there is low potential for the release of hazardous materials from these sources during Project grading and excavation activities. However, as described above, the Project site may have residual hazardous materials from previous land uses, such as fuels, oils, fertilizers, decomposing construction materials, and limited amounts of pesticides and herbicides. Grading activities may release these hazardous materials. However, given that the site is largely undeveloped and was historically used for grazing and dairy operations, the risk of contamination is extremely low. Further, federal, state, and local regulations govern the disposal of hazardous wastes. Additionally, asbestos-containing material (ACM), lead-based paint (LBP), or other hazardous materials encountered during demolition or construction activities would be disposed of in compliance with all pertinent regulations for the handling of such waste, including SLO County APCD NESHAP requirements and CCR Title 8, Industrial Relations.

Operation of the Project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. In addition, operation of residential and commercial uses within the Project site would entail routine cleaning and maintenance activities using common hazardous materials, such as cleaning fluids, detergents, solvents, adhesives, sealers, paints, fuels/lubricants and pesticides/herbicides, etc. However, applications of such materials would be in limited (i.e., not commercially reportable) quantities and would be handled in compliance with federal, state, and local regulations pertaining to their transport, use, or disposal.

Ultimately, the existing Project site conditions do not indicate that substantial safety risks from hazardous materials are present that may be exacerbated. Additionally, implementation of the Project would not substantially increase the risk from hazardous materials to the public within the Project site or within the surrounding area. Therefore, compliance with standards and regulations would ensure that the risk of hazardous materials impacts would be *less than significant*.

Impact HAZ-3 The Project site is located within Airport Land Use Plan (ALUP) Safety Areas and would potentially result in an airport-related safety hazard for people residing or working in the Project site (Less than Significant).

Airport safety is primarily related to the potential for accidents related to aircraft operations such as emergency landings or in rare cases crashes, excessive noise levels caused by frequent aircraft flyover, and ensuring that land use development is carried out in a manner that minimizes risks associated with aircraft hazards. Minimizing or avoiding risks to residential and commercial land uses involves designating areas around the ends of runways that must be free of objects or sensitive land uses, limiting the height of new structures in the surrounding airspace, and understanding historical accident patterns. The Project site's proximity to the Airport would present a potential airport-related safety issue for future development, if development intensities exceed the standards established by the ALUC and the California Airport Land Use Planning Handbook. The risk of an aircraft accident increases with proximity to the runway and its approach path.

The Project site is located approximately 1.7 miles away from Runway 7-25, which supports only 3 percent of Airport aircraft operations. The majority of the Project site is outside of the general approach areas of Runway 7-25. Although a small portion of residential and commercial uses in the northeastern corner of the site are within Aviation Safety Sub-Areas S-1B and S-1C of the existing ALUP, developable land uses proposed under the Project are largely located within Aviation Safety Area S-2, which generally indicates areas of overhead aircraft turning movements. The maps prepared as part of the Johnson Aviation Report depicting Airport hazards based on the Caltrans Handbook Safety Compatibility Zones depict the Project site as being located entirely outside of the airport safety compatibility zones and susceptible to airport hazards. The ALUP is currently in the process of being updated, including the Safety Areas. Further, the ALUC conceptually reviewed the Project on April 19, 2017 and advised that the Project should comply with Aviation Safety Area S-2 restrictions at a minimum. Given the ALUC's preliminary determination of the Project and the pending ALUP update, the Project is analyzed for airport safety against the Caltrans Handbook Safety Compatibility Zones identified in the Johnson Aviation Report.

While small portions of the Project site lie within Safety Sub-Areas S-1B and S-1C of the 2005 ALUP, more recent analysis of Airport hazards indicates the safety risks may differ from the 2005 ALUP. Using the criteria in the California Airport Land Use Planning Handbook, the Project site falls outside of the Aviation Safety Areas (Johnson Aviation 2014). While the 2005 ALUP Safety Area maps are adopted by the ALUC, the actual Airport risks are very low onsite according to the more recent San Luis Obispo Airport Land Use Compatibility Report prepared by Johnson Aviation in 2014 based on the California Airport Land Use Planning Handbook. Accordingly, no substantial physical

airport-related safety hazard is expected to occur as result of Project implementation. Further, the Project would be subject to review by the ALUC for consistency with the ALUP and Airport Safety Areas.

With regard to excessive airport noise, noise from aircraft overflights do not generate excessive noise levels under current and projected airport operations and would not substantially affect the health or safety of future Project residents. Therefore, aviation-related safety impacts to residents and commercial employees or patrons within the Project site would be *less than significant*.

3.7.3.4 Cumulative Impacts

Cumulative hazards from wildfire would be exacerbated by additional construction and operation of urban uses within the City and region along the wildland-urban interface. Projects within this area would introduce additional fire hazard-related risks that would place additional people and structures at risk of damage. Further, the heightened potential for future fire hazards from the influence of climate change and warmer conditions, as discussed in Section 3.7.1.3, *Wildfire Risk*, would contribute to the potential for a higher frequency, intensity, and size of fires that may occur within the Project site vicinity and overall region. Adherence to the CFC, City Municipal code, policies within the General Plan SE, and review of discretionary projects by the SLOFD would reduce potential wildfire hazards, but given the high potential for wildfire near the City, the potential for cumulative development to exacerbate wildfire hazards is *significant and unavoidable*.

Cumulative projects within the City and the Project vicinity would have the potential to expose future area residents, employees, and visitors to chemical hazards through development of sites and structures that may be contaminated from either historic or ongoing uses. The severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Discretionary projects proposed in the City would be required to undergo individual environmental review, including review of potential impacts related to hazards and hazardous materials that are applicable to that particular development site and proposed use. Additionally, projects would also be subject to the local, state, and federal standards which require the safe removal of potentially hazardous building materials and the cleanup of contaminated properties, thus reducing the level of risk on a particular site. Because development standards or remediation requirements would be applied if hazards or hazardous materials posed a risk to safety, the Project's cumulative impacts associated

with exposure to hazards or hazardous materials would not be cumulatively considerable. Therefore, the Project's contribution to cumulative impacts are *less than significant*.

In addition, several cumulative projects listed within Table 3.0-1 are also within the ALUP Safety Areas, thereby potentially exposing persons to risk of airport safety hazards. These primarily include residential units and commercial developments near the Airport, such as the San Luis Ranch Specific Plan and Avila Ranch Development Plan projects. However, these projects are subject to review of airport-related hazards during the environmental review process and by the ALUC, which would ensure that development does not impose an aviation-related hazard on structures or people. In addition, the incremental increase in airport safety hazards at the Project site would be negligible and would not be cumulatively considerable. Therefore, cumulative impacts from airport hazards would be *less than significant*.

3.8 HYDROLOGY AND WATER QUALITY

Froom Creek, an approximate 3.5-mile-long stream, bisects the 116.8-acre Project site and is a tributary to San Luis Obispo Creek.

This section of the EIR describes the potential impacts of the Project – including the realignment of Froom Creek within the Project site – on flooding, water quality, and other hydrologic conditions in the Froom Creek watershed. The information and analysis presented in this section is based largely upon Applicant-prepared technical studies, particularly for onsite flooding, which were subject to initial peer review by EIR consultant technical specialists, revisions, and final review and approval by the City. Please refer to Section 3.8.3.2, *Impact Assessment and Methodology* for a list of sources of information utilized in this section. For a discussion of potential impacts to wetland and stream habitats, please refer to Section 3.4, *Biological Resources*.

3.8.1 Environmental Setting

3.8.1.1 Regional Hydrology

According to the Central Coast RWQCB, the Project site is located 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 RWQCB 2017). Within the Estero Bay Hydrologic Unit, the San Luis Obispo Creek watershed drains approximately 83 square miles; Froom Creek is a tributary 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 U.S. 101 until it reaches the southern extent of the Irish Hills where it veers west to the Pacific Ocean near Avila Beach.

Froom Creek drains a 1,162-acre watershed within the Irish Hills.

The Project site is located within the Froom Creek watershed, which is a sub-basin of the San Luis Obispo Creek watershed. Froom Creek is an approximately 3.5-mile-long tributary that extends from the confluence of Froom Creek and San Luis Obispo Creek, immediately downstream of the Project site at U.S. 101 and north and west to the Irish Hills. The Froom Creek watershed drains approximately 1,162 acres (approximately 1.8 square miles) and is bordered on the north by the Prefumo Creek and Sycamore Creek watersheds, on the east by the San Luis Obispo Creek watershed, and on the south by the See Canyon Creek and Lower San Luis Obispo Creek watersheds (Land Conservancy of San Luis Obispo County 2002; Appendix J). Land use within the Froom Creek watershed is predominantly undeveloped open space in the upper reaches and residential and commercial development and grazing land in the lower reach in the Project vicinity.

Flood Hazards

Flooding occurs in response to heavy rainfall, when creek and drainage channels overflow. Flooding may also occur in low-lying areas that have poor drainage, or when culverts become blocked, even during moderate storms. Flood severity can be increased by structures or fill placed in flood-prone areas, and increased runoff resulting from development of impervious surfaces (such as parking lots, roads, and roofs). Floods damage human and natural environments and can have adverse health effects.

Low-lying valleys within the San Luis Obispo Creek watershed periodically experience substantial flood. Flooding within the San Luis Obispo Creek system is generally caused by intense Pacific storm systems that occur during annually from December through March. The great topographic variability of the watershed causes these systems to release large amounts of precipitation, especially along the higher ridgelines. For example, the Irish Hills, located just west of the Project area and cresting at approximately 1,650 feet in elevation, can experience twice the rainfall observed in the lower portions of the watershed

at the Project site. This upper-elevation rainfall is ultimately channeled through the Project site via Froom Creek to connect to San Luis Obispo Creek.

San Luis Obispo Creek water flows can respond very quickly to short high-intensity rainfall bursts. The San Luis Obispo Creek watershed is steep and is characterized by high-magnitude, short-duration floods. Floods have been a continuing problem along San Luis Obispo Creek, and significant flooding along the creek has been recorded in 1884, 1897, 1948, 1952, 1969, 1973, 1978, and 1995. In addition, many minor waterways, including Froom Creek, drain into one or more of the four major drainage features that create flood hazards in the City (i.e., San Luis Obispo Creek, Stenner Creek, Prefumo Creek, and Old Garden Creek). These minor waterways, although having relatively small drainage sheds, can also present flood hazards to lives and property, due to their steep slopes and high gradient that can lead to intense, fast moving flood events.

Flood zone mapping and drainage improvements are based on the probability of a certain amount of rainfall within a defined timeframe, usually 24 hours. From rainfall gauge records, the size of a storm that has a 1-percent probability of occurring in any one year within a watershed can be calculated. A storm with this probability is often referred to as the "100-year storm" or "Q100" since at least one such storm would be expected to occur in a 100-year period, and the associated overflow termed the "100-year flood." Similarly, a storm that has a 4 percent probability of occurring in any one year is referred to as the "25-year storm," and flows from this storm are called "Q25" flows or 25-year floods.

Water Quality

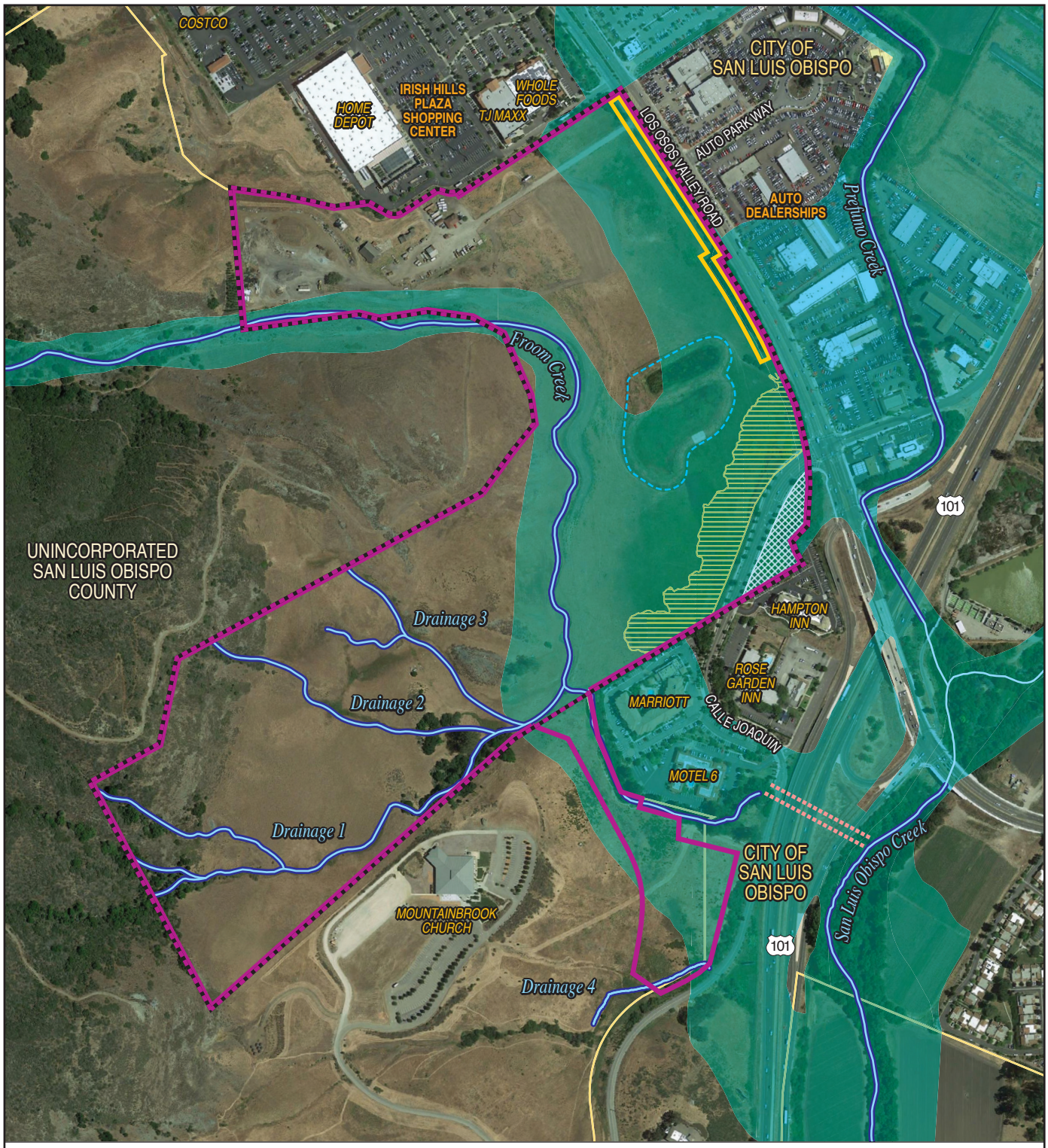
All storm drains within the City lead directly to creeks and ultimately to the Pacific Ocean. None of this stormwater is treated in a municipal treatment plant before entering these water bodies, although many more recent urban development projects include a variety of onsite stormwater treatment features designed to protect water quality. According to the Central Coast RWQCB, the two primary sources of pollutants to the watershed are uncontrolled sediment and agricultural runoff. The Central Coast RWQCB also notes that many other sources are also contributors, including pollutants from vehicles (e.g., oil, gasoline, and other fluids), trash, pharmaceuticals, and household chemicals. Infiltration and inflow into the wastewater collection mains causes excessive wet weather flows and can lead to intermittent discharges of partially treated wastewater to San Luis Obispo Creek (Central Coast RWQCB 2017).

The City's Public Works, Utilities, and Community Development Departments are responsible for coordinating the implementation of the City's Stormwater Management Plan (SWMP). This comprehensive program is required under the Phase II Stormwater Regulations regulated by SWRCB, San Luis Obispo Region. The primary goal of the program is to minimize urban runoff that enters the municipal storm drain system, and carries bacteria and other pollutants into the local creeks, watershed, and to the ocean. As part of these requirements, the City has been mandated to establish a set of minimum designated BMPs and Pollution Prevention Methods (PPMs). BMPs are steps taken to minimize or control the amount of pollutants and runoff. PPMs are strategies to eliminate the use of polluting materials, and/or not exposing potential pollutants to rainwater or other runoff.

San Luis Obispo Creek below Marsh Street and the City's Downtown is designated by the Central Coast RWQCB as having present and potential beneficial uses for municipal supply; agricultural supply; recreation; groundwater recharge; wildlife habitat; warm and cold fresh water habitat; migration of aquatic organisms; spawning, reproduction, and/or early development of fish; and commercial and sport fishing. According to the Central Coast RWQCB, surface water quality in the San Luis Obispo Creek drainage system is generally considered to be good. However, the water quality fluctuates along with seasonal changes in flow rates. In summer months, when the flows decrease, water quality decreases. Degradation of San Luis Obispo Creek water quality is generally due to municipal discharge and agricultural runoff, as well as urban runoff. San Luis Obispo Creek is on the 2010 CWA Section 303(d) list of impaired waters for nutrients and pathogens, where nitrate-nitrogen and fecal coliform total maximum daily load (TMDL) levels exceed the Basin Plan numerical targets. As such, the use of National Pollutant Discharge Elimination System (NPDES) permits, Municipal Separate Storm Sewer System (MS4) permits, and Waste Discharge Requirements permits for irrigated lands and the City's Water Reclamation Facility are required (Central Coast RWQCB 2017).

Groundwater Resources

The City is underlain by the San Luis Obispo Valley Groundwater Basin, within which depth to groundwater is estimated to be 15 to 25 feet below ground surface (bgs). The majority of recharge to the basin is from precipitation falling in the hills to the west, north, and east. Refer to Section 3.14, *Utilities and Energy Conservation*, for more discussion on groundwater supply.



wood.

Existing Drainage Conditions on the Project Site

FIGURE 3.8-1

Groundwater quality is determined principally by the chemical nature of the sediments and rocks within which the groundwater is contained. Groundwater is typically evaluated for its chemical constituents to assess current conditions and potential beneficial uses, or to identify possible contamination sources. Chemical constituent sources can be natural (e.g., contact with mineralized rock) or human-related (e.g., pesticide or fertilizer contamination). Groundwater within the San Luis Obispo area is considered suitable for agricultural water supply, municipal and domestic supply, and industrial use. Groundwater quality in the San Luis Obispo Valley Groundwater Basin has been reduced in part due to the degradation of surface waters in San Luis Obispo Creek. Groundwater in the unconfined aquifers within the basin contains high levels of nitrates, iron, manganese, and organic compounds.

3.8.1.2 Project Site Hydrology

Runoff is conveyed on the Project site through natural and man-made drainage features and infrastructure. Froom Creek flows across the site in a north-to-south trajectory ultimately passing through two box culverts beneath Calle Joaquin and U.S. 101 before its confluence with San Luis Obispo Creek. There are four unnamed drainages that flow through the site from the Irish Hills, including Drainages 1, 2, and 3 in the Upper Terrace, and Drainage 4 to the south through the Mountainbrook Church property (Figure 3.8-1). Man-made stormwater infrastructure includes the LOVR ditch and the 3.2-acre existing stormwater detention basin in the Lower Area. These features receive runoff from the adjacent Irish Hills Plaza with some runoff from LOVR. Stormwater from the LOVR ditch and the existing stormwater detention basin either percolates/evaporates in place or under storm conditions flows to the Calle Joaquin wetlands. As described further below, the site's hydrologic setting has related flood hazards, high groundwater, and drainage constraints during storm events.

Onsite Drainage

Site topography causes onsite drainage to flow east and south across the site toward the lower elevation of the site near the Calle Joaquin wetlands. Froom Creek flows into the Project site from the west and then bends sharply to the south to bisect the Project site from north to south for approximately 0.4 miles (Figure 3.8-1). Froom Creek flows to the southeast for approximately 0.2 miles toward Calle Joaquin adjacent to the southern boundaries of the Marriott Hotel and Motel 6 properties before ultimately passing through a concrete double box culvert that conveys flows for nearly 300 feet under Calle Joaquin,

the main travel lanes of U.S. 101, and the northbound U.S. 101 offramp and ultimately to San Luis Obispo Creek.

Froom Creek traverses the Project site within a narrow channel composed of rock, gravel, and sand. Evidence of eroded, undercut banks from high-velocity flows was observed onsite (January 2018)

The Froom Creek channel onsite averages 30 feet in width and occupies roughly 2.1 acres. Froom Creek's alignment appears to have been substantially altered over time. Although the exact alignment of all historic tributaries and drainages is unknown, based on historic USGS topographic maps prior to 1940, Froom Creek was aligned along the north and eastern boundaries of the site near LOVR where it connected with Prefumo Creek before ultimately feeding into San Luis Obispo Creek. Since that time, Froom Creek has been realigned and reinforced through construction of an artificial earthen berm along the eastern bank of the creek in 2013. In dry weather, the creek bed is generally dry and devoid of vegetation within the Project site, with seasonal ponding of water in deeply incised segments. During wet weather, Froom Creek conveys substantial flows through the site, as the channel drains the 1,162-acre Froom Creek sub-watershed. Alteration of Froom Creek alignment and confinement to narrow channel has resulted in higher velocity flows, increased erosion, and significant bank cutting during larger storm events (Appendix J).

The man-made drainage ditch adjacent to LOVR conveys stormwater runoff from adjacent development to the north and east. Prolonged ponding of runoff has resulted in the establishment of high-quality wetland and riparian habitats.

Another key onsite drainage feature is the LOVR ditch, a roadside ditch adjacent to LOVR that conveys surface runoff from the roadway and the Irish Hills Plaza to the north. This ditch conveys these flows to the southeast toward the Calle Joaquin wetlands where they commingle with high groundwater to help sustain sensitive wetland and riparian scrub habitats (see Section 3.4, *Biological Resources*). These waters eventually flow south to a 36-inch storm drain that conveys water under Calle Joaquin and adjacent hotels and under U.S. 101 and into San Luis Obispo Creek. Based on field observations in January 2019, the Calle Joaquin wetland may also discharge into a 12-inch and/or 24-inch storm drain that conveys flows under Calle Joaquin to an isolated 1.77-acre area of the Project site, which is bounded by Calle Joaquin to the north and west, the Hampton Inn and Suites parking lot to the south, and LOVR to the east (Figure 3.8-1). These flows support approximately 1.0 acre of existing wetland, which is hydrologically connected under Calle Joaquin to the larger wetland. Water in these wetlands either percolates into the groundwater or evaporates.

The Calle Joaquin wetlands are fed primarily by surface flows across the site and from the LOVR ditch, runoff from Irish Hills Plaza, and high groundwater levels.

Four unnamed natural drainages carry surface runoff from undeveloped upper elevations of the site and the Irish Hills. These three drainages – designated Drainage 1, Drainage 2, and Drainage 3 – generally flow downslope from northwest to southeast (Figure 3.8-1). The three drainages are approximately 3,200 feet, 1,400 feet, and 1,100 feet in length, respectively. These drainages are partially fed by several on-and offsite seeps or springs, where water "daylights" out of the ground at fractures in the serpentine bedrock (see also, Section 3.6, *Geology and Soils*). Natural runoff and these springs and seeps support wetland habitat within each of these drainages (refer to Section 3.4, *Biological Resources* for more discussion). Drainage 4 flows for approximately 400 feet through the southernmost portion of the Project site and flows to San Luis Obispo Creek through a separate culvert; Drainage 4 does not flow to Froom Creek.

Offsite Drainage

Runoff from adjacent Irish Hills Plaza flows to onsite detention features on the Project site, including a 3.2-acre basin, and creates pooling in a former infiltration area adjacent to the existing driveway (pictured).

Runoff from the Irish Hills Plaza to the north drains onto the site through a 48-inch underground storm drain. This pipe runs from the western corner of the Irish Hills Plaza across the Project site to an approximately 3.2-acre stormwater detention basin developed and sized to contain runoff from the Irish Hills Plaza. This detention feature consists of a desiltation forebay, a main basin, and concrete spillway which, during large storm events, discharges runoff into the Calle Joaquin wetlands. A perimeter drain catches dry weather runoff (i.e., low flow) and conveys to the Calle Joaquin wetlands via a perimeter drain outlet adjacent to LOVR. Runoff from the Irish Hills Plaza may also flow onto the Project site via an existing culvert that discharges water into a low-lying drainage easement where water ponds and percolates into the ground or evaporates. Lastly, runoff from development to the north is also conveyed onto the Project site via a storm drain underneath the Irish Hills Plaza southern access road and into the manmade LOVR ditch located on the Project site's eastern boundary and adjacent to LOVR.

Properties adjacent to the east of the Project site include LOVR and automobile dealerships. Some runoff from LOVR may sheet flow and drain to the LOVR ditch which flows to the Calle Joaquin wetlands. Other runoff from LOVR and development to the west drains to storm drains that discharge to Prefumo Creek and/or San Luis Obispo Creek.

Peak Flows and Overtopping of Froom Creek Banks

An important component of the hydrologic analysis of a watershed is the timing of the peak flows that result from a rainfall-runoff event. As precipitation in a given storm rises and falls in intensity over time, the resulting runoff, or discharge, also rises and falls over time. Factors that influence the volume of runoff include: 1) rainfall intensity and pattern; 2) areal distribution of rainfall over the watershed; and 3) duration of the storm event. Physiographic factors of importance include: 1) size and shape of the drainage area; 2) nature of the stream network; 3) slope of the land and the main channel; 4) storage detention in the watershed; and 5) vegetation conditions of the watershed. Existing peak flows were estimated for the Froom Creek watershed, which includes the Specific Plan area, to the Froom Creek confluence at the double box culvert at U.S. 101. Peak flow calculations by storm severity are summarized in Table 3.8-1. Based on these conditions, overbanking of the Froom Creek channel may occur during at least a 10-year storm event (Appendix J).

Table 3.8-1. Existing Peak Flows in Froom Creek

Storm Occurrence Condition	Total Creek Flow (Overbank Flowrate) (cfs)
2-year	253.3 (0)
10-year	521.5 (89.4)
25-year	714.3 (282.2)
50-year	867.6 (435.5)
100-year	980.4 (548.3)

Source: Appendix J; Existing Froom Creek Hydrologic Analysis.

Flood Hazards

Given peak flows and capacity of the existing channel, Froom Creek has a history of periodic flooding with estimated overbank flows occurring every five to six years (Balance Hydrologics, Inc. 2005; Appendix J). The potential for overtopping and flooding of the Lower Area has been reduced since the 2013 installation of an artificial earthen berm that confines Froom Creek to its perched location on the eastern edge of the site (Appendix J). However, the existing Froom Creek

An existing double box culvert under U.S. 101 conveys water from Froom Creek to San Luis Creek. This box culvert is inadequately sized to convey flows from storm events larger than 10-year storms.

channel does not have adequate capacity to convey 100-year storm events to the U.S. 101 culverts. Consequently, in a 100-year storm, Froom Creek overtops its existing banks and sheet flows towards existing the LOVR ditch and the Calle Joaquin wetlands with localized flooding and ponding onsite. As a result, the Lower Area and portions of Madonna Froom Ranch include flood hazard areas. Approximately 35 percent of (38.4 acres) of the Specific Plan area lies within the 100-year floodplain hazard area of Froom Creek (Figure 3.8-1). These flood prone areas include the channel of Froom Creek and the low-lying areas along LOVR and Calle Joaquin that fall within Zone A of the 100-year floodplain as mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRM).[1] The existing concrete box culverts under U.S. 101 east of Calle Joaquin are inadequately sized to convey flows from storm events larger than 10-year storms. This physical limitation results in stormwater back-up, localized flooding, and U.S. 101 being overtopped during a 10-year storm when flows would exceed 547 cubic feet per second (cfs) (Appendix J). This flooding can require road closures and result in damage to infrastructure and buildings.

Groundwater Resources

The Project site overlies the San Luis Obispo Valley Groundwater Basin and flows toward the east-southeast, following the general gradient of surface topography. The lower areas of the Project site lie in a valley that is underlain by up to 200-feet-thick alluvium comprised of shallow alluvial fan deposits near the historic Froom Ranch Dairy complex and shallow clayey deposits elsewhere by permeable sand and gravel beds. The clayey deposits confine groundwater in these deeper sand and gravel beds but do allow for gradual upward leakage contributing water to the Calle Joaquin wetlands. Thus, groundwater levels are high in the lower elevations of the Project site adjacent to LOVR and portions of Calle Joaquin.

Groundwater recharge occurs from percolation of runoff where shallow alluvial fan deposits and stream channel deposits are present.

Groundwater level measurements in the eastern-lower elevations of the site found groundwater levels of about 10 feet bgs at the Madonna domestic well on the west and at ground surface at the Artesian Well by Calle Joaquin on July 31, 2018. The depth to water in the proximity of the existing stormwater detention basin was measured in several

[1] Zone A consists of areas of a floodplain where no base flood elevation has been determined; FIRM Number 06079C1330H, 06079C1331G, and 06079C1068G.

backhoe pits on September 20, 2018. The depths to water in the backhoe pits around the basin were between 3 and 6 feet and inside the basin the depths to water were 2.3 feet (forebay) and 2.6 feet (detention) below the lowest point in the basins. Based on historic groundwater monitoring at the Calle Joaquin wetlands, the groundwater level at the wetlands fluctuates seasonally 2 to 4 feet with a range of about 4 feet (from 3 feet bgs to 1+ feet above ground). During wet years during winter, groundwater levels are near ground surface in the higher topographic areas of the valley and in the lower elevation wetland area above ground surface. Historically, the groundwater levels declined more than 30 feet as a result of regional groundwater extraction during the 1987-1991 drought. During the most recent 2012-2017 drought, groundwater levels remained within 10 feet of ground surface over most of the Project area (Cleath-Harris Geologists, Inc. 2018; Appendix J). Groundwater has not been observed in the western upper-elevations of the Project site, though several springs have been mapped in this area, including the confluence of Drainages 1, 2, and 3 in the Upper Terrace (Appendix J).

No known sources of active groundwater contamination are located within the Project site. A total of eight groundwater contamination cleanup sites are located within 0.5-mile of the Project site, seven of these sites are closed leaking underground storage tank sites, and one is active for potential contamination of soils and groundwater along a crude oil pipeline within the U.S. 101 right-of-way near the City Waste Water Treatment Plant property across U.S. 101 to the east (SWRCB 2018). Existing onsite wells are currently idle and no groundwater pumping occurs onsite. However, in 2014, a total of eight shallow monitoring wells were installed adjacent to the Calle Joaquin wetlands to document groundwater levels within the top 18 inches of the soil (Appendix J).

Existing sources of potential groundwater quality contamination or degradation include percolation of leaked fuels and lubricants originating from staged construction equipment, equipment mobilization, and equipment refueling activities. In addition, a small outhouse for the John Madonna Construction Company disposes of wastewater via an existing septic tank near the barn. Wastewater generated by use of the outhouse is stored within the existing septic tank and pumped and disposed of offsite via a permitted third-party liquid waste hauler. There are no known leaks or groundwater contamination issues associated with this permitted septic system.

Water Quality

Froom Creek within the Project site has present and potential beneficial uses for municipal supply; recreation; wildlife habitat; rare, threatened, or endangered species; and

commercial and sport fishing (Central Coast RWQCB 2017). The primary beneficial use of Froom Creek onsite appears to be groundwater recharge, although upstream reaches in the Irish Hills support perennial flows, riparian habitat, and steelhead trout (Appendix J). Froom Creek is not listed on the 2010 CWA Section 303(d) list of impaired waters for any water quality pollutants or constituents.

At the Project site, existing sources of potential surface water quality contamination or degradation include mobilization of leaked fuels and lubricants into Froom Creek or the LOVR ditch from construction equipment, and equipment refueling activities. Frequent disturbance of stockpiled fill materials onsite, particularly within the existing quarry, also represents a potential source of existing water quality degradation associated with increased sedimentation, siltation, or erosion. Urban stormwater runoff generated by the Irish Hills Plaza and conveyed to the Project site via the LOVR ditch also has the potential to mobilize contaminants that would compromise surface water quality in Froom Creek and potentially downstream in San Luis Obispo Creek.

3.8.2 Regulatory Setting

Hydrologic resources and water quality are governed primarily by federal, state, and local laws that would apply to future development under the Project. Some activities under the Project would require coordination and permits from federal, state, and local agencies. Federal, state, and local regulations that are directly relevant to potential impacts associated with the Project are summarized below.

3.8.2.1 Federal

Federal Clean Water Act (CWA)

In 1972, the Federal Water Pollution Control Act (later referred to as the CWA) was amended to require that the discharge of pollutants into waters of the U.S. from any point source be effectively prohibited unless the discharge is in compliance with a NPDES permit. In 1987, the CWA was again amended to require that the USEPA establish regulations for the permitting of stormwater discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that MS4 discharges to surface waters be regulated by an NPDES permit.

The CWA requires states to adopt water quality standards for water bodies and have those standards approved by USEPA. Water quality standards consist of designated beneficial

uses for a particular water body (e.g., wildlife habitat, agricultural supply, and fishing), along with water quality criteria necessary to support those uses. Water quality criteria include quantitative set concentrations, levels, or loading rates of constituents—such as pesticides, nutrients, salts, suspended sediment, and fecal coliform bacteria—or narrative statements that represent the quality of water that support a particular use.

CWA Section 303, List of Water Quality Limited Segments: Section 303 of the CWA requires that the State adopt water quality standards for surface waters. When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. Once a water body has been deemed impaired, a TMDL must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a "factor of safety" included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

CWA Section 402, National Pollutant Discharge Elimination System: Direct discharges of pollutants into waters of the U.S. are not allowed, except in accordance with the NPDES program established in Section 402 of the CWA. Non-point source discharges to stormwater are regulated under stormwater NPDES permits for municipal stormwater discharges, industrial activities, and construction activities. These permits require development of and adherence to a Storm Water Pollution Prevention Plan (SWPPP).

CWA Sections 404 and 401: Under Section 404 of the CWA, the USACE regulates the discharge of dredged or fill material into waters of the U.S., which are those waters that have a connection to interstate commerce, either directly via a tributary system or indirectly through a nexus identified in the USACE regulations. Under Section 401 of the CWA, the SWRCB must certify all activities requiring a permit in accordance with Section 404. The RWQCB regulates these activities and issues water quality certifications for those activities requiring a 404 permit.

3.8.2.2 State

California Department of Fish and Wildlife (CDFW)

Any work that is within CDFW jurisdiction, which includes the Froom Creek riparian zone, requires permitting through CDFW. Section 1602 of the Fish and Game Code requires an

entity notify the CDFW prior to commencing any activity that may substantially divert or obstruct the flow of any channel or bank.

California Department of Water Resources (DWR)

DWR is the state agency that studies, constructs, and operates regional-scale flood protection systems, in partnership with federal and local agencies. DWR also provides technical, financial, and emergency response assistances to local agencies related to flooding.

Several bills were signed by Governor Schwarzenegger in 2007, adding to and amending state flood and land use management laws. The laws contain requirements and considerations that outline a comprehensive approach to improving flood management at state and local levels.

State Water Resources Control Board (SWRCB) & Central Coast Regional Water Quality Control Board (RWQCB)

The Porter-Cologne Act mandates that waters of the state shall be protected such that activities that may affect waters of the state shall be regulated to attain the highest quality. The SWRCB is given authority to enforce Porter-Cologne Water Control Act as well as Section 401 of the Clean Water Act and has adopted a statewide general permit that applies to almost all stormwater discharges. This general permit, which is implemented and enforced in the San Luis Obispo area, is implemented by the local Central Coast RWQCB and requires all owners of land where construction activity occurs to:

- Eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the U.S.;
- Develop and implement a Stormwater Pollution Control Plan emphasizing stormwater BMPs; and
- Perform inspections of stormwater pollution prevention measures to assess their effectiveness.

In addition, SWRCB regulations mandate a "non-degradation policy" for state waters, especially those of high quality. Under the authority of the SWRCB, the protection of water quality in San Luis Obispo Creek and its tributaries is under the jurisdiction of the Central Coast RWQCB. The RWQCB establishes requirements prescribing the quality of point sources of discharge and establishes water quality objectives. These objectives are established based on the designated beneficial uses for a particular surface water or groundwater. Within city limits of San Luis Obispo, the jurisdiction for the water quality

of the San Luis Obispo Creek Watershed overlaps with the city public works and utilities agencies.

In accordance with the California Water Code, the Central Coast RWQCB developed a Water Quality Control Plan for the Central Coast Basin (2017) designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Water quality objectives for the Central Coastal Basin satisfy state and federal requirements established to protect waters for beneficial uses and are consistent with existing statewide plans and policies.

The Central Coast RWQCB has adopted Watershed Management Zones (WMZs) and Post-Construction Requirements (PCRs) that apply to projects in the Central Coast Region. Four PCRs are applied by WMZ to reduce pollutant discharges and prevent stormwater discharges from contributing to or causing violation of water quality standards. The PCRs address site design and runoff reduction, water quality treatment, runoff retention, and peak management.

3.8.2.3 Local

The protection of water quality in San Luis Obispo Creek and its tributaries is under the jurisdiction of the RWQCB. The City also has the responsibility for regulating water quality under its NPDES MS4 permits program. This board establishes requirements prescribing the quality of point sources of discharge and establishes water quality objectives. These objectives are established based on the designated beneficial uses for a particular surface water or groundwater. Within the City limits, the jurisdiction for the water quality of the San Luis Obispo Creek Watershed overlaps with the City Public Works and Utilities agencies.

City of San Luis Obispo General Plan

The City addresses hydrology and water quality issues through implementation of adopted General Plan policies and programs. These policies are found in the General Plan LUE, COSE, and SE. The goals and policies from the existing General Plan relate to protecting water quality and minimizing flood hazard risk within the City. The City seeks to protect and enhance creek corridors to promote wildlife and water conservation. The City seeks to accomplish these goals by promoting responsible stormwater management techniques including using porous paving, preventing creek bank encroachment, and ensuring new developments do not decrease flood capacity of waterways. Under the General Plan, any

property within the FIRM defined 100-year flood zone is considered as having a hazard potential requiring specified controls or protective measures.

Land Use Element (LUE)

The City has adopted a LUE as part of their General Plan. This element contains the following policies relevant to hydrology and water quality:

Policy LU 6.6.1 Creek and Wetlands Management Objectives. The City shall manage its lake, creeks, wetlands, floodplains, and associated wetlands to achieve the multiple objectives of:

B. Preventing loss of life and minimizing property damage from flooding;

C. Providing recreational opportunities which are compatible with fish and wildlife habitat, flood protection, and use of adjacent private properties.

Policy LU 6.6.5 Runoff Reduction and Groundwater Recharge. The City shall require the use of methods to facilitate rainwater percolation for roof areas and outdoor hardscaped areas where practical to reduce surface water runoff and aid in groundwater recharge.

Policy 6.6.6 Development Requirements. The City shall require project designs that minimize drainage concentrations and impervious coverage. Floodplain areas should be avoided and, where feasible, any channelization shall be designed to provide the appearance of a natural water course.

Policy 6.6.7 Discharge of Urban Pollutants. The City shall require appropriate runoff control measure as part of future development proposals to minimize discharge of urban pollutants (such as oil and grease) into area drainages.

Policy 6.6.8 Erosion Control Measures. The City shall require adequate provision of erosion control measures as part of new development to minimize sedimentation of streams and drainage channels.

Conservation and Open Space Element (COSE)

The City has adopted a COSE as part of their General Plan. This element contains the following goals and policies relevant to hydrology and water quality:

Program COS 7.7.9 Creek Setbacks. As further described in the Zoning Regulations, the City will maintain creek setbacks to include: an appropriate separation from the physical top of the bank, the appropriate floodway as identified in the Flood Management Policy,

native riparian plants or wildlife habitat and space for paths called for by any City-adopted plan. In addition, creek setbacks should be consistent with the following:

A. The following items should be no closer to the wetland or creek than the setback line: buildings, streets, driveways, parking lots, above-ground utilities, and outdoor commercial storage or work areas.

B. Development approvals should respect the separation from creek banks and protection of floodways and natural features identified in part A above, whether or not the setback line has been established.

Goal COS 10.1.3 Water Quality. Protect and maintain water quality in aquifers, Laguna Lake, streams, and wetlands that supports all beneficial uses, agriculture, and wildlife habitat.

Policy COS 10.2.1 Water Quality. The City will employ the best available practices for pollution avoidance and control, and will encourage others to do likewise. "Best available practices" means behavior and technologies that result in the highest water quality, considering available equipment, life-cycle costs, social and environmental side effects, and the regulations of other agencies.

City of San Luis Obispo Municipal Code

17.70.030 Creek Setbacks. The City's Creek Setback requirement applies to all creeks that are shown on Figure 9 of the COSE in the General Plan, including Froom Creek. A 35-foot setback is required for Froom Creek "from the existing top of bank (or the future top of bank resulting from a creek alteration reflected in a plan approved by the City), or from the edge of the predominant pattern of riparian vegetation, whichever is farther from the creek flow line." The setback along all creeks other than those identified in Section 17.70.030 shall be 20 feet.

City of San Luis Obispo NPDES Phase II Program

The City submitted a their SWMP to the Central Coast RWQCB in July 2013 under the NPDES Phase II program. Development is required to be undertaken in strict accordance with conditions and requirements of that program, which includes distinct Post-Construction Requirements for on-site retention/volume control, treatment of runoff, channel protection, flood control, and redevelopment.

San Luis Obispo Waterway Management Plan (WMP) (2003)

The WMP incorporates three volumes: the WMP, the Drainage Design Manual (DDM), and the Stream Management and Maintenance Program. The WMP is a watershed-based management plan for San Luis Obispo Creek and its tributaries within the City and County. The WMP serves as a basis for future project planning, decision-making, and permitting. Volume III of the WMP is a DDM, providing design guidance and criteria intended to meet surface water management objectives, which includes revised policies for floodplain and stream corridor management and new design flows for stream channels within the City. Procedures for hydrologic and hydraulic analysis, and guidelines and criteria for the design of channels, storm drain systems, stormwater detention facilities, bank repair and stream restoration, and erosion control are described within this document. The floodplain management policies in the DDM generally require that fill placed on floodplains be managed so that there is no adverse impact in terms of flooding or bank stability. These are referred to as the "Managed Fill" and "No Adverse Impact" policies of the DDM. The DDM also requires applicants that create adverse hydrologic impacts to fully mitigate them.

Special Floodplain Management Zone Regulations (Managed Fill Criteria)

The City's Floodplain Management Regulations require that all building pads within a 100-year flood zone be raised at least 1 foot above the specified 100-year flood elevation. The regulations also state that, cumulatively, developments will not displace floodwater sufficient to raise the flood elevation more than one foot at any point, without causing damage to any offsite properties. Development of vacant lands in Special Floodplain Management Zone areas have been determined to have a potentially significant effect on downstream flooding and bank stability. These potential impacts can be mitigated by incorporation of the specific floodplain management policies in project design. For any development or subdivision proposal within the 100-year FEMA floodplain, on individual parcels or developments larger than 2.5 acres, the development proposal shall include a Concept Grading Plan and Master Drainage Plan. These Plans shall be submitted to the City or County Public Works Director for approval and shall meet specific criteria, including:

- The project shall not cause the 100-year flood elevation to increase more than 2.5 inches.
- The project shall not cause stream velocities to increase more than 0.3 feet per second.

- The project shall not cause a significant net decrease in floodplain storage volume unless several exceptions are met.

City of San Luis Obispo Engineering Standards

The current Engineering Standards for the City include the following requirements relevant to water quality:

- All new development or redevelopment shall comply with the criteria and standards set forth in the WMP – DDM, applicable area specific plans, and the Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region, adopted by the Central Coast RWQCB, and included in the appendices. Where requirements conflict, the stricter shall apply. Stormwater Control Plan, and Operation and Maintenance Plan are required prior to final approvals.
- **Source Control** (per 2013 State General Stormwater Permit Section E.12.d)**:**
    - Projects with pollution generating activities and sources must be designed to implement operation or source control measures consistent with recommendations from the California Stormwater Quality Association Handbook for New Development and Redevelopment or equivalent, including:
        - Accidental spills or leaks
        - Interior floor drains
        - Parking/storage areas and maintenance
        - Indoor and structural pest control
        - Landscape/outdoor pesticide use
        - Pools, spas, ponds, decorative fountains and other water features
        - Restaurants, grocery stores, and other food service operations
        - Refuse areas
        - Industrial processes
        - Outdoor storage of equipment or materials
        - Vehicle and equipment cleaning, repair, and maintenance
        - Fuel dispensing areas
        - Loading docks
        - Fire sprinkler test water
        - Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources
        - Unauthorized non-stormwater discharges
        - Building and grounds maintenance

- Design should prevent water from contacting work areas, prevent pollutants from coming in contact with surfaces used by stormwater runoff, or where contact is unavoidable, treat stormwater to remove pollutants.
- Operations and maintenance activities required to achieve Source Control are to be included in the Operation and Maintenance Plan submitted for approvals and recorded with the property as required by ordinance.

3.8.3 Environmental Impact Analysis

3.8.3.1 Thresholds of Significance

With respect to hydrology and water quality impacts, applicable sections of Appendix G of the State CEQA Guidelines state that a project would normally have a significant impact if it would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

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

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

   i. Result in substantial erosion or siltation on- or offsite;

   ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite;

   iii. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system or provide substantia additional sources of polluted runoff; or

   iv. Impede or redirect flood flows;

d) Be in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Non-Applicable Threshold(s)

- Threshold (d) (*Seiche, Tsunami, or Mudflow*): The Project site is not located within an area identified as being subject to inundation by a seiche, tsunami, or mudflow. Implementation of the Project is not anticipated to exacerbate effects or damage

from a seiche, tsunami, or mudflow on residents and visitors of the Project and surrounding development.

- Threshold (b) (*Groundwater Quality*): Wastewater and sanitary waste services would be provided via City wastewater infrastructure. The Project does not propose any onsite waste treatment systems (e.g., septic tanks, leach fields) that could contribute to degradation of groundwater quality. Potential polluted stormwater discharges which could percolate into the underlying groundwater system and degrade groundwater quality would be appropriately managed onsite through stormwater detention and treatment systems (see Impact HYD-3).

3.8.3.2 Impact Assessment Methodology

In the City, hydrology impacts would be considered potentially significant if shallow groundwater encountered building foundations and retaining walls, exposing people or structures to potentially adverse effects. Flooding impacts would be considered potentially significant if the development is proposed within an identified flood-prone area, as determined by the City FIRM, thereby increasing the structures exposed to the existing flood hazard; or if the new development conflicts with Flood Hazard avoidance policies in the General Plan SE. Water quality impacts would be considered potentially significant if development of the proposed Project would result in the increased degradation of surface water quality, including indirect impacts to threatened and endangered species downstream of the Downtown area.

This hydrology and water quality impact assessment is based on literature review, discussions with City staff, and initial peer review of 7 technical studies prepared by the Project applicant (Appendix J). These include:

- Preliminary Engineering Geology Investigation prepared by GeoSolutions, Inc. in April 2017;
- Groundwater Impacts Assessment prepared by Cleath-Harris Geologists, Inc. in September 2018;
- Delineation of Waters of the United States and State of California prepared by KMA in August 2015;
- Preliminary Hydrologic and Hydraulic Calculations prepared by RRM Design Group, updated as of February 2019;
- Existing Froom Creek Hydrologic Analysis prepared by RRM Design Group in July 2019; and

- Preliminary Sediment Transport Analysis and Calculations prepared by RRM Design Group in July 2019.

This assessment also included review of the Project's preliminary VTTM, which includes preliminary Project grading and drainage information.

The findings of this Preliminary Hydrologic and Hydraulic Calculations form the primary basis for the drainage and flooding analysis in this impact assessment. This report built upon the watershed-wide hydrologic and hydraulic analysis that was completed for the San Luis Obispo Creek Watershed for the City and the San Luis Obispo County Flood Control District Zone 9 as part of the San Luis Obispo Creek WMP and utilizes USACE's HEC – HMS digital model (City of San Luis Obispo 2003; Appendix J). This information was used to establish the locations and extent of drainages, wetland features, and groundwater resources, and serves as the environmental baseline upon which impacts resulting from the Project are assessed. These calculations also serve as the basis for impact analysis related to flooding, water quality, erosion, and groundwater.

In addition, Wood Environment & Infrastructure Solutions, Inc. (Wood) conducted a reconnaissance-level site visit in January 2018 to assess and document existing conditions present at the site. Attention was paid to attempting to document or confirm the location, function, operation, and capacity of existing drainage improvements such as the onsite detention basins, Calle Joaquin wetlands, and the size of drainage culverts and lines conveying water to and from these facilities. Wood staff conducted in-depth literature review of prior plans and hydrologic studies to assess these drainage improvements. These include: the Final Supplementation Environmental Impact Report for the Madonna / Eagle Hardware & Garden (SCH No. 1998031015; County of San Luis Obispo 1998) and associated technical reports; the Final Environmental Impact Report for the Costco / Froom Ranch (SCH No. 2002051036; City of San Luis Obispo 2003) and associated reports; the Drainage and Flood Analysis for Calle Joaquin Realignment Public Improvements (Cannon Associates 2004); the Hydrologic Monitoring Plan for Sustaining a Separated Wetland Near Calle Joaquin (Balance Hydrologics, Inc. 2005); the Revised Location Hydraulic Study Report for the LOVR / U.S. 101 Interchange Improvements Project (WRECO 2010); and the Irish Hills Plaza Detention Basin Report (Wallace Group 2006). Impacts associated with the disturbance and/or loss of wetlands with regard to habitat and biological value are assessed in detail in Section 3.4, *Biological Resources.*

3.8.3.3 Project Impacts and Mitigation Measures

This section discusses the potential hydrology and water quality impacts associated with the construction and operation of the Project. Hydrology and water quality impacts associated with the Project are summarized in Table 3.8-2 below.

Table 3.8-2. Summary of Project Impacts

Hydrology and Water Quality Impacts	Mitigation Measures	Residual Significance
HYD-1. Project construction activities would result in impacts to water quality due to polluted runoff and increased erosion or siltation.	MM HYD-1 MM HYD-2 MM HYD-3	Less than Significant with Mitigation
HYD-2. The Project would potentially exacerbate flooding and erosion hazards onsite and in areas downstream, particularly related to the proposed realignment and design of Froom Creek and developed areas of the site.	MM HYD-4	Less than Significant with Mitigation
HYD-3. Operation of the Project would potentially impact water quality of Froom Creek and San Luis Obispo Creek due to polluted urban runoff and sedimentation.	No Mitigation Required	Less than Significant
HYD-4. The Project would involve development of new impervious surfaces and potentially interfere with groundwater recharge.	No Mitigation Required	Less than Significant

Impact HYD-1 Project construction activities would result in impacts to water quality due to polluted runoff and increased erosion or siltation (Less than Significant with Mitigation).

Construction would include excavation, grading, and other earthwork that would disturb soils across the Project site, including construction of a new realigned channel for Froom Creek and installation of the proposed stormwater basin, along with supporting stormwater management infrastructure such as the Home Depot ditch and LOVR ditch. During this time when soils are disturbed or stockpiled onsite, rainfall has the potential to cause substantial soil erosion and sediment transport into Froom Creek due to runoff waters moving over exposed areas and newly created slopes and entering the new drainage system leading to the realigned Froom Creek and the Calle Joaquin wetlands. Construction runoff flowing into Froom Creek and onsite wetlands would also potentially affect water quality in San Luis Obispo Creek.

Project construction is assumed to occur over four phases extending for an approximate 5-year period. The Project would require approximately 160,000 cy of cut soil and

approximately 378,700 cy of fill, with 220,000 cy of fill imported to the site for distribution and compaction within the Lower Area and Madonna Froom Ranch. This disturbed state is expected to occur over approximately three years while the Project is constructed in phases (see Section 2.0, *Project Description*).

Although mass grading and major creek realignment would be concentrated in Phases 1 and 2, major grading and importation of fill would extend well into Phase 3. Soil would be redistributed across the site, particularly to fill over 38.4 acres of lower-lying floodplain. Several disturbed areas, stockpiles, and internal balancing of loose soils would occur onsite during construction. During storm events, surface runoff from exposed construction areas could flow into onsite wetlands and Froom Creek, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Following completion of the realignment of Froom Creek, runoff from exposed construction areas would primarily be directed into the realigned creek. These construction activities could impact water quality by exposing disturbed ground to potential erosion, particularly during major storms and high intensity rainfall events, or by introducing pollutants into the runoff.

Phase 1 of construction would involve realignment of Froom Creek, installation of stormwater management infrastructure, and construction activities near or within a drainage channel. Grading for construction of the Upper Terrace would occur within 5 feet of unnamed Drainages, 1, 2, and 3, as well as instream construction of four headwall and pipe culverts. In addition, grading, excavation, and placement of hundreds of thousands of cubic yards of fill near Froom Creek would occur to increase site elevation by 1 foot to bring building pads above the floodplain. The presence and use of large construction machinery within close proximity of drainages has the potential to result in a spill of fluids, such as oil, gasoline, and hydraulic fluids, which could be mobilized by stormwater runoff. See Section 3.4, *Biological Resources*, for additional detail on impacts of stormwater infrastructure installation and runoff within the creek to biological resources.

In addition, soil erosion could result in the creation of onsite rills and gully systems, clog existing and planned drainage channels, breach erosion control measures, and transport soil into down-gradient areas on the Project site. Soil movement would occur in these exposed graded or excavated areas, as well as in unprotected drainage culverts or basins. These changes to site hydrology would occur during Phase 1 of Project implementation between February 2020 to September 2021, which could overlap with winter storms between October and March.

As part of Project construction, erosion control, sediment barriers and temporary sediment basins would be constructed to minimize the extent of construction site impacts to on- and offsite surface waters. These measures include, but are not limited to, the requirements of the City's NPDES Phase II Program and SWMP, SWRCB's Construction General Permit Order 2009-0009-DWQ, Central Coast RWQCB PCRs 1-4, and the City's Storm Water Quality Ordinance (Municipal Code Chapter 12.08) (Section 3.8.2 above). These state and local regulations are adopted to ensure the quality of water during construction activities is not significantly degraded and that appropriate BMPs and control measures are implemented to ensure adequate management of onsite runoff. However, the potential for water quality degradation from erosion, sedimentation, and pollutants flowing to Froom Creek and the Calle Joaquin wetlands would be *potentially significant*.

Mitigation Measures

MM HYD-1 *Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.*

Plan Requirements and Timing. The NOI shall be submitted for review and approval to the SWRCB. The City will verify that a Waste Discharge Identification (WDID) number is assigned by the Board prior to the issuance of grading permits for construction activities. The NOI shall address discharge during all phases of development of the site until all disturbed areas are permanently stabilized.

Monitoring. The City will confirm WDID number assignment prior to approval of the grading permit(s). City monitoring staff will periodically inspect the site during construction to ensure compliance.

MM HYD-2 *For each phase of construction, the Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of 1 acre, or where the area of disturbance is less than 1 acre but is part of the Project's plan of*

development that in total disturbs 1 or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to stormwater and shall include specific BMPs to control the discharge of material from the site, including, but not limited to:

- *Temporary detention basins, straw bales, sand bagging, mulching, erosion control blankets, silt fencing, and soil stabilizers shall be used.*
- *Sufficient physical protection and pollution prevention measures to prevent sedimentation, siltation, and/or debris from entering the Calle Joaquin wetlands.*
- *Soil stockpiles and graded slopes shall be covered after 14 days of inactivity and 24 hours prior to and during inclement weather conditions.*
- *Fiber rolls shall be placed along the top of exposed slopes and at the toes of graded areas to reduce surface soil movement, as necessary.*
- *A routine monitoring plan shall be implemented to ensure success of all onsite erosion and sedimentation control measures.*
- *Dust control measures shall be implemented to ensure success of all onsite activities to control fugitive dust.*
- *Streets surrounding the Project site shall be cleaned daily or as necessary.*
- *BMPs shall be strictly followed to prevent spills and discharges of pollutants onsite (material and container storage, proper trash disposal, construction entrances, etc.).*
- *Sandbags, or other equivalent techniques, shall be utilized along graded areas to prevent siltation transport to the surrounding areas.*

Additional BMPs shall be implemented for any fuel storage or fuel handling that could occur onsite during construction. The SWPPP must be prepared in accordance with the guidelines adopted by the SWRCB. The SWPPP shall be submitted to the City along with grading/development plans for review and approval. The Applicant shall file a Notice of Completion for construction of the development, identifying that pollution sources were

controlled during the construction of the Project and implementing a closure SWPPP for the site.

Plan Requirements and Timing. The Applicant shall prepare a SWPPP that includes the above and any additional required BMPs addressing each phase of construction and timing. The SWPPP and notices shall be submitted to the SWRCB under their Stormwater Multi-Application, Reporting, and Tracking System (SMARTS). The SWPPP shall be designed to address erosion and sediment control during all phases of development of the site until all disturbed areas are permanently stabilized. The development plans submitted to the City shall include and reflect the erosion control plan and BMPs submitted to the State.

Monitoring. City monitoring staff shall periodically inspect the site for compliance with the SWPPP during grading to monitor runoff and after conclusion of grading activities. A Qualified SWPPP Practitioner (QSP) will be retained by the developer for overall management and reporting responsibility regarding the SWPPP and documentation under SMARTS in accordance with their permitting requirement. The Applicant will keep a copy of the SWPPP on the Project site during grading and construction activities.

MM HYD-3 *Installation of the stormwater management system shall occur during the dry season (May through October), including realignment and restoration of Froom Creek, installation of hydrological connections for the stormwater detention basin, construction of onsite retention basins, and the installation of the Home Depot and LOVR ditches. Stormwater management system features shall be fully installed and restored to ensure soil stabilization and adequate stormwater conveyance capacity prior to the storm season (October through April).*

Plan Requirements and Timing. The Applicant shall demonstrate compliance within grading and construction phasing plans subject to City review and approval prior to issuance of grading permits for each Project phase.

Monitoring. The City shall review grading and construction plans for all phases to ensure compliance. City grading monitors shall spot check for compliance.

Residual Impact

Implementation of MM HYD-1 and MM HYD-2 above would avoid or substantially reduce the potentially significant construction runoff, erosion, and associated impacts to water quality. Implementation of MM HYD-3 would prevent construction of the stormwater management system during the rainy season, thereby reducing the potential for erosion and construction runoff from installation of the drainage facilities to flow downstream to San Luis Obispo Creek or to the Calle Joaquin wetlands. As a result, impacts would be *less than significant with mitigation*.

Impact HYD-2 The Project would potentially exacerbate flooding and erosion hazards onsite and in areas downstream, particularly related to the proposed realignment and design of Froom Creek and developed areas of the site (Less than Significant with Mitigation).

Altered Site Drainage and Increased Runoff

Project development would substantially alter onsite drainage patterns through realignment of Froom Creek, reconstruction of LOVR ditch, installation of the Home Depot ditch, replacement of the existing onsite detention basin with the proposed stormwater detention basin on Mountainbrook Church property, increases in development and impervious surfaces, and fill of the Lower Area and Madonna Froom Ranch areas to raise site elevation by approximately one foot. In addition, Project construction and proposed stormwater conveyance systems would substantially alter the volume and velocity of surface water flows and runoff. Further, the existing stormwater detention basin serving adjacent development would be removed and a new detention basin would be constructed within the southern downstream portion of the Project site adjacent to Calle Joaquin to detain flood flows from the proposed Project, as well as those from Irish Hills Plaza and Mountainbrook Church. These changes to the creek and proposed new stormwater conveyance system would substantially alter surface water flows through the site, as well as peak surface flows downstream.

The direct effects of development of the Project would result from replacement of approximately 50.7 acres of undeveloped land with residential, commercial, and recreational development. Substantial areas of new impervious surfaces would increase

both the total volume of stormwater runoff and the peak flow of runoff. Project design features such as the ditches, retention and detention basins, parks, planted parkways, and the drainage conveyance system are proposed to avoid flooding and retain runoff to meet Central Coast RWQCB PCRs for peak flow and water quality. However, considering the available information considered for this analysis, Project implementation would substantially increase the amount of surface flows, especially following major storm events.

Removal of the 2,145 linear feet of Froom Creek through the Project site and construction of a new 3,745-foot-long realigned creek channel of an average of 65 feet in width and varying depths are major Project features. At the downstream end of the Project site adjacent to the proposed stormwater detention basin, the existing creek channel would be widened to 5 feet with a spill-over feature to allow conveyance of storm flows in excess of a 10-year event to flow to the stormwater basin. These proposals are developed at a conceptual level as described in the Preliminary Hydrologic and Hydraulic Calculations report and Draft FRSP (see also Figures 2-5, 2-15, and 2-16). These proposed changes to site hydrology would occur during Phase 1 of Project implementation between February 2020 to September 2021.

The new creek would feature substantial bioengineered water flow and bank erosion control features, including restored in-channel and creek bank riparian habitat, installation of 2,300 cy of boulders along the toe of creek banks to reduce erosion from high-velocity flows and flooding within the creek channel and Calle Joaquin wetlands, and creation of pool and riffle sequences in the channel bottom to slow flows and create aquatic habitat, particularly for the Southern steelhead trout (see also, Section 3.4, *Biological Resources*). Although detailed specifications and design are not yet fully developed, the resiliency of these proposed improvements to survive high-velocity flows and flood volumes during storm events, reduce or avoid creek bank erosion, and provide habitat mitigation and benefits are central to successful creek realignment and redesign (see also, Section 3.4, *Biological Resources*).

As summarized in Table 3.8-3, based on the preliminary design of the realigned Froom Creek corridor, the improved and realigned Froom Creek would result in a net increase in peak flow capacity, increasing the ability of Froom Creek to accommodate flows during large storm events and resulting runoff caused by increased impervious surfaces at the Project site. Under the Project, Froom Creek would overbank only after the 2-year peak flow is achieved. Flows greater than a 2-year storm would overbank to the Calle Joaquin

wetlands or be contained within the channel when not adjacent to the wetland, where the creek channel would be sized to handle up to a 100-year storm event with a minimum of one foot of freeboard (Appendix J).

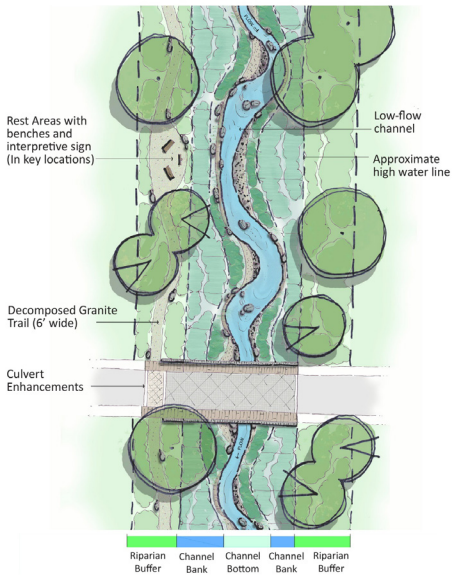
The proposed stormwater detention basin would provide additional "surge" storage for flows larger than 2-year storm events, where the existing box culverts overtop Calle Joaquin during 10-year events. The proposed stormwater detention basin would allow for storage enough to allow the 25-year event to pass entirely through the culverts. The 50-year and 100-year events are prohibitively large to allow for storage during these events and overtop Calle Joaquin as safe overflow (Appendix J).

Table 3.8-3. Projected Peak Flow in Realigned Froom Creek

Storm Reoccurrence Interval	Total Creek Flow (Overbank Flowrate) (cfs)		
	Existing Froom Creek	Proposed Froom Creek	Net Change
2-year	253.3 (0)	518.7 (0)	265.4 (0)
10-year	521.5 (89.4)	707.3 (188.6)	185.8 (99.2)
25-year	714.3 (282.2)	877.2 (358.5)	162.9 (76.3)
50-year	867.6 (435.5)	1,098.1 (579.4)	230.5 (143.9)
100-year	980.4 (548.3)	1,240.8 (722.1)	260.4 (173.8)

Source: Appendix J; Existing Froom Creek Hydrologic Analysis.

Creek Bank Stability and Erosion



The proposed Froom Creek channel would include 2,300 cy of rock and boulders to create pools and slow flows, as well as some toe rocks to help stabilize banks during storm events.

As discussed in Section 3.1 *Environmental Setting* above, the Froom Creek watershed can experience high intensity rainfall events that can result in short duration high intensity flows of up to 1,241 cfs under 100-year storm conditions, with potential for scouring of the channel bottom and erosion along the banks of the newly realigned creek (Appendix J). Similar conditions are frequently experienced within the existing Froom Creek, which demonstrated deep incising and scouring of creek banks. To address this concern for the proposed alignment, the Project includes use of 2,300 cy of imported rock to create a series of channel bottom pools along upper reaches of the creek within the Specific Plan area. This creek design would retain and slow flows and to provide slope protection toe rock (i.e., boulders) along the base of the creek bank to prevent or minimize bank erosion, along with in-channel and creek bank revegetation.[2] Based on an analysis of sedimentation and erosion of the proposed Froom Creek realignment, it is anticipated that installation of proposed features to reduce flow velocity (e.g., channel bottom pools) and stabilize channel banks would be effective at reducing or preventing scour and bank erosion (Appendix J; Preliminary Sediment Transport Analysis and Calculations).

The Preliminary Hydrologic and Hydraulic Calculations report prepared by RRM Design Group notes the flow velocities of the proposed Froom Creek channel would range from 2 – 8 feet per second (fps). Based on an analysis of sedimentation and erosion of the proposed Froom Creek realignment, these proposed velocities, as well as installation of bank stabilization features, would be effective at reducing scour and bank erosion (Appendix J).

[2] It should be noted that the FRSP is a planning document with no detailed engineering drawings; therefore, specifications regarding the location or design of creek bank stabilization or armoring are not known. As such, it cannot be determined at this time that design of the realigned Froom Creek would prevent or avoid bank erosion or scouring.

Where the realigned Froom Creek bends to the south and runs adjacent to the Calle Joaquin wetlands, the realigned creek channel would be constructed with an approximately 1,500-foot-long low-flow channel. A low berm would separate the low-flow channel from the Calle Joaquin wetlands. The low-flow channel would be designed to handle normal flow events, but flows in excess of a 2-year storm event would overtop the low-flow channel and spread laterally to and flood the Calle Joaquin wetlands, submerging the low berm. Effectively, the low-flow channel at the Calle Joaquin wetlands would allow the realigned creek to expand into a wide floodplain area in the Calle Joaquin wetlands. The frequency of bank overtopping of the realigned creek channel at this segment is intended to mimic the historic frequency of bank overtopping of the existing Froom Creek prior to 2013 when an artificial earthen berm was installed immediately downslope of the existing channel to reduce potential overtopping (see Table 3.8-3). Flow velocity along this portion of the creek during large flow events would be less than 1 foot per second, which would not result in substantial erosion of the low-flow channel, low berm, or the Calle Joaquin wetlands (refer also to Section 3.4, *Biological Resources*).

Flood Flow Retention and On and Offsite Flooding Potential

Based on the findings of the Preliminary Hydrologic and Hydraulic Calculations prepared by RRM Design Group, using the City WMZ rainfall mapping, and a 24-hour storm event which equates to 1.9 inches of rainfall over the WMZ development area, implementation of the Project would result in generation of an additional 4.9 AF of runoff, which would be detained and treated within the proposed onsite stormwater treatment areas (see Table 3.8-4). Based on the combined runoff generated by offsite development during such a storm event (4.0 AF) and natural Froom Creek flood flows entering the Project site (16.9 AF), the flows being conveyed via Froom Creek through the site under the Project equates to 20.9 AF (see Table 3.8-5). Based on the analysis prepared by RRM Design Group, all on- and offsite stormwater detention and control measures are adequately sized to detain on- and offsite flows, consistent with the City's Drainage Design Manual requirements for attenuation of runoff from 2-year through 100-year events. Implementation of these measures would adequately attenuate all Project stormwater peak flows and even slightly reduce peak flows at the U.S. 101 double box culvert; however, peak flow at the U.S. 101 double box culvert would continue to exceed capacity during storm events greater than 10-year event. Projected peak flows accommodated by the realigned Froom Creek channel summarized in Table 3.8-3.

Table 3.8-4. Required Onsite Runoff Retention

Drainage Management Area	Development Area (acres)	Retention Value Required (AF)
Onsite		
Madonna-Froom (Residential / Park)	12.7	0.9
Madonna-Froom (Commercial)	10.1	1.1
Lower Area	26.9	2.3
Upper Terrace	12.5	0.6
Total	**62.2**	**4.9**

Source: Appendix J; Preliminary Hydrologic and Hydraulic Calculations.

Table 3.8-5. Required Offsite Runoff Retention

Drainage Management Area	Development Area (acres)	Retention Value Required (AF)
Offsite		
Home Depot	10.1	1.3
Irish Hills	15.2	2.3
Mountainbrook Church	3.7	0.4
Total	**29.0**	**4.0**
Froom Creek 100-year Flow	**-**	***16.9***
Grand Total	29.0	20.9

Note: The grand total of Development Area in Table 1-2 of Appendix J is incorrectly summed to 32.43. The value presented in this table is the corrected sum; however, it cannot be determined if the total Retention Value Required reflects the correct sum of Developed Area.
Source: Appendix J.; Preliminary Hydrologic and Hydraulic Calculations

The Project would include substantial stormwater retention and treatment facilities to accommodate runoff from both existing sources (i.e., Froom Creek watershed, Irish Hills Plaza) and the new impervious areas onsite to avoid on and offsite increases in flooding, consistent with the requirements of the City's Drainage Design Manual and the SWRCB's Post-Construction Requirements. Attenuation of onsite surface water runoff would be provided via point and non-point source water retention features to slow and retain increased flows, including vegetated retention basins and pervious paving, and other elements designed to promote bio-infiltration. Froom Creek would also be designed with a low-flow channel in the creek's centerline to convey flows occurring from flows under a 2-year storm event.

For flows below the intensity of a 2-year storm event, runoff would be directed through the realigned Froom Creek to the existing box culvert under U.S. 101. Flows greater than a 2-year storm event would overtop the creek banks and flow to either the Calle Joaquin

wetlands or downstream to the stormwater detention basin. The Calle Joaquin wetlands would serve as part of the creek corridor and the first line of defense in flood conditions with the capacity to store up to 11 AF of flood water. It appears that under normal storm conditions (i.e., 2- to 10-year events) the Calle Joaquin wetlands would not be hydrologically reconnected to the Froom Creek channel downstream or the proposed stormwater detention basin, meaning flood waters flowing to the Calle Joaquin wetlands would not have any outlet other than percolation and evaporation; however, under large storm conditions (e.g., 25-year to 100-year events) when capacity within the Calle Joaquin wetland floodplain is reached, the Froom Creek low-flow channel and Calle Joaquin wetlands would effectively become a single, wide channel, allowing flows to reconnect and potentially continue downstream within the realigned channel (Appendix J).

Storm flows and runoff exceeding a 2-year storm condition would also be conveyed along Froom Creek and into the Calle Joaquin wetlands and the proposed stormwater detention basin when flooding begins to occur at the U.S. 101 box culverts. The Calle Joaquin wetlands have total storage capacity of 11 AF. The proposed stormwater detention basins would have a capacity of 28.8 AF to accommodate the anticipated 20.9 AF of post-development flow generated from the Home Depot, Irish Hills Plaza, Mountainbrook Church, and Froom Creek watershed during a 100-year storm event and allow for storage enough to allow the 25-year event to pass entirely through the U.S. 101 box culvert (Appendix J). Further, the Draft FRSP outlines the following BMPs which, once adopted, would guide development of the Project to manage stormwater runoff consistent with City and RWQCB requirements:

- Site and landscape design should integrate sustainable practices to manage stormwater onsite to the maximum extent practical. These practices may include bioswales, rain gardens, and detention basins.
- Stormwater retention areas should be designed to be visually attractive and functional, and fencing should be avoided to the maximum extent possible.
- Stormwater runoff should be diverted from impervious areas such as roofs and paths, to landscape areas and infiltration basins where water can seep into the ground.
- Site drainage may be designed to integrate a decentralized system that distributes stormwater across a project site to replenish groundwater supplies. In addition, various devices that filter water and infiltrate water into the ground should be considered.

Considering proposed stormwater management systems improvement and the Preliminary Hydrologic and Hydraulic Calculations prepared by RRM Design Group, stormwater

would be adequately managed, maintained, and attenuated through on- and offsite stormwater control features, which are designed consistent with the requirements of the City Drainage Design Manual and State Post Construction Requirements.

Development Within a Flood Zone

Most of the low elevation areas of the Project site are currently located within a designated floodplain, Zone A, and development of the Project within this area could pose risk of new development to flooding hazards. However, as discussed above, the Project would relocate and redesign Froom Creek to provide additional flood-flow capacity and would fill the Lower Area and Madonna Froom Ranch portions of the site within these flood zones to engineered elevations above the 100-year floodplain. Implementation of the proposed improvements would remove the site development area from the FEMA floodplain and require a Conditional Letter of Map Revision/Letter of Map Revision from FEMA.

Based on the Preliminary Hydrologic and Hydraulic Calculations prepared by RRM Design Group, the proposed stormwater management system would be sized and designed to accommodate and attenuate 100-year storm event flood waters to ensure proposed development would lie outside a flood hazard zone and the Project would not change the potential for flooding offsite; the existing flood risks associated with 10-year storm events due to the existing box culvert under U.S. 101 would remain under the Project. However, the proposed design of Froom Creek would not ensure a fixed location and high velocity flows would potentially cause erosion, scouring, and bank undercutting, which would lead to creek rerouting and bank destabilization with unpredictable effects on flows, flooding, and sedimentation. This impact would be *potentially significant*.

Mitigation Measures

MM HYD-4 *The Applicant shall submit final Froom Creek Realignment plans and supporting technical studies that provide a refined bio-engineering approach to ensure creek bank and channel bottom stability and avoidance or reduction of further erosion. Final creek design plans and a supporting engineering study shall address appropriate boulder sizes and bank protection measures necessary to prevent dislodgement or remobilization of in-channel or toe-slope protection rock. Natural methods (e.g., additional rock) shall be employed as needed to maintain the proposed creek alignment and downslope bank location between the channel and LOVR and the Calle Joaquin wetlands, and to protect mid- to upper-bank*

areas and top-of-bank from erosion from flood flows and aid in maintenance of riparian vegetation.

Plan Requirements and Timing. The Applicant shall submit revised plans and additional supporting technical studies to the City for review and approval prior to recordation of the final VTM. The final VTM shall depict all necessary revisions or improvements identified in the revised Froom Creek Realignment plans and supporting studies.

Monitoring. City staff shall inspect Froom Creek realignment improvements and ensure compliance throughout all construction phases. Permit compliance monitoring staff shall perform periodic site inspections to verify compliance with planned improvements.

Residual Impact

Implementation of MM HYD-4, requiring revised Froom Creek realignment plans and additional supporting technical studies would ensure the realigned creek and erosion protection features are sufficient to prevent or significantly reduce erosion and destruction of the creek channel and bank. Implementation of this measure would also ensure stability of proposed in-stream fish habitat improvements (e.g., for Southern steelhead), supporting the success and longevity of improved habitat; thus, impacts are considered *less than significant with mitigation.*

Impact HYD-3 Operation of the Project would potentially impact water quality of Froom Creek and San Luis Obispo Creek due to polluted urban runoff and sedimentation (Less than Significant).

Project development would replace approximately 50.7 acres of undeveloped land with a roughly equivalent area of urban development consisting of new residential units, a senior life plan community, a 100-room hotel, commercial center, and 2.9 acres of developed parks and open space. This development would substantially increase the amount of impervious surface onsite and would involve activities that would generate new sources of pollutants onsite, such as pesticides, fertilizers, oils, grease, lubricants, and sediment in urban runoff. New impervious surfaces, including roads and parking lots, collect automobile derived pollutants such as oils, greases, heavy metals, and rubber. During storm events, these pollutants would be transported into the proposed stormwater management system by surface runoff. An increase in point source and non-point source pollution could result from increases in development intensity that may directly impact water quality

specific to site drainage patterns. Accordingly, disturbed soils, sedimentation, and contaminants that are mobilized by water flow may ultimately be conveyed to Froom Creek, and subsequently, San Luis Obispo Creek located 0.3 mile downstream.

However, the Project includes a comprehensive stormwater management system with approximately five stormwater retention and treatment areas on site, as well as the LOVR and Home Depot ditches, which would capture and bio-filter runoff before it enters Froom Creek or the Calle Joaquin wetlands. Additionally, the Draft FRSP outlines the following BMPs which, once adopted, would guide development of the Project to manage stormwater runoff consistent with City and Central Coast RWQCB requirements:

- Site and landscape design should integrate sustainable practices to manage stormwater onsite to the maximum extent practical. These practices may include bioswales, rain gardens, and detention basins.
- Implementation of BMPs for water quality treatment is required for each development area prior to discharging to a storm drain system or into the Froom Creek corridor.
- Stormwater runoff should be diverted from impervious areas such as roofs and paths, to landscape areas and infiltration basins where water can seep into the ground.

The Project would be subject to the Central Coast RWQCB's PCRs and NPDES discharge permits. Once adopted, implementation of proposed BMP strategies of the FRSP would reduce impacts from urban runoff. Further, upon compliance with the City's SWMP, Engineering Standards, General Plan, and City Municipal Code requirements, adverse effects to water quality from operation of the Project would be reduced, and impacts are considered *less than significant.*

Impact HYD-4 The Project would involve development of new impervious surfaces and potentially interfere with groundwater recharge (Less than Significant).

Reduction in Groundwater Recharge

The Project could result in a decrease in percolation to the groundwater basin, due to the increase in the amount of impervious surface it would create. However, since the City stopped its reliance on groundwater for drinking water in April 2015, and the San Luis Obispo Groundwater Basin is not in overdraft and recharges quickly during normal rainfall

years, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Further, the Project does not propose the use of groundwater within the site. There would be an incremental loss of basin-wide groundwater recharge due to the increase in impervious surfaces. Project impacts related to groundwater would be offset by implementation of Project BMPs to manage stormwater onsite. The Draft FRSP outlines the following BMPs which, once adopted, would guide development of the Project to manage stormwater consistent with City and RWQCB requirements:

- Stormwater runoff should be diverted from impervious areas such as roofs and paths, to landscape areas and infiltration basins where water can seep into the ground.
- Site drainage may be designed to integrate a decentralized system that distributes stormwater across a project site to replenish groundwater supplies. In addition, various devices that filter water and infiltrate water into the ground should be considered.

In addition, all surface flows would either percolate within developed areas or flow to the realigned Froom Creek channel. The realigned Froom Creek channel is anticipated to result in some increase in recharge to the groundwater basin and extend the period during the winter when standing water is present in the wetland area. The longer reach and flatter grade of the realigned stream channel allows for a greater surface area and longer duration of wetter channel conditions, increasing groundwater recharge when stream flow occurs. The realigned channel will traverse alluvial fan deposits along portions of the historic channel alignment and will not flow over Obispo weathered bedrock soils as occurs in the current channel alignment. The detention basin downstream of the Specific Plan area, when saturated, is anticipated to result in a higher groundwater level than currently exists and reduce the groundwater flow gradient in the proximity to the wetlands (Cleath-Harris Geologists, Inc. 2018; Appendix J). Therefore, the Project would not adversely affect groundwater levels, even though the Project would increase impervious surfaces within the Specific Plan area.

Potential to Encounter Shallow Groundwater

The Project would involve the development of one-level subterranean parking structures within the eastern lower elevations of the site as part of the Lower Area, where groundwater levels were observed at depths of 2.3 to 10 feet bgs (Appendix J). Investigation of groundwater levels using soil borings and existing onsite groundwater wells did not

thoroughly measure for groundwater within the areas proposed for construction of subterranean development – within areas overlying the current alignment of Froom Creek where surface water seepage may create areas of shallow groundwater. Therefore, depending on the timing of construction and seasonal fluctuations in groundwater levels, subsurface construction in this area may encounter groundwater or saturated soils. However, the proposed Project would relocate Froom Creek to the base of the slope within the Project site and raise the ground surface to at least 1 foot above the 100-year floodplain, which would eliminate the potential for the proposed development to encounter groundwater resources. The higher site elevation would increase the depth to water below grade, assuming the groundwater level elevation will be similar to the recent groundwater elevations. However, since the Project would not deplete or degrade groundwater resources or impede or encounter groundwater, groundwater impacts would be *less than significant* (see also, Impact GEO-4, Section 3.6, *Geology and Soils)*.

Cumulative Impacts

The Project, in combination with approved, pending, and proposed development within the City, particularly recently approved large residential development projects (e.g., San Luis Ranch Specific Plan, Avila Ranch Development Plan) would further contribute to the increase in development and associated water quality impacts, as well as alter the existing hydrologic environment, thereby altering the abundance and natural flow of water resources of the area, including San Luis Obispo Creek. As analyzed in the LUCE Update EIR, cumulative impacts of the LUE, which includes the Project site, to hydrology and water quality would be reduced to a less than significant level with the implementation of and adherence to the policies and requirements discussed above.

Cumulative development would result in a change from agricultural to urban pollutant discharge to surface water runoff and groundwater percolation. Construction activities could also result in the pollution of natural watercourses or underground aquifers. The types of pollutant discharges that could occur as a result of construction include accidental spillage of fuel and lubricants, discharge of excess concrete, and an increase in sediment runoff. Storm runoff concentrations of oil, grease, heavy metals, and debris increases as the amount of urban development increases in the watershed. However, when properly implemented, water quality requirements of the Central Coast RWQCB and the City and County of San Luis Obispo would be expected to mitigate any adverse impacts resulting from new development. Therefore, the proposed Project, in conjunction with pending cumulative development, would not significantly increase the concentration of urban

pollutants in surface runoff or groundwater. Polluted runoff that may be generated during construction activities of cumulative development and projects considered in this analysis would be regulated by the SWRCB under General Construction, NPDES permits, and would be minimized using standard construction BMPs. Cumulative impacts would therefore be less than significant for water quality. With adherence to these regulatory standards, the cumulative contribution from the Project would be *less than significant*.

Flooding and Site Hydrology

Regarding flooding, several projects included on the cumulative projects list (see Table 3.0-1) are located within the 100-year floodplain associated with San Luis Obispo Creek. Cumulative development in the City and the San Luis Obispo Creek Watershed is anticipated to contribute to an incremental increase in runoff and peak flood flows. No planned or pending projects are located upstream or downstream on Froom Creek from the Project site that would contribute to the risk of flooding on- or offsite. Avila Ranch Development Plan and San Luis Ranch Specific Plan projects would contribute runoff to the San Luis Obispo Creek Watershed. However, each cumulative project within the City would be expected to provide its own facilities or other mitigations, where feasible, to mitigate increased peak flows and exacerbated downstream flooding. The Project, through the proposed realigned creek design and stormwater detention basin, would adequately attenuate all Project-related increases in flood flows on- or offsite, such that flooding would not occur.

Based on post-development flows, capacity of the existing U.S. 101 box culvert would continue to be exceeded under during a 10-year or greater storm event, resulting in continued flooding potential downstream of the Project site. However, policies and design measures of the FRSP would reduce the Project's contribution to this cumulative flooding impact to the extent feasible, even such that peak flows experienced at the U.S. 101 box culvert may be less than existing flood flows. Therefore, the Project's contribution to cumulative flood impacts are considered *less than significant*.

3.9 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. It also evaluates Project consistency with adopted planning goals and policies of the City General Plan, the County General Plan, and the ALUP for the Airport.

3.9.1 Environmental Setting

3.9.1.1 Regional Land Use and Planning

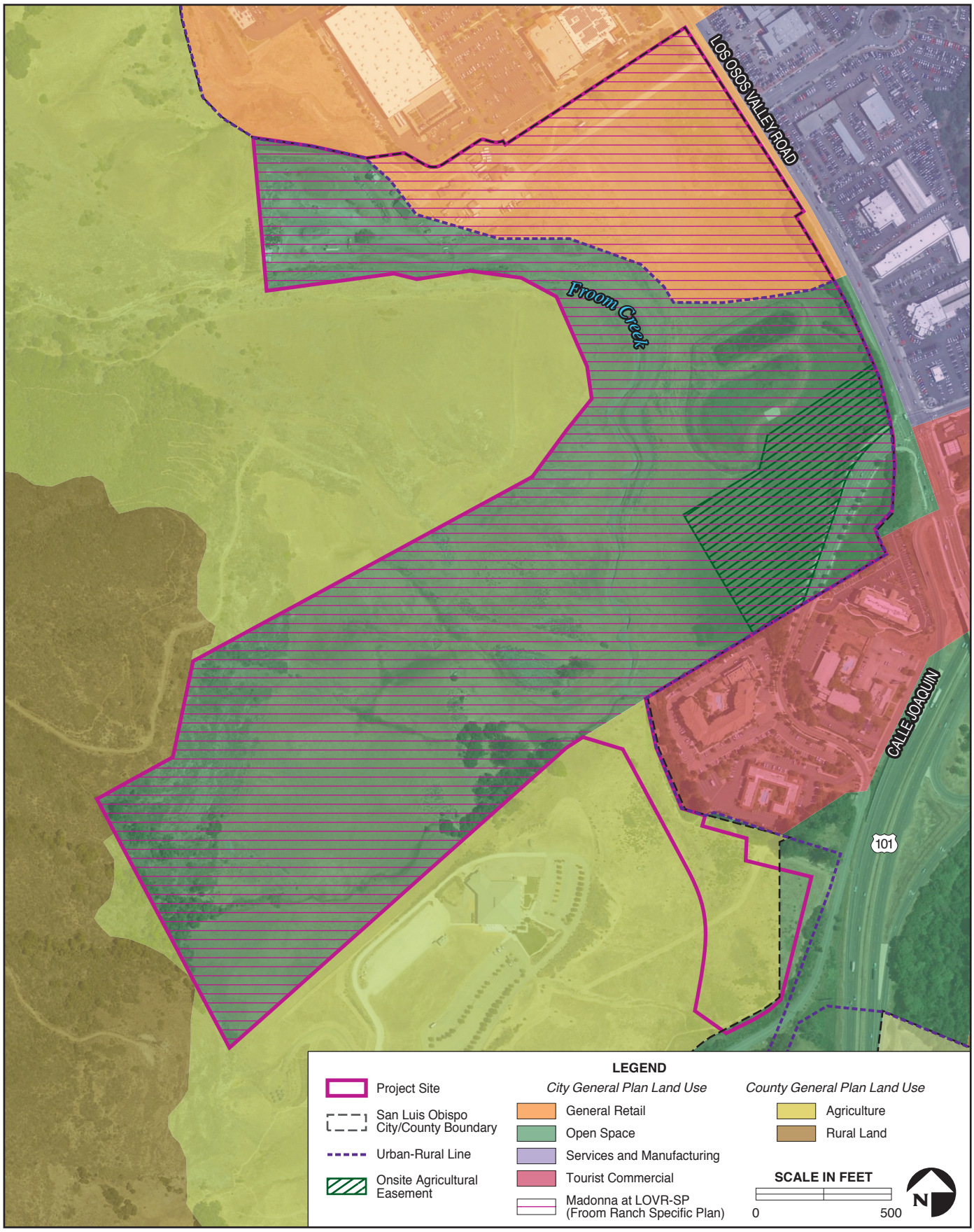
The Project site is located in the central portion of the County, approximately 5 miles northeast of the Pacific Ocean and outside of the local coastal zone. The site is currently unincorporated on the southern edge of the City and is surrounded on three sides by incorporated City areas. Urban land uses within the City, including commercial development, surround the site to the north, east, and south. Rural agricultural uses and open space within the Irish Hills Natural Reserve lie to the west. Allowable land uses on nearby properties are governed by both the City and County General Plans and respective Zoning Ordinances,[1] which allow a range of retail, commercial, visitor-serving, and open space uses (Tables 3.9-1 and 3.9-2; Figure 3.9-1).

Table 3.9-1. Existing City and County Land Use within Project Vicinity

Location	Land Use	Example of Potential Uses
City	General Retail	Specialty stores, department stores, restaurants, discount stores, and banks
	Open Space	Farming and grazing, protected natural open space, trails, and historic resources
	Services and Manufacturing	Medical services, storage businesses, lumber yards, car repair shops, light manufacturing, caretaker quarters, homeless shelters, and mixed-use residential
	Tourist Commercial	Hotels, motels, restaurants, gasoline stations, recreational uses, and minor retail
County	Agriculture (AG)	Agricultural processing, animal facilities, crops and grazing
	Rural Lands (RL)	Agricultural processing, crop production and grazing, mines and quarries, energy generating facilities

Source: City of San Luis Obispo 2014b; County of San Luis Obispo 2019.

[1] The County's General Plan is adopted as the County's Zoning Ordinance.



wood.

Existing Land Use

FIGURE 3.9-1

Table 3.9-2. Existing City and County Zoning Districts within Project Vicinity

Location	Zoning District	Example of Potential Uses
City	Conservation/Open Space (C/OS)	Open Space, agricultural grazing and accessory structures
	Commercial-Retail (C-R)	Retail sales, business, personal and professional services, parks and recreation facilities, entertainment, hotels, churches, restaurants, mixed-use developments
	Commercial-Service-Special Considerations (C-S-S) & Commercial-Service-Planned Development (C-S-PD)	Limited retail, storage, automobile and vehicle sales and services, wholesaling, warehousing, light manufacturing uses
	Commercial-Tourist (C-T)	Accommodations and services for the traveling public, parks and recreational facilities, mixed-use, restaurants
County	Agriculture (AG)	Agricultural processing, animal facilities, crops and grazing
	Rural Lands (RL)	Agricultural processing, crop production and grazing, mines and quarries, energy generating facilities
	Commercial Retail (CR)	Retail sales, business, personal and professional services, recreation, entertainment, transient lodging

Source: City of San Luis Obispo 2014b; County of San Luis Obispo 2019.

City-designated commercial-retail (C-R) uses border the Project site along LOVR to the northwest, including Irish Hills Plaza with numerous large-scale "big box" retail commercial businesses, including Costco and Home Depot, along with additional retail businesses, such as T.J. Maxx and Whole Foods Market. To the north across LOVR, commercial-service (C-S) land uses support primarily automobile dealerships, such as BMW, Nissan, Ford, Volkswagen, Toyota, and Honda, where structural development is

The Project site is surrounded on three sides by urban development in the City and bordered to the west by the Irish Hills Natural Reserve (left). Irish Hills Plaza (right) located north of the Specific Plan area contains retail and commercial businesses.

generally modern one-story offices and showrooms. To the southeast adjacent to U.S. 101 and Calle Joaquin, commercial-tourist (C-T) uses include a gasoline station, a restaurant, and several hotels, including Hampton Inn, Courtyard by Marriott, and Motel 6. To the south, Mountainbrook Church, a one-story conditionally permitted use, is located in County agricultural land off Calle Joaquin. To the west, the 1,110-acre Irish Hills Natural Reserve is located within County-designated rural lands (RL) but is owned and managed by the City. The nearest residential neighborhoods are 0.3 mile north of Irish Hills Plaza and 0.3 mile east across U.S. 101.

3.9.1.2 Project Site Land Uses and Planning

The Project site is currently unincorporated and subject to the County's General Plan. As described in the County's General Plan, the Project site is located within the San Luis Obispo Planning Area, Sub Area North (2014). Figure 2-1 in Section 2.0, *Project Description*, shows the regional location of the Project. Approximately 97 acres of the Project site are designated agriculture, 0.5 acre is designated rural lands, and 19.3 acres are designated general retail (Figure 3.9-1). Within the Project site, the approximately 110-acre Specific Plan area is used primarily as grazing land for horses. The approximately 7-acre developed area on the northern side of the site is developed with the historic Froom Ranch Dairy complex and a permitted quarry. One of these buildings supports a construction business office (JM Development Group) in the main ranch house (an office) and other portions of the property support an equipment storage yard. The Project site also includes unpaved roads and walking paths, staging and materials storage, and stormwater detention facilities serving Irish Hills Plaza. The approximately 7.1-acre stormwater basin area on Mountainbrook Church property is currently undeveloped and is not used for agricultural uses. See Section 3.2, *Agricultural Resources*, for a discussion of the Project's agricultural setting and Section 3.5, *Cultural and Tribal Cultural Resources*, for a discussion of the existing structures on the site.

In December 2014, the City adopted the LUCE of the General Plan with programs and policies to guide private development and public improvements in the City for the next 20 years. The City certified an EIR for the LUCE update in 2014. The Project site lies fully within the City's adopted SOI under the LUCE. Approximately 19.3 acres within the northeastern portion of the Specific Plan area are located within the URL, which includes the

urban areas of the City and a limited portion of unincorporated area within the County.[2] The Specific Plan area within the Project site is designated as the Madonna at LOVR Specific Plan area in the LUCE. This designation anticipates consideration of future annexation to the City and eventual development under an adopted specific plan. The LUCE also identifies the site as a Special Focus Area, SP-3 in Section 8.1.5 of the LUCE, which provides specific policy guidance for future development within the Specific Plan area (see Section 3.9.2, *Regulatory Setting*). Development standards for the Specific Plan area set forth in the LUCE would allow up to 350 residences and 350,000 sf of neighborhood commercial and commercial-retail development (Table 3.9-3). The LUCE's performance standards for SP-3 include access to trails and protection of wetlands, slopes, historic structures, open space, and viewsheds.

Table 3.9-3. LUCE Performance Standards for Madonna at LOVR Specific Plan Area

Type	Designations Allowed	Minimum[1]	Maximum
Residential (Mixed-Use)	Medium Density Residential Medium-High Density Residential High Density Residential	200 units	350 units
Commercial	Neighborhood Commercial Commercial	50,000 sf	350,000 sf
Parks	Park		
Open Space/Agriculture	Open Space Agriculture	50 % site coverage	
Public	N/A		
Infrastructure	N/A		

N/A – Not Applicable
[1] There can be a reduction in the minimum requirement based on specific physical and/or environmental constraints.
Source: City of San Luis Obispo 2014b.

3.9.1.3 Easements within Project Site

The Project site is encumbered by two recorded easements; one is for agricultural conservation within the Specific Plan area and the other delineates the proposed stormwater detention basin area.

[2] The URL represents the boundary of the City's urban reserve, containing the area around the City where urban development would potentially occur. The City URL is an unincorporated extension of the City in which residents share City infrastructure and government-operated facilities and services including schools, libraries, and parks. The URL encompasses approximately 2,300 acres beyond the existing City limit (City of San Luis Obispo and County of San Luis Obispo 2013).

2010 Open Space & Agricultural Conservation Easement

In 2010, a 7.1-acre agricultural easement was dedicated within the Project site as mitigation for impacts associated with the nearby Prefumo Creek Commons project. The easement is recorded over the southern areas of the Specific Plan area and includes the Calle Joaquin wetlands to the north of Calle Joaquin. As part of approval of annexation of that project site into the City, the San Luis Obispo County LAFCO required dedication of a permanent agricultural easement of 7.1 acres on Froom Ranch as part of an overall mitigation package. LAFCO criteria for dedication included the continuation of prior historical agricultural activities on the property. The resulting easement is managed by the City and may be amended with written consent of both Irish Hills Plaza, LLC and the City.

2018 Memorandum of Option and Easement Rights

A Memorandum of Option and easement rights is recorded between the owners of the Mountainbrook Church property and the Project Applicant, and applies to an area between the Church, the Marriott and Motel 6 hotels, and Calle Joaquin. The Madonna Family Trust was granted the option to purchase easement rights within the Mountainbrook Church property to allow development of the proposed stormwater detention basin (see Section 2.0, *Project Description*).

2001 Open Space Easement

In 2001, an open space agreement was made between the County and the City (co-grantees) and the Madonna family (owner) for the granting of two easement areas for the preservation of open space and natural resource protection within the Irish Hills. The easement areas lie immediately west of the Project site covering a cumulative area of 111.78 acres, but does not overlie the Project site. Under the agreement, no structures or facilities may be erected except for agriculture accessory buildings or public service facilities pursuant to approvals, and the landscape may not be altered that materially changes the site's attractive scenic features. Easement alterations may only be conducted with written agreement by all easement holders.

2010 Deed of Easement for Ingress and Egress

In 2010, the Irish Hills Plaza West, LLC (owner) granted to the City (grantee) an irrevocable 20-foot-wide easement for ingress and egress for emergency maintenance, monitoring, and patrol purposes. The easement consists of two routes. One extends from LOVR along the existing entrance road and disturbed portions of the Project site, southwest

to the Froom Creek Connector Trail. The second easement route extends from the existing construction operations area and across the Arizona crossing at Froom Creek to connect to the Neil Havlik Way trail to the south. Easement alterations may only be conducted with written agreement by all easement holders.

3.9.2 Regulatory Setting

This section summarizes directly relevant state regulations and regional and local land use plans and procedures. Evaluation of the Project's consistency with specific goals, policies, and requirements from relevant land use plans and regulations is provided below in Section 3.9.3, *Consistency with Plans and Policies*, as well as within referenced EIR sections.

3.9.2.1 State

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 LAFCOs. A LAFCO 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. LAFCOs establish SOIs 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 LAFCO (described below) has adopted local policies that it considers in its review of projects, as further described below.

Senate Bill (SB) 375

The adoption of California's Sustainable Communities and Climate Protection Act SB 375 on September 30, 2008 aligns the goals of regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPOs) such as the SLOCOG to adopt a Regional Transportation Plan (RTP)/ Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) within their RTP to demonstrate the achievement of GHG reduction targets. In compliance with SB 375, SLOCOG has adopted an RTP/SCS that covers the entirety of the City and County, as well as other cities within the boundaries of the County (see discussion below and also refer to Section 3.3, *Air Quality and Greenhouse Gas Emissions*).

3.9.2.2 Regional

Regional Transportation Plan/Sustainable Communities Strategy

The 2014 RTP/SCS is the region's long-term vision for the transportation system. As required by state and federal law, the SLOCOG prepares, updates and adopts the RTP/SCS every four years. The RTP facilitates the compliance with the state mandate for communities to coordinate with state and regional agencies to achieve regional air quality and GHG emission reduction targets. The key principles of these strategies include: locating new employment centers and neighborhoods near transit to reduce vehicle trips and peak congestion; creating communities around transit stations, with small businesses, housing, and restaurants within walking distance to reduce automobile travel; focusing future growth in urban centers and existing cities to reduce VMT and preserve rural and other natural areas; and preserving established single-family neighborhoods and existing natural and green spaces by accommodating new development within existing urbanized areas and downtown regions.

San Luis Obispo County Local Agency Formation Commission (LAFCO)

A LAFCO 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. LAFCO establishes SOI for cities and special districts that define the territory that LAFCO independently finds will represent the appropriate and probable future jurisdictional boundary and service area of the subject agency. The state legislature has prescribed a "uniform process" for boundary changes for both cities and special districts that is now embodied in the Cortese-Knox-Hertzberg Local

Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.). This Act delegates the legislature's boundary powers to LAFCOs.

The San Luis Obispo County LAFCO is responsible for reviewing and approving proposed jurisdictional boundary changes in the County, including the annexation and detachment of territory to and/or from cities and most special districts, incorporations of new cities, formations of new special districts, and consolidations, mergers, and dissolutions of existing districts. In addition, the San Luis Obispo County LAFCO would review the Project's proposed annexation to the City.

County of San Luis Obispo General Plan

In accordance with California state law, the County's General Plan guides development on County land. The General Plan forms the basis for the County's land use decision-making by expressing the County's development goals, setting forth land use policy, and informing citizens and decision-makers of development related policies. The purpose of the General Plan is to identify the appropriate location of land uses, including basic design and function of circulation, open space, and infrastructure policies, and public service needs. The County's General Plan consists of nine state-mandated and optional elements: LUE (Inland Framework for Planning [2015] and Coastal Zone Framework for Planning [2018]); Housing Element (HE; 2014); Noise Element (NE; 1992); SE (2014); COSE (2015); Parks and Recreation Element (PRE; 2006); Agriculture Element (2010); Offshore Energy Element (1992); and an Economic Element (2012).

County of San Luis Obispo Inland Land Use Ordinance

The County's LUE (Inland Framework for Planning) is adopted as its zoning ordinance and defines 12 land use categories and 11 combining designations. Residential zones include: rural residential, suburban residential, and single-family residential. Non-residential zones include: agriculture, rural lands, open space, recreation, public facilities, office and professional, retail commercial, service commercial, and industrial. The combining designations include: airport review area, energy and extractive resource area, extractive resource area, flood hazard, geologic study area, historic site, local coastal plan area, renewable energy area, sensitive resource area, transfer of development credit receiving site, and transfer of development credit sending site.

Airport Land Use Plan for the San Luis Obispo County Regional Airport

The ALUP is a key governing land use document regarding safety and noise related restrictions for land use surrounding the Airport. It was first adopted in December 1973, most recently amended in 2005, and is currently being updated by the County ALUC. The ALUP provides guidance for the establishment of compatible land uses within the Airport Land Use Planning Area (ALUPA). The ALUP contains policies and guidelines which address public safety and noise exposure within the ALUPA and provides land use guidance based upon established noise and safety corridors. ALUP policies affect areas under both City and County jurisdiction.

Small portions of the Project site lie within Safety Sub-Areas S-1B and S-1C of the 2005 ALUP, identifying potential airport risk hazards from airport operations. However, as discussed further below, recent analysis of Airport hazards based on Caltrans Airport Land Use Planning Handbook and the San Luis Obispo Airport Land Use Compatibility Report criteria (Johnson Aviation 2014) indicates that the safety risks may be significantly lower than identified in the 2005 ALUP and that Airport hazard risks are very low. The maps prepared as part of the Johnson Aviation Report depicting Airport hazards based on the Caltrans Handbook Safety Compatibility Zones depict the Project site as being located entirely outside of the airport safety compatibility zones and susceptible to airport hazards. In addition, though two Airport Safety Areas are mapped on the Project site under the current ALUP, the ALUC conceptually reviewed the Project on April 19, 2017 and determined that the use of the corrected map was appropriate for defining airport hazards for the Project. Further, the ALUC is currently in the process of updating the ALUP to evaluate airport safety zones consistent with the California Airport Land Use Planning Handbook. Potential safety policies are discussed more fully in Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* while consistency with ALUP polices is discussed in Section 3.9.3, *Consistency with Plans and Policies* below. Given the ALUC's preliminary review of the Project and the pending ALUP update, the Project is analyzed for airport safety against the Caltrans Handbook Safety Compatibility Zones identified in the Johnson Aviation Report.

ALUP Safety Area S-1B is comprised of those portions of Safety Area S-1 which are not included in Safety Area S-1A, but are within probable gliding distance for aircraft on expected approach or departure courses. This Safety Area also includes state-defined sideline safety areas, inner turning zones and outer safety areas for both Runway 11-29 and Runway 7-25. Aviation safety hazards to be particularly considered

in this area include mechanical failures, fuel exhaustion, deviation from glideslope or minimum descent altitude during instrument flight rules operations (due to pilot error or equipment malfunction), loss of control during short approach procedures, stall/spin incidents during engine-out maneuvers in multi-engine aircraft, loss of control during "go around" or missed approach procedures, and midair collisions. Under the 2005 ALUP, approximately 34.9 acres of the Specific Plan area are within this area.

Airport Safety Area S-1C is comprised of those portions of Safety Area S-1 which are not included in Safety Areas S-1A or S-1B, but are adjacent to Runway 11-29 (within 0.5 nautical mile [nm]) frequent or low-visibility aircraft operations at less than 500 feet above ground level. Aviation safety hazards to be considered in this area include mechanical failures, deviation from localized runaway approach during instrument flight rules operations (due to pilot error or equipment malfunction), stall/spin incidents during engine-out maneuvers in multi-engine aircraft, loss of control during "go around" or missed approach procedures, and loss of visual references by aircraft performing circle-to-land procedures. The outer border of Safety Area S-1C is rectangular in shape. Approximately 7.6 acres of the Specific Plan area are in this area.

ALUP Safety Area S-2 represents the area within the vicinity of the Project where aircrafts operate frequently or in conditions of reduced visibility at altitudes between 501 and 1,000 feet above ground level. Aviation safety hazards identified in the ALUP include mechanical failures, fuel exhaustion, loss of control during turns from downwind to base legs or from base to final legs of the traffic pattern, stall/spin incidents during engine-out maneuvers in twin engine aircraft, and midair collisions. Because aircraft in Safety Area S-2 are at greater altitude and are less densely concentrated than in other portions of the ALUPA, the overall level of aviation safety risk is considered to be lower than that in Area S-1 or the Runway Protection Zones (RPZs) (SLO County ALUC 2005). Approximately 107.5 acres of the Specific Plan area are within Safety Area S-2.

3.9.2.3 Local

City of San Luis Obispo General Plan

The City General Plan identifies the appropriate location of land uses, basic design and function of circulation, open space, and infrastructure policies, as well as public service needs. The City's General Plan consists of eight state-mandated and optional elements:

LUE (2014); CE (2017); HE (2015); NE (1996); SE (2012); COSE (2006); PRE (2001); and Water and Wastewater Management Element (WWME; 2018). Project consistency with specific policies from the General Plan are analyzed below in Section 3.9.3, *Consistency with Plans and Policies* and within specific EIR sections.

In the early 1980s, the City's LUE was amended to address concerns over hillside development, including within the Project vicinity. The City has a long history of planning to protect steeper hillsides within and surrounding the City, including those within and adjacent to the Irish Hills. The City's 1982 Hillside Planning Areas Phase I and 1984 Phase II reports found that for the Project vicinity, among other things, the area above the 150-foot elevation has steep slopes and a high scenic value while areas below the 150-foot elevation south of Froom Creek are subject to inundation. The Phase I and II reports recommend that all areas above the 150-foot elevation in the Irish Hills become part of a permanent open space easement and that structures, grading, and removal of significant vegetation be prohibited. These recommendations were adopted in 1984 as an amendment to the 1977 LUE (Ordinance 1028-1984), including limiting hillside development on slopes over 15 percent to protect against adverse impacts related to emergency access, unstable geology, water resources availability, wildfire hazard, and visual resource degradation.

As a result of these previous planning efforts, the LUE prohibits development above the 150-foot elevation contour within the Hillside Planning Area to preserve the open space in the area's "steeper, higher, and most visible hillsides." Specifically, Subsection 6.4.7.H of the LUE, The Irish Hills Area, states, "The Irish Hills area should secure permanent open space with no building sites above the 150-foot elevation, in conjunction with any subdivision or development of the lower areas". This policy applies to the Specific Plan area and was not amended or altered during adoption of the 2014 LUCE Update.

2014 Land Use Element

The City's LUE identifies the Project site as a Special Focus Area, SP-3. The LUE includes policies and the prescribed format and content of regulatory elements of a specific plan for SP-3 (Sections 8.1.1 and 8.1.2 of the LUE, General Plan). The City also certified an EIR for the LUE update in 2014. The 2014 LUCE Update EIR addresses potential impacts of development of the Project site in a programmatic manner, primarily referring to the location as the "Madonna on LOVR Specific Plan Area," but it does not address the particulars of the Draft FRSP. Accordingly, Project-specific impacts associated with this development are addressed in detail in this EIR.

The 2014 LUE identifies the Specific Plan area as Special Focus Area, SP-3, with the following requirements:

Policy 8.1.5 Purpose. The purpose of the specific plan is to provide design flexibility that will secure the appropriate development of the site while protecting sensitive environmental resources on the site. Development on the site should be a compact, mixed-use project that provides workforce housing options and neighborhood commercial uses that support pedestrian and bicycle access. The specific plan for this area should consider and address the following land use and design issues:

a. Develop a design that is sensitive to environmental constraints and adjusts accordingly through design. Constraints include wetland protection, slope protection, historic structures, and open space protection.
b. Maintain viewshed of surrounding mountains and secure steeper hillsides as protected open space areas.
c. Variable height limits will be required to protect views of adjacent hills.
d. Provide access to trails.
e. Provide a plan for adequate and safe infrastructure, including appropriate points of access to LOVR.
f. Address neighborhood commercial needs of new neighborhood.
g. Provide connectivity to adjacent development.

LUE Chapter 7, Airport Area

Regulations in Chapter 7 of the LUE, titled Airport Area, apply to all uses, activities, and existing and proposed development on properties within ALUP Safety Areas S-1B, S-1C, and S-2 designated in the ALUP. LUE policies relating to airport land use are listed below.

> ***7.3. Airport Land Use Plan.*** Land use density and intensity shall carefully balance noise impacts and the progression in the degree of reduced safety risk further away from the runways, using guidance from the ALUP, State Aeronautics Act, and California Airport Land Use Planning Handbook guidelines. The City shall use the Airport Master Plan forecasts of aviation activity as a reasonably foreseeable projection of ultimate aviation activity sufficient for long-term land use planning purposes. Prospective buyers of property subject to airport influence should be so informed.
>
> ***7.4. ALUP Safety Area.*** Density and allowed uses within the Safety Areas shall be consistent with the ALUP unless the City overrides a determination of inconsistency in accordance with Section 21676 and 21676.5 et. seq. of the Public Utilities Code. If the

City overrides a determination, all land uses shall be consistent with the State Aeronautics Act and guidance provided in the California Airport Land Use Planning Handbook guidelines, City policies, and noise standards as substantiated by the San Luis Obispo County Airport Master Plan activity forecasts as used for noise planning purposes.

7.5. Airport Noise Compatibility. The City shall use the aircraft noise analysis prepared for the Airport Master Plan EIR as an accurate mapping of the long-term noise impact of the airport's aviation activity that is tied to the ultimate facilities development depicted in the FAA-approved Airport Layout Plan. The City shall use the 60 dB CNEL aircraft noise contour (FAA and state aircraft noise planning standard) as the threshold for new urban residential areas. Interiors of new residential structures shall be constructed to meet a maximum 45 dB CNEL.

7.12. County Airport Land Use Plan. The City shall continue to work with the ALUC to strive to achieve consistency between the ALUP and the City's General Plan. If consistency cannot be achieved, the City shall preserve and maintain as a plausible alternative its constitutional land use authority to overrule the ALUC with regard to adopting General Plan policies that are consistent with the purposes of the California Airport Land Use Planning Handbook, State Aeronautics Act, and state law. Applicable sections of the Zoning Regulations and Specific Plans shall be amended accordingly.

7.16. Airport Overlay Zone. The City shall create an AOZ to reflect the boundaries of the ALUP within the City limits. The purpose of the AOZs are to codify airport compatibility criteria in areas for which the City may override the ALUP determination to ensure compliance with the requirements of the California State Aeronautics Act (Cal. Pub. Utilities Code, Section 21670, et. seq.), which establishes statewide requirements for airport land use compatibility planning, guidance from the California Airport Land Use Planning Handbook, which is published by the California Department of Transportation Division of Aeronautics to support and amplify the State Aeronautics Act requirements, and other related federal and state requirements relating to airport land use compatibility planning. Implementation of the compatibility policies was intended to be accomplished through the Zoning Regulations.

7.17. Airport Land Use and Zoning Code. The City shall update its Zoning Regulations to address allowable uses and development standards for areas in which the City may override a determination of inconsistency. Zoning Regulations shall be consistent with the requirements of the State Aeronautics Act, use guidance from the

Caltrans Airport Handbook, and comply with related state and federal requirements relating to airport land use compatibility. These development standards will include, but are not limited to, intensity and density limitations, identification of prohibited uses, infill development, height limitations, obstructions and other hazards to flight, noise insulation requirements, buyer awareness measures, nonconforming uses, and reconstruction. The process for airport compatibility criteria reviews by the City shall be consistent with these development standards.

City of San Luis Obispo Zoning Regulations

The City's Zoning Regulations define 15 zoning districts in three categories: residential, non-residential, and overlay. The residential zones include: low-density residential, medium-density residential, medium-high-density residential, and high-density residential. The non-residential zones include: conservation/open space, office, public facility, neighborhood commercial, retail commercial, community commercial, Downtown commercial, tourist commercial, service commercial, manufacturing, and business-park. The overlay zones include: planned development, specific plan, historic, mixed-use, and special considerations.

City of San Luis Obispo Community Design Guidelines

The City's Community Design Guidelines, revised in 2010, includes numerous principles related to site planning, building design, street orientation, and creek side development. Section 3.1, *Aesthetics* analyzes the Project's physical impacts related to principles outlined in these guidelines.

3.9.3 Consistency with Plans and Policies

This section summarizes relevant adopted goals and policies and evaluates the Project's consistency with guidelines and requirements established therein. The following discussion of General Plan policies and preliminary determinations regarding Project consistency with these policies is presented for informational purposes. Section 15125(d) of the CEQA Guidelines requires that an EIR "shall discuss any inconsistencies between the Project and applicable general plans and regional plans." Table 3.9-4 discusses a preliminary determination of the Project's consistency with applicable policies from the City's General Plan. Table 3.9-5 summarizes the Project's preliminary consistency with applicable policies from the County's General Plan. The EIR identifies any feasible mitigation measures to improve Project consistency with these policies. Final Project consistency determinations would be made by City decision-makers.

Table 3.9-4. City General Plan Policy Consistency Analysis

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
Land Use Element (LUE)			
1.1.1 – Growth Management	The City shall manage its growth so that: A. The natural environment and air quality will be protected. B. The relatively high level of services enjoyed by City residents is maintained or enhanced. C. The demand for municipal services does not outpace their availability. D. New residents can be assimilated without disrupting the community's social fabric, safety, or established neighborhoods.	Potentially Consistent	As discussed in Section 3.3, *Air Quality and Greenhouse Gas Emissions,* Section 3.4, *Biological Resources,* Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* Section 3.11, *Population and Housing*, Section 3.12, *Public Services and Recreation*, Section 3.13, *Transportation*, and Section 3.14, *Utilities and Energy Conservation*, development of the Project would ensure the City continues to provide essential municipal services to all residents in a manner that ensures the protection of the natural environment to the maximum extent feasible while resulting in consistency and fluidity with surrounding community development.
1.1.2 – Development Capacity and Services	The City shall not designate more land for urban uses than its resources can be expected to support.	Potentially Consistent	As discussed in Section 3.3, *Air Quality and Greenhouse Gas Emissions,* Section 3.4, *Biological Resources,* Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* Section 3.11, *Population and Housing*, Section 3.12, *Public Services and Recreation*, Section 3.13, *Transportation*, and Section 3.14, *Utilities and Energy Conservation*, resources available within the City would be sufficient to support the urban uses within the Project in a manner that ensures the protection of the natural environment to the maximum extent feasible.
1.4 – Urban Edges Character	The City shall maintain a clear boundary between San Luis Obispo's urban development and surrounding open land. Development just inside the boundary shall provide measures to avoid a stark-appearing edge between buildings in the City and adjacent open land. Such measures may include: using new or existing groves or	Potentially Inconsistent	The Project would include development of medium and higher density residential uses immediately adjacent to the open land within the Irish Hills Natural Reserve above the 150-foot elevation line, creating a stark edge between new buildings and the adjacent open lands. The Project would be potentially inconsistent with this policy.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	windrows of trees, or hills or other landforms, to set the edge of development; increasing the required side-yard and rear-yard setbacks; and providing open space or agricultural transition buffers.		
1.5 – Jobs/Housing Relationship	The gap between housing demand (due to more jobs and college enrollment) and supply should not increase.	Potentially Consistent	The Project would include construction of 174 multi-family residential dwelling units and 404 senior units, meeting a need identified in the City General Plan HE. These new units would help maintain the City's current jobs/housing ratio. The Project would contribute to providing housing to improve this balance.
1.7.3 – Interim Uses	Expansion areas should be kept in agriculture, compatible with agricultural support services, or open space uses until urban development occurs, unless a City-approved specific plan provides for other interim uses.	Potentially Consistent	The Project is proposed on land designated for a specific plan (SP-3) which would provide for urban development and open space preservation to implement the City's General Plan.
1.8.1 – Open Space Protection	Within the City's planning area and outside the urban reserve line, undeveloped land should be kept open. Prime agricultural land, productive agricultural land, and potentially productive agricultural land should be protected for farming. Scenic lands, sensitive wildlife habitat, and undeveloped prime agricultural land should be permanently protected as open space.	Potentially Inconsistent	The Project site is located within the City's SOI, is planned for growth under SP-3, and would be annexed to the City consistent with adopted policy and LAFCO review. In accordance with the LUCE Update EIR, the Applicant must dedicate open space land or in-lieu fees for newly annexed land at a ratio of no less than 1:1. The Project would also be required to provide for permanent conservation of approximately 7.1 acres of land to maintain the acreage of an existing open space and agricultural conservation easement that would be partially developed under the Project and requires reconfiguration. However, proposed development of the Upper Terrace would impact scenic lands and sensitive wildlife habitat that supports wildlife movement and corridors. Loss of these resources would be potentially inconsistent with this policy.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
1.8.3 – Commercial uses in the Greenbelt	The City shall not allow commercial development within the greenbelt area unless it is clearly incidental to and supportive of agriculture or other open space uses.	Potentially Consistent	The Project site is located within the City's SOI, within the greenbelt boundary, is planned for urban growth under the LUCE Update, and implementation of the Project would result in annexation of the Project site to the City. The Project would fill a development gap along LOVR with residential and commercial development, consistent with City policy for long-term protection of agriculture and open space surrounding the City within the greenbelt.
1.8.5 – Building Design and Siting	All new buildings and structures should be subordinate to and in harmony with the surrounding landscape. The City should encourage County adoption of regulations prohibiting new structures on ridge lines or in other visually prominent or environmentally sensitive locations, and allowing transfer of development rights from one parcel to another in order to facilitate this policy.	Potentially Inconsistent	The FRSP design provides for larger buildings and structures within the Lower Area of Villaggio and Madonna Froom Ranch, adjacent to already developed areas along LOVR such as the Irish Hills Plaza, and in conformance with the surrounding development and landscape, consistent with the intent of this policy. However, development of the Upper Terrace would place new multi-story structures in open lands on the Upper Terrace adjacent to and highly visible from public roads and the Irish Hills Natural Reserve. Such development would be potentially inconsistent with the intent of this policy that new buildings and structures should be subordinate to and in harmony with the surrounding landscape.
1.8.6 – Wildlife Habitat	The City shall ensure that continuous wildlife habitat- including corridors free of human disruption are preserved, and, where necessary, created.	Consistent	Project development would result in disruption of wildlife movement, particularly to and across the Upper Terrace through development in close proximity to key seep and spring water sources for wildlife and interrupt or prevent wildlife from the Irish Hills Natural Reserve moving through or across the Project site. Implementation of mitigation would reduce Project impacts to a less than significant degree and ensure continuous movement through the site can be provided for

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			wildlife. Refer also to Section 3.4, *Biological Resources.*
1.9.1 – Agricultural Protection	The City shall support preservation of economically viable agricultural operations and land within the URL and city limits. The City should provide for the continuation of farming through steps such as provision of appropriate general plan designations and zoning.	Potentially Consistent	The City has considered the viability of agricultural operations on the Specific Plan area through past planning efforts such as the LUCE Update and the identification of the Project site as SP- 3. The Project site does not support any prime soils or economically viable agricultural operations. The existing open space and agricultural easement would be replaced through dedication of an equivalent continuous area of comparable soils. These measures would mitigate impacts to agricultural resources. See Section 3.2, *Agricultural Resources,* for additional information regarding the viability of agriculture onsite.
1.9.2 – Prime Agricultural Land	The City may allow development on prime agricultural land if the development contributes to the protection of agricultural land in the urban reserve or greenbelt by one or more of the following methods, or an equally effective method: acting as a receiver site for transfer of development credit from prime agricultural land of equal quantity; securing for the City or for a suitable land conservation organization open space or agricultural easements or fee ownership with deed restrictions; helping to directly fund the acquisition of fee ownership or open space easements by the City or a suitable land conservation organization. Development of small parcels which are essentially surrounded by urbanization need not contribute to agricultural land protection.	Potentially Consistent	The City has considered the protection of agricultural resources on the Specific Plan area through past planning efforts, such as the LUCE Update and through the measures detailed for SP-3. Therefore, although Project implementation would result in loss of agricultural soils, which are considered prime when irrigated, the site is not currently irrigated, and has not been irrigated in the past. The existing open space and agricultural easement would be reconfigured. As discussed in Section 3.2, *Agricultural Resources,* there is no prime farmland or farmland of state or local importance identified within the Project site. Development of the Project would not result in the loss of prime agricultural land.
1.10.3 – Public Access	Areas preserved for open space should include public trail access, controlled to protect the natural resources, to assure	Potentially Consistent	The Project's proposed land use plan and conceptual site plan includes a trailhead park in Madonna Froom Ranch providing improved public

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	reasonable security and privacy of dwellings, and to allow continuing agricultural operations.		access to the Irish Hills Natural Reserve's trail network and a new trail access point associated with the Lower Area of Villaggio. Existing trails, proposed public streets, and parking areas would connect to a multi-use trail that would provide public access along the 3,000-foot-long reach of relocated Froom Creek onsite.
1.11.1 – Overall Intent	The City shall manage the city's growth rate to provide for the balanced evolution of the community and the gradual assimilation of new residents. Growth must be consistent with the City's ability to provide resources and services and with State and City requirements for protecting the environment, the economy, and open space.	Potentially Consistent	As discussed in Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* Section 3.11, *Population and Housing*, Section 3.12, *Public Services and Recreation*, Section 3.13, *Transportation*, and Section 3.14, *Utilities and Energy Conservation*, Project design and mitigation measures would ensure that resources and services provided by the City would be sufficient to address growth as a result of the Project.
1.11.2 – Residential Growth Rate	The City shall manage the growth of the City's housing supply so that it does not exceed one percent per year, on average, based on thresholds established by LUE Table 3, excluding dwellings affordable to residents with extremely low, very low or low incomes as defined by the HE. This rate of growth may continue so long as the City's basic service capacity is assured. Table 3 below shows the approximate number of dwellings and residents which would result from the one percent maximum average annual growth rate over the planning period. Approved specific plan areas may develop in accordance with the phasing schedule adopted by each specific plan provided thresholds established by Table 3 are not exceeded. The City Council shall review the rate of growth on an annual basis in conjunction with the General Plan annual	Potentially Consistent	As discussed in Section 3.11*, Population and Housing,* buildout of the FRSP, excluding inclusionary units, would contribute to an average 0.35 percent annual increase to the City's total housing supply. The average annual growth rate would be below, and consistent with, the 1 percent annual average increase allowed by this policy.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	report to ensure consistency with the City's gradual assimilation policy.		
1.13.1 – Water and Sewer Service	The City shall not provide nor permit delivery of City potable water or sewer services to the following areas. However, the City will serve those parties having valid previous connections or contracts with the City. A. Outside the City limits; B. Outside the urban reserve line; C. Above elevations reliably served by gravity-flow in the City water system; D. Below elevations reliably served by gravity-flow or pumps in the City sewer system.	Potentially Consistent	The Project site is located within the City's SOI and implementation of the Project would result in annexation of the Project site to the City. Development under the FRSP would not occur above or below elevation reliably served by gravity-flow or pumps in the City's water or sewer system. The site is a designated expansion area that would be entitled to both City water and sewer services.
1.13.2 – Recycled Water	Provision of recycled water outside of City limits may only be considered in compliance with WWME Policy A 7.3.4 and the following findings: A. Non-potable/recycled water is necessary to support continued agricultural operations. B. Provision of non-potable/recycled water will not be used to increase development potential of property being served. C. Non-potable/recycled water will not be further treated to make it potable. D. Prior to provision of non-potable/recycled water, the property to be served will record a conservation, open space, Williamson Act, or other easement instrument to maintain the area being served in agriculture and open space while recycled water is being provided.	Potentially Consistent	The Project site is located within the City's SOI and implementation of the Project would result in annexation of the Project site to the City. Development under the FRSP would utilize recycled water in a manner consistent with this policy.
1.13.8 – Open Space	The City shall require that each annexation help secure permanent protection for areas designated open space, and for the habitat	Potentially Inconsistent	The Project would involve annexation of the site to the City, with dedication of approximately 54 percent of the Specific Plan area (59 acres) as open

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	types and wildlife corridors within the annexation area that are identified in the COSE.		space. This area would include some but not all of the sensitive habitats (e.g., wetlands, serpentine native bunchgrass habitats). In addition, this open space would be fragmented by proposed development in the Upper Terrace, with residential units, roads, driveways and other improvements disrupting the continuity of this open space. The Project would also result in direct removal of wetland habitat with both onsite and offsite restoration proposed. In addition, development of the Upper Terrace would impact up to 12 special status native plant species, disrupt wildlife movement and corridors, and impact portions of Drainages 1, 2, and 3 and associated sensitive spring and seep habitats, with potential for significant and unavoidable impacts. Therefore, the Project would be only partially consistent with this policy (see Section 3.4, *Biological Resources*).
1.13.10 – Solid Waste Capacity	In addition to other requirements for adequate resources and services prior to development, the City shall require that adequate solid waste disposal capacity exists before granting any discretionary land use approval which would increase solid waste generation.	Potentially Consistent	As discussed in Section 3.14, *Utilities and Energy Conservation*, waste produced by the Project would not substantially affect the landfill's capacity or ability to comply with federal, state, or local regulations. There is adequate capacity at the Cold Canyon Landfill to support the Project.
1.14.7 Development Fee Programs	The City shall maintain a development fee program that covers the costs associated with serving projects with City services and facilities. This maintenance will include periodic review of the fees collected to ensure they are adequate to cover City costs.	Potentially Consistent	The City actively maintains and updates its development fee programs and the Project would be subject to City development fees to covers the costs associated with serving the Project with City services and facilities.
2.3.1 – Mixed Uses and Convenience	The City shall promote a mix of compatible uses in neighborhoods to serve the daily needs of nearby residents, including schools, parks, churches, and convenience retail stores. Neighborhood shopping and services	Potentially Consistent	The Project would be located adjacent to the Irish Hills Plaza Shopping Center, providing immediate access to convenience retail stores for food, clothing, and other necessary goods. Following mitigation discussed in Section 3.12, *Public*

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	should be available within about one mile of all dwellings. When nonresidential, neighborhood serving uses are developed, existing housing shall be preserved and new housing added where possible. If existing dwellings are removed for such uses, the development shall include replacement dwellings (no net loss of residential units).		*Services and Recreation*, sufficient access to schools and parks would be available to Project residents. Several churches exist within the Project vicinity, including the immediately adjacent Mountainbrook Church as well as several churches in residential areas to the north of the Project site. No existing housing would be removed.
2.3.7 – Natural Features	The City shall require residential developments to preserve and incorporate as amenities natural site features, such as land forms, views, creeks, wetlands, wildlife habitats, wildlife corridors, and plants.	Potentially Inconsistent	Project development would result in substantial changes to onsite natural features through mass grading, changes in topography and alteration or elimination of substantial areas of sensitive habitats, including development in close proximity to 12 rare plant species; loss and disruption of sensitive habitats such as serpentine native grassland, springs, and seeps; and loss or disruption of wildlife habitats and wildlife corridors with potential significant and unavoidable impacts. Therefore, the Project would be potentially inconsistent with this policy.
6.4.1 – Hillside Policies	The City shall maintain comprehensive standards and policies for hillside development for the following reasons: A. To protect and preserve scenic hillside areas and natural features such as the volcanic Morros, ridge lines, plant communities, rock outcroppings and steep slope areas that function as landscape backdrops for the community. B. To set the limits of commercial and residential development in hillside areas by establishing a permanent open space green belt at the edge of the community. C. To protect the health, safety and welfare of community residents by directing development away from areas with hazards	Potentially Inconsistent	The Project would include development above the 150-foot elevation, subject to a General Plan Amendment, that would result in significant, unavoidable impacts to aesthetics including views from trails within the Irish Hills Natural Reserve and views from public roads towards the Irish Hills. Scenic hillside areas and natural features within the Upper Terrace that serve as landscape backdrops along the edge of the City would be fragmented by proposed development. The Project would also impact and disrupt natural features such as rare plant communities, including serpentine native bunch grassland and wetlands and up to 12 special status plant species would also be subject to direct and indirect impacts. Project development would also impinge directly on the border of the

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	such as landslides, wildland fires, flooding and erosion.		Irish Hills Natural Reserve, disrupting the continuity of open space greenbelt along the edge of the City. Finally, Project development would expose new residences to significant wildland fire hazards. Because many of these impacts would be significant and unavoidable, the Project would be potentially inconsistent with this policy. See Sections, 3.4, *Biological Resources*, 3.7 *Hazards, Hazardous Materials, and Wildfire,* and 3.1, *Aesthetics*.
6.4.2 - Development Limits	The City shall establish and maintain clear development limit lines for hillside planning areas, and special design standards for the hillside areas. The location of the development limit and the standards should cause development to avoid encroachment into sensitive habitats or unique resources as defined in the COSE, and public health and safety problems related to utility service, access, wildland fire hazard, erosion, flooding, and landslides and other geologic hazards. Also, the development limit line and the standards should help protect the city's scenic setting.		
6.4.7 – Hillside Planning Areas	The City shall urge the County to implement the following hillside policies. Specific policies to address particular concerns for the area as shown on Figure 7 are listed below. For each of these areas, land above the development limit line should be secured in open space. H. The Irish Hills area should secure permanent open space with no building sites above the 150-foot elevation, in conjunction with any subdivision or development of the lower areas.		
6.6.1 – Creek and Wetlands Management Objectives	Maintain and restore natural conditions and habitats; minimize flooding damage; recognize sections of creeks which are in largely natural areas and manage for maximum ecological value. The City shall manage its lake, creeks, wetlands,	Potentially Inconsistent	Project development would result in large-scale planned restoration of Froom Creek and improvements to flood control and public access, consistent with the intent of this policy. However, proposed substantial changes to onsite natural drainage patterns, elimination of some wetland and riparian features and impacts to the ecological

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	floodplains, and associated wetlands to achieve the multiple objectives of: A. Maintaining and restoring natural conditions and fish and wildlife habitat; B. Preventing loss of life and minimizing property damage from flooding; C. Providing recreational opportunities which are compatible with fish and wildlife habitat, flood protection, and use of adjacent private properties.		value of Drainages, 1, 2, and 3 would cause potential inconsistencies as discussed below: A. Project improvements to Froom Creek would restore or create riparian habitat along the creek channel as well as potentially improve passage for steelhead trout and other wildlife species along the realigned Froom Creek channel. However, development within the Upper Terrace in close proximity to segments of Drainages 1, 2, and 3, as well as construction of roads across and culverts within these tributary drainages could substantially reduce the ecological value of the perennial springs and seeps to both onsite wildlife and that from the adjacent Irish Hills Natural Reserve, potentially inconsistent with the intent of this policy. B. Project flood control improvements would confine Froom Creek floodwaters, reducing onsite and offsite flooding, consistent with intent of this policy. C. The Project would include improved recreational opportunities through installation of amenities such as including a 6-foot-wide public trail and park benches along the bank of Froom Creek, consistent with the intent of this policy.
6.6.3 – Amenities and Access	New development adjacent to creeks must respect the natural environment and incorporate the natural features as project amenities, providing doing so does not diminish natural values. Developments along creeks should include public access across the development site to the creek and along the creek, provided that wildlife habitat, public safety, and reasonable privacy and security of the development can be maintained, consistent with the COSE.	Potentially Inconsistent	The Project would include restoration and enhancement of both natural resources (e.g., riparian habitat) and public access along Froom Creek. Amenities including a 6-foot-wide trail, picnic benches, and trash facilities would be located adjacent to the creek and would be accessible to the public from public streets. Further, implementation of MM BIO-1 through -8 would ensure appropriate replacement of adversely affected wetland and riparian habitat. However, development of the Upper Terrace with units, roads and driveways located proximate to Froom Creek

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			tributary and Drainages 1, 2, and 3 would disrupt the natural environment and values of these tributary drainages and their ability to sustain rare plants and wildlife movement and access, potentially inconsistent with the intent of this policy. Mitigation is identified, including a requirement for a comprehensive Biological Mitigation and Monitoring Plan and HMMP, which would increase the Project's consistency with this policy.
6.6.5 – Runoff Reduction and Groundwater Recharge	The City shall require the use of methods to facilitate rainwater percolation for roof areas and outdoor hardscaped areas where practical to reduce surface water runoff and aid in groundwater recharge.	Potentially Consistent	The Project includes BMPs, including use of bioswales, rain gardens, and detention basins to facilitate rainwater percolation, aid in groundwater recharge, and reduce surface water runoff, consistent with this policy.
6.6.6 – Development Requirements	The City shall require project designs that minimize drainage concentrations and impervious coverage. Floodplain areas should be avoided and, where feasible, any channelization shall be designed to provide the appearance of a natural water course.	Potentially Consistent	Project development would preserve approximately 54 percent of the site in open space, minimizing impervious surfaces, and include rain gardens and bioswales. Much of the area of proposed development is currently located within a floodplain; however, implementation of the Project would elevate lower portions of the site and reconfigure the floodplain such that no development would occur in a designated floodplain area. Froom Creek would be realigned to confine the floodplain largely within the creek channel outside developed areas and revegetated to have the appearance of a natural water course consistent with the intent of this policy.
6.6.7 – Discharge of Urban Pollutants	The City shall require appropriate runoff control measures as part of future development proposals to minimize discharge of urban pollutants (such as oil and grease) into area drainages.	Potentially Consistent	The Project identifies runoff control measures and water quality treatment components that would minimize or eliminate discharge of pollutants, including oils, grease, erosion, and sedimentation. In addition, all future development under the Draft

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
6.6.8 – Erosion Control Measures	The City shall require adequate provision of erosion control measures as part of new development to minimize sedimentation of streams and drainage channels.		FRSP would be required to comply with the Central Coast RWQCB's Post Construction Stormwater Requirements.
8.1.5 – SP-3, Madonna on LOVR Specific Plan Area	The purpose of the specific plan is to provide design flexibility that will secure the appropriate development of the site while protecting sensitive environmental resources on the site. Development on the site should be a compact, mixed-use project that provides workforce housing options and neighborhood commercial uses that support pedestrian and bicycle access.	Potentially Inconsistent	The Project would contain compact mixed-use workforce housing and commercial development within Madonna Froom Ranch. Senior housing and support facilities and private neighborhood commercial would be more dispersed within the Lower Area and Upper Terrace of Villaggio. Conceptual circulation plans are also designed to support pedestrian and bicycle access within, to, and from Madonna Froom Ranch and adjacent commercial development. See Section 3.13, *Transportation.* However, the Project would include a General Plan Amendment to allow for development above the 150-foot elevation, which was not initially contemplated in the LUE. The Upper Terrace would include new residences, parking garages, roads and driveways constructed within and immediately adjacent to environmentally sensitive resources, including native serpentine bunchgrass and wetland habitats, serpentine rock outcroppings that support special status plant species, and springs and seeps that support wildlife movement. Therefore, the Project would be potentially inconsistent with this policy. See Section 3.4, *Biological Resources*.
9.7 – Sustainable Design	The City shall promote, and where appropriate, require sustainable building practices that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.	Potentially Consistent	The Project would provide passive heating, utilization of renewable energy sources (e.g., wind, solar), and incorporation of native and non-invasive drought tolerant plant materials that would promote and require implementation of sustainable design. These actions would implement City sustainable design policies and would comply with green
9.13 – Incentive Program	The City shall consider the feasibility of providing incentives for new and renovate	Potentially Consistent	

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	projects that incorporate sustainable design features such as constructing new buildings that are solar ready, or off-setting significant operational energy use through use of solar water heating, photovoltaic systems, geothermal or wind energy systems.		building certification on the City's General Plan COSE and Climate Action Plan.
Conservation and Open Space Element (COSE)			
2.2.1 – Atmospheric Change	City actions shall seek to minimize undesirable climate changes and deterioration of the atmosphere's protective functions that result from the release of carbon dioxide and other substances.	Potentially Consistent	Buildout of the Draft FRSP would result in substantial GHG generation during construction and operation. Although bicycle and pedestrian amenities and local-serving commercial uses would be provided, the site's distance from downtown and lack of high-frequency transit routes inhibits minimization of long-term GHG generation. See Section 3.3, *Air Quality and Greenhouse Gas Emissions*. Implementation of air quality mitigation measures would reduce Project emissions below adopted thresholds and minimize deterioration of the atmosphere.
2.2.4 – Promote walking, biking, and use of public transit use to reduce dependency on motor vehicles	City actions shall seek to reduce dependency on gasoline- or diesel-powered motor vehicles and to encourage walking, biking, and public transit use.	Potentially Consistent	The Project is designed to enhance and provide for multi-modal access within, to, and from the site. The Project would facilitate the development of new residences and mixed-use development adjacent to existing developed commercial and residential areas, supporting walkability and reducing vehicle trip lengths to and from the home and workplace.
3.2 – Historic and Architectural Resources	The City will expand community understanding, appreciation, and support for historic and architectural resource preservation to ensure long-term protection of cultural resources.	Potentially Consistent	The Project would preserve historic buildings within the Froom Ranch Historic District. Consistent with MM CR-8, the Project would develop and distribute an informational pamphlet that documents the potential historic district and its cultural and architectural heritage. The pamphlet would highlight social (Froom family) and industrial (dairy industry) factors relevant to the

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			property and region, and 500 free copies would be distributed in local museums, heritage organizations, and the trailhead park. After distribution of physical copies, a digital copy of the pamphlet would remain available.
3.3.1 – Historic Preservation	Significant historic and architectural resources should be identified, preserved, and rehabilitated.	Potentially Inconsistent	Implementation of MM CR-9 through -13 would ensure relocation and restoration and/or reconstruction of the four individually eligible historical resources would conform with the Secretary's Standards, and MM CR-14 would address potential for construction vibration to disturb these buildings. Additionally, these measures would lessen impacts to the potential historic district by ensuring that relocation and reconstruction of the main residence, dairy barn, creamery, and granary would retain character-defining features that convey the district's historical significance, and that demolished historic structures would be thoroughly documented and curated. However, because the demolition of portion of a historical resource represents an irreversible change to the historical resource, the Project may be inconsistent with these policies.
3.3.3 – Historical Documentation	Buildings and other cultural features that are not historically significant but which have historical or architectural value should be preserved or relocated where feasible. Where preservation or relocation is not feasible, the resources shall be documented and the information retained in a secure but publicly accessible location. An acknowledgement of the resources should be incorporated within the site through historic signage and the reuse or display of historic material and artifacts.		
3.3.4 – Changes to Historic Buildings	Changes or additions to historically or architecturally significant buildings should be consistent with the original structure and follow the Secretary of the Interior's Standards for the Treatment of Historic Buildings. New buildings in historical districts, or on historically significant sites, should reflect the form, spacing and neighborhood's architectural character should be maintained.		
3.5.1 – Archaeological Resource Protection	The City shall provide for the protection of both known and potential archaeological resources. To avoid significant damage to important archaeological sites, all available measures, including purchase of the property	Potentially Consistent	The Specific Plan includes policies for the protection of known and unknown pre-historic cultural and archaeological resources. Policy 3.3.4 of the Specific Plan, once adopted, would incorporate Section 4.30 of the City's

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	in fee or easement, shall be explored at the time of a development proposal. Where such measures are not feasible and development would adversely affect identified archaeological or paleontological resources, mitigation shall be required pursuant to the Archaeological Resource Preservation Program Guidelines.		Archaeological Resource Preservation Guidelines, Mitigation Measures, and Avoidance by reference to ensure the identification, protection, and mitigation of archaeological resources occurs consistent with adopted City standards. With mitigation included in Section 3.4, *Cultural and Tribal Cultural Resources*, the Project would have less than significant effects on cultural resources and the Project would be consistent with these policies.
3.5.2 – Native American Sites	All Native American cultural and archaeological sites shall be protected as open space wherever possible.		
3.5.4 – Archaeological Sensitive Areas	Development within an archaeologically sensitive area shall require a preliminary site survey by a qualified archaeologist knowledgeable in Native American cultures, prior to a determination of the potential environmental impacts of the project.		
3.5.5 – Archaeological Resources Present	Where a preliminary site survey finds substantial archaeological resources, before permitting construction, the City shall require a mitigation plan to protect the resources. Possible mitigation measures include: presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; excavation removal and curation in an appropriate facility under the direction of a qualified professional.		
3.5.6 – Qualified Archaeologist Present	Where substantial archaeological resources are discovered during construction or grading activities, all such activities in the immediate area of the find shall cease until a qualified archaeologist knowledgeable in Native American cultures can determine the		

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	significance of the resource and recommend alternative mitigation measures.		
3.5.7 – Native American Participant	Native American participation shall be included in the City's Guidelines for resource assessment and impact mitigation. Native American representatives should be present during archaeological excavation and during construction in an area likely to contain cultural resources. The Native American community shall be consulted as knowledge of cultural resources expands and as the City considered updates or significant changes to its General Plan.	Potentially Consistent	The City initiated consultation with the NAHC and local interested Tribal agencies and representatives on the presence of sensitive archaeological sites and resources pursuant to SB 18 and AB 52. The results of this consultation process have been incorporated into the design of this Project, and potential impacts to these sensitive sites and resources would be avoided or mitigated through implementation of MM CR-1 through --7, that provide for monitoring during Project construction and requirements for incidental discovery of resources onsite, consistent with these policies.
3.5.8 – Protection of Native American Cultural Sites	The City will ensure the protection of archaeological sites that may be culturally significant to Native Americans, even if they have lost their scientific or archaeological integrity through previous disturbance; sites that may have religious value, even though no artifacts are present; and sites that contain artifacts which may have intrinsic value, even though their archaeological context has been disturbed.		
4.3.4 – Use of Energy-Efficient, Renewable Energy Resources	The City will promote the use of cost effective, renewable, non-depleting energy sources wherever possible, both in new construction projects and in existing buildings and facilities.	Potentially Consistent	The Draft FRSP provides policies promoting and requiring implementation of sustainable design including resource conservation and energy efficiency requirements, photovoltaic systems, EV charging stations, 100 percent use of carbon-free energy supplies, and reductions in VMT to the maximum extent feasible. These policies are intended to align with City policies for sustainable design and compliance with green building certification, including the City's goal for achieving carbon neutrality by 2035, promoting energy efficiency, and the use of renewable energy supplies.
4.3.6 – Energy-Efficient and Green Building in New Development	The City shall encourage energy-efficient "green buildings" as certified by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Program or equivalent certification.		

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
4.4.1 – Pedestrian- and Bicycle-friendly Design	Residences, work places and facilities for all other activities will be located and designed to promote travel by pedestrians and bicyclists.	Potentially Consistent	The Draft FRSP would facilitate mixed-use development adjacent to the Irish Hills Plaza and other existing urban development. The Draft FRSP land use and circulation plan promotes travel by pedestrians and bicyclists both onsite and offsite by providing a new sidewalk and bike lane along LOVR, pedestrian connections to Irish Hills Plaza, a new transit stop, and a new multi-use trail along Froom Creek.
4.4.2 – Alternative Transportation	The City's transportation and circulation systems shall foster travel by modes other than motor vehicles, including walking, bicycles and public transit.		
4.5.1 – Solar Access Standards	To encourage use of solar energy, reasonable solar access shall be provided and protected. The City will protect reasonable solar exposure for existing collectors and likely locations of future collectors, both active and passive. Standards for the subdivision and development of property should assure desirable solar access.	Potentially Consistent	Section 4.7 Energy Conservation & Sustainability of the Draft FRSP provides site design and development practices to maximize solar exposure and opportunities for passive heating, cooling, and lighting. Unwanted heat gain would be minimized through implementation of FRSP policies, encouraging the use of exterior shading devices, skylights, daylighting controls, thermal mass building components, natural ventilation, and installation of high-performance glazing. FRSP goals, policies, and regulations developed based on the City's COSE and Climate Action Plan would require the use of photovoltaic solar collectors where feasible to offset new energy demand. Vegetation and topography onsite would permit siting and development of solar collectors. No solar collectors on adjacent properties would be shaded as a result of Project implementation. See Section 2.4.2, *Project Design* for a complete list of Project sustainability features.
4.5.2 – Subdivision Design for Solar Access	In subdivisions, the layout of streets and lots shall provide and protect solar exposure. To assure the maximum control over potential shading features, the longest dimension of each lot should be oriented within 30 degrees of south, unless the subdivider demonstrates that for certain lots any of the following applies: The lots are large enough to allow desirable solar access, regardless of lot orientation. Buildings will be constructed as part of the tract development, and the buildings will be properly oriented, with adequate solar access. Topography makes variations from the prescribed orientation desirable to reduce grading or tree removal, or to take advantage of a setting that would favor greater reliance		

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	on early morning or late afternoon solar exposure. Topographical conditions, such as steep, north-facing slopes or shading by the mass of a hill, make solar energy infeasible. The size of the subdivision, combined with the existing orientation of surrounding streets and lots, precludes desirable lot orientation.		
4.5.7 – Unwanted Solar Heat Gain	Sites and buildings should be designed to avoid unwanted heat gain from solar exposure. Features that provide shading at suitable times of the day and year and generally should be "passive" or automatic, avoiding the need for occupants to regularly monitor or adjust them.		
4.6.8 – Energy Efficient Project Design	Encourage energy-efficient project design by emphasizing use of daylight and solar exposure, shading and natural ventilation, as opposed to designing a particular image and relying on mechanical systems to maintain functionality and comfort. Educate City staff, citizen advisers, developers and designers on ways to exceed minimum state energy standards.		
4.6.9 – Solar Access for New Development	Address solar access in all plans needing City discretionary approval, considering both structures and vegetation. Shading by vegetation is also subject to the California Solar Shade Control Act. This act prohibits the placement of vegetation that would shade a solar collector on another's property, if the collector meets certain height and setback criteria. The City will advise those seeking permits for solar collectors to document		

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	vegetation existing when the collector is installed or built.		
4.6.17 – Require Solar Power for New Dwellings	Within new single-family residential projects of 20 or more dwelling units, 5 percent of the total number of dwellings shall be built with photovoltaic solar collectors beginning in 2008; this percentage shall increase 4 percent each year until 2020. Multi-family residential developments shall be exempt from this requirement, except for common-use facilities such as recreation rooms, spas, or swimming pools. In these cases, the common facilities shall be built with photovoltaic solar collectors.		
5.5.8 – Recycling Facilities in New Development	Requires facilities in new developments to accommodate and encourage recycling.	Potentially Consistent	The Draft FRSP would designate communal collection areas for trash, recycling, and food waste material that would be accessible to municipal solid waste collectors.
7.3.1 – Protect Listed Species	City will comply with state and Federal requirements for listed species; City will protect listed species through its actions on…development applications.	Potentially Inconsistent	The Project would potentially impact two listed species, the state and federally-listed endangered Chorro Creek bog thistle and the federally-threatened southern steelhead trout. Development within the Upper Terrace would be located in close proximity (as close as 15 to 20 feet) to populations of the Chorro Creek bog thistle known to occur within Drainages 1 and 2. Development footprints may avoid direct impacts to known mapped locations of this species; however, mass grading and construction in such close proximity to this endangered species has potential to result in loss of individuals or take or this species. In addition, there is a high potential for indirect loss of take during construction and operation (e.g., landscape maintenance, fire buffer clearance, resident activities) as development would closely bracket populations in Drainage 2 and be located near this

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			in Drainage 1. Mitigation is identified including increased buffers and implementation of a comprehensive Biological Mitigation and Monitoring Plan, which would further the Project's consistency with this policy. However, this impact could not be fully mitigated without major changes to current development configuration within the Upper Terrace. In addition, while potentially providing long-term habitat improvement benefits, construction activities during realignment of Froom Creek could impact southern steelhead trout due to inadvertent take; however, this impact could be feasibly mitigated. Because impacts to the endangered Chorro Creek bog thistle would be significant and unavoidable, the Project would be potentially inconsistent with this policy. See Section 3.4 *Biological Resources.*
7.3.2 Species of Local Concern	The City will: Maintain healthy populations of native species in the long term, even though they are not listed for protection under State or Federal laws. These "species of local concern" are at the limit of their range in San Luis Obispo, or threats to their habitat are increasing. Identify the location, habitat and buffer needs of species of local concern. This information will be developed by qualified people early in the planning and development review process. Protect species of local concern through: its actions on land use designations, development standards, development applications; the location, design, construction, and maintenance of City	Potentially Inconsistent	The Project site supports habitat for several listed species of local concern, other special-status plants and wildlife, as well as sensitive riparian, native bunchgrass, and freshwater marsh habitats. A total of seven plant species of local concern are known to occur within the Upper Terrace generally above the 150-foot elevation. Project development has the potential to directly or indirectly adversely affect these species, their range, and/or their habitat. Although the conceptual land use plan attempts to avoid direct removal of known locations of such species, large-scale mass grading of the Upper Terraces could lead to accidental or inadvertent loss of such species while Project operation and occupancy could lead to indirect losses as residences, roads, parking areas, trails and other uses areas would be interspersed among known locations of such species, leading to potential indirect impacts to such species through fire buffer

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	facilities; land that the City owns or manages. Encourage individuals, organizations, and other agencies to protect species of local concern within their areas of responsibility and jurisdiction. Protect sensitive habitat, including creeks, from encroachment by livestock and human activities.		and landscape management and human activities. Further, while Froom Creek would be restored and enhanced, development of the Upper Terrace would directly and indirectly impact sensitive creek, seep and spring habitats in Drainage 1, 2, and 3, as well as native grassland habitats and wetlands leading to long-term degradation of these sensitive habitats. While FRSP policies and mitigation measures in Section 3.4, *Biological Resources*, would partially mitigate potential harm or loss, impacts to species of local concern and sensitive habitats would remain significant and unavoidable. Therefore, the Project would be potentially inconsistent with this policy.
7.3.3 – Wildlife Habitat and Corridors	Continuous wildlife habitat, including corridors free of human disruption, shall be preserved and where necessary, created by interconnecting open spaces, wildlife habitat, and corridors.	Potentially Inconsistent	The Project would include development of housing, roads, driveways, parking areas and walkways within the Upper Terrace above the 150-foot elevation. The Upper Terrace development would be clustered between Drainages 1 and 3, closely bracketing both sides of Drainage 2. This clustered development would be linked to the Lower Area by an approximately 1,000-foot-long private access road and lighted walkways that would traverse the proposed open space area. This road would be traversed by hundreds of vehicles, pedestrians, cyclists, and other users per day, with potential for interruption of wildlife movement and increases in vehicle strikes. Although substantial areas of open space would be preserved and continue to be accessible to wildlife in the Upper Terrace, the development of medium and higher density residential units with associated increased noise, light, and activities in the middle of the proposed open space adjacent to or astride three drainages with perennial springs and seeps on the Upper Terrace adjacent to Irish Hills Natural Reserve

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			would severely disrupt existing continuous wildlife habitat. This development would introduce high levels of human disruption in the middle of an environmentally sensitive wildlife habitat, with such development particularly inhibiting wildlife access to key spring and seep water sources which would be closely bordered by new residences. Further, this would greatly increase potential for urban-wildland conflicts related to trash management, pesticide impacts to wildlife (e.g., rodenticide impacts to predators), predation of domestic pets by, and/or adverse human interaction with larger predators (e.g., coyotes, mountain lions). Therefore, although the Project would preserve substantial amounts of open space, its value to wildlife would be diminished and the Project would be potentially inconsistent with this policy.
7.5.1 – Protection of Significant Trees	Significant trees, as determined by the City Council upon the recommendation of the Tree Committee, Planning or Architectural Review Committee, are those making substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. Significant trees, particularly native species, shall be protected. Removal of significant trees shall be subject to the criteria and mitigation requirements in Chapter 8.6.3 [COSE Policy]. Oak Woodland communities in the Greenbelt and in open space areas shall be protected.	Potentially Consistent	Mature native and non-native trees would be potentially removed, trimmed, limbed, or otherwise adversely affected through Project development. Implementation of MM BIO-15 requiring daily surveys during construction by a City-approved arborist or qualified biologist would protect remaining native trees by ensuring avoidance and proper protection. Loss of native or riparian trees would require replacement, and would ensure individual discretionary actions mitigate for impacts to significant trees. Refer to Section 3.4, *Biological Resources*.
7.5.2 Use of Native California Plants in Urban Landscaping	Landscaping should incorporate native plant species, with selection appropriate for location.	Potentially Consistent	Draft FRSP policies would require that landscape plans use native and non-invasive drought-tolerant plant materials. These policies would require that park landscaping consist primarily of drought-tolerant trees, shrubs, and native grasses.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
7.5.4 – Preservation of Grassland Communities and Other Habitat Types	Grassland communities and other habitat types in the Greenbelt and in designated open space areas shall be preserved.	Potentially Inconsistent	The majority of the serpentine bunchgrass grassland onsite would be preserved within the designated 59 acres of open space. MM BIO-1 through -8 would minimize disturbance of onsite grassland habitats, but full replacement of 4.74 acres of directly impacted serpentine bunchgrass grassland may be infeasible due to the difficulty of reestablishing the full complement of conditions and grasslands species. Therefore, impacts to this sensitive habitat would be considered significant and unavoidable. Therefore, the Project would be potentially inconsistent with this policy.
7.5.5 – Soil Conservation and Landform Modification	Public and private development projects shall be designed to prevent soil erosion, minimize landform modifications to avoid habitat disturbance, and conserve and reuse onsite soils.	Potentially Inconsistent	The Project would involve significant landform modification, including major grading on slopes within the Upper Terrace above the 150-foot elevation and realignment of 3,000 feet of Froom Creek. Site grading would include approximately 379,200 cy of fill including 120,000 cy of import; 253,000 cy of cut would be reused and balanced onsite. Although RWQCB permit requirements and BMPs would minimize soil erosion during and following construction, substantial areas of sensitive wetland, riparian and native grassland would be disturbed, damaged, or removed. While much of this disturbed habitat would be restored onsite or replaced offsite, long-term loss of 4.7 acres of native grassland habitat and potential ongoing disturbance of wetlands, seeps and springs in Drainages 1, 2, and 3 would not be fully mitigated. While grading and development within Madonna Froom Ranch and the Lower Area of Villaggio would appear to be consistent with the intent of this policy, development of the Upper Terrace in areas above the 150-foot elevation would require both substantial landform alteration

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			and disturbance of sensitive habitats. Therefore, the Project would be inconsistent with this policy.
7.7.6 – Replace Invasive, Non-Native Vegetation with Native Vegetation	The City and private development will protect and enhance habitat by removing invasive, non-native vegetation and by replanting it with native California plant species.	Potentially Consistent	The Project would include habitat restoration, designation of open space, and realignment of Froom Creek that would involve removal of non-native species and replanting with native vegetation. Draft FRSP policies would require existing invasive plants and noxious weeds removal prior to landscape installation. See Section 3.4, *Biological Resources.*
7.7.7 – Preserve Ecotones	Condition or modify development approvals to ensure that "ecotones," or natural transitions along the edges of different habitat types, are preserved and enhanced because of their importance to wildlife. Natural ecotones of particular concern include those along the margins of riparian corridors, marshlands, vernal pools, and oak woodlands, where they transition to grasslands and other habitat types	Potentially Inconsistent	Project implementation would preserve ecotones and/or natural transitions between the realigned Froom Creek and the Calle Joaquin wetlands, as well as portions of ecotones between Drainages 1, 2, and 3 and surrounding grasslands and between oak woodlands and surrounding grasslands. However, ecotones between the riparian woodlands along the LOVR ditch, Calle Joaquin wetlands and adjacent grasslands, between Drainage 2 and adjacent grasslands and coastal sage scrub on the Upper Terrace and grasslands, around the confluence of Drainages 1, 2, and 3, and between the realigned Froom Creek and adjacent grasslands would be substantially reduced in extent or in some cases eliminated. In particular, the Calle Joaquin wetlands and realigned From Creek would be isolated from grasslands and drainages in the Upper Terrace. Therefore, the Project is potentially inconsistent with the intent of this Policy.
7.7.8 – Protect Wildlife Corridors	Condition development permits in accordance with applicable mitigation measures to ensure that important corridors for wildlife movement and dispersal are protected. Features of particular importance to wildlife include riparian corridors, wetlands, lake shorelines, and protected	Potentially Inconsistent	The Project would include development of housing, roads, driveways, parking areas and walkways within the Upper Terrace above the 150-foot elevation contour. The Upper Terrace development would be clustered between Drainages 1 and 3, closely bracketing both sides of Drainage 2. This clustered development would be linked to the

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	natural areas with cover and water. Linkages and corridors shall be provided to maintain connections between habitat areas.		Lower Area by an approximately 1,000-foot-long private access road and lighted walkways that would traverse the open space. This road would be traversed by hundreds of vehicles, pedestrians, cyclists, and other users per day, with potential for interruption of wildlife movement and increases in vehicle strikes. Although substantial areas of open space would be preserved and continue to be accessible to wildlife in the Upper Terrace, the development of residential units with associated increased noise, light and activities in the middle of the proposed open space adjacent to or across three drainages with perennial springs and seeps on the Upper Terrace adjacent to Irish Hills Natural Reserve would disrupt existing continuous wildlife habitat. This development would introduce high levels of human disruption in the middle of an environmentally sensitive wildlife habitat, with such development particularly inhibiting wildlife access to key spring and seep water sources which would be closely bordered by new residences. Further, this would greatly increase potential for urban-wildland conflicts related to trash management, pesticide impacts to wildlife (e.g., rodenticide impacts to predators), and predation of domestic pets by, and/or adverse human interaction with larger predators (e.g., coyotes, mountain lions). Therefore, although the Project would preserve substantial amounts of open space, its value to wildlife would be diminished and the Project would be potentially inconsistent with this policy.
7.7.9 – Creek Setbacks	As further described in the Zoning Regulations [Section 17.16.025], the City will maintain creek setbacks to include: an appropriate separation from the physical top	Potentially Consistent	The Project would establish and maintain a minimum 35-foot setback from the realigned Froom Creek top of bank as set forth in City policy. Planned 20-foot setbacks from Drainages 1, 2, and

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	of bank, the appropriate floodway as identified in the Flood Management Policy, native riparian plants or wildlife habitat, and space for paths called for by any city-adopted plan. In addition, creek setbacks should be consistent with the following: The following items should be no closer to the wetland or creek than the setback line: buildings, streets, driveways, parking lots, aboveground utilities, and outdoor commercial storage or work areas. Development approvals should respect the separation from creek banks and protection of floodways and natural features identified in Part A above, whether or not the setback line has been established.		3, which are tributaries to Froom Creek, pursuant to Policy 3.2.2 of the proposed FRSP, would be insufficient to protect wildlife and endangered plant habitat or long-term habitat viability, particularly within Drainage 2. However, because these tributary drainages are not flood hazards or specifically identified in City Flood Management Policy, the Project would be consistent within this policy.
8.2.2 – Open Space within the Urban Area	Within the urban area, the City will secure and maintain a diverse network of open land encompassing particularly valuable natural and agricultural resources, connected with the landscape around the urban area. Particularly valuable resources include: A. Creek corridors, including open channels with natural banks and vegetation. C. Wetlands and vernal pools. D. Undeveloped land within the Urban Reserve not intended for urban uses. E. Grassland communities and woodlands. F. Wildlife habitat and corridors for the health and mobility of individuals and of the species. G. The habitat of species listed as threatened or endangered by the State or Federal governments.	Potentially Inconsistent	The Project would dedicate 59 acres as open space, including the realigned Froom Creek corridor, Calle Joaquin wetlands and grassland and other habitats above the 150-foot elevation adjacent to the Irish Hills Natural Reserve, which would support diverse open space with valuable habitats. However, while the Project would be consistent with the majority of items listed in A-M, it would diminish the value to onsite wildlife corridors (F) as discussed under Policy 7.3.3 Wildlife Corridors and Habitats, above, and result in significant and unavoidable impacts to the serpentine bunchgrass grasslands which correspond to the *Nassella pulchra* Herbaceous Alliance, a unique plant community, as well as impacting several species of local concern as discussed under Policy 7.3.2 Species of Local Concern (M). Therefore, development of the Project is potentially inconsistent with this policy.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	H. Prime agricultural soils and economically viable farmland. I. Groundwater recharge areas. J. Historically open-space settings for cultural resources, native and traditional landscapes. K. Hills, ridgelines and the Morros. M. Unique plant and animal communities, including "species of local concern."		
8.3.1 Open Space within an Urban Area	The City will preserve the areas listed in Goal 8.2.2 (creek corridors, including open channel with natural banks and vegetation, wetlands and vernal pools, grassland communities and woodlands, wildlife habitat corridors, habitat of listed species, and unique plant and animal communities including "species of local concern") and will encourage individuals, organizations, and other agencies to do likewise. The City will designate these areas as Open Space or Agriculture in the General Plan.	Potentially Inconsistent	As discussed above, although consistent with the intent of many factors listed in Policy 8.2.2, the Project would diminish the value of wildlife corridors and habitat onsite, impact six plant species of local concern, and eliminate 4.7 acres of the unique serpentine native bunchgrass habitat community. Therefore, the Project would be potentially inconsistent with this policy. Refer to discussion of consistency with General Plan COSE Policies 7.3.2, 7.3.3, and 7.5.4, above. Refer also to Section 3.4, *Biological Resources.*
8.3.2 – Open Space Buffers	When activities close to open space resources within or outside the urban area could harm them, the City will require buffers between the activities and the resources. Buffers associated with new development shall be on the site of the development, rather than on neighboring land containing the open space resource. Buffers shall be adequate for the most sensitive species in the protected area, as determined by a qualified professional and shall complement the protected area's habitat values.	Potentially Inconsistent	The City's 1,110-acre Irish Hills Natural Reserve is adjacent to the north and west of the Project site, and supports a wide variety of sensitive plant and animal species, including large predators such as mountain lions, coyotes and bobcats. Though the Project would incorporate a buffer between development in much of the areas adjacent to the Irish Hills Natural Reserve in the Upper Terrace through the designation of open space, the Project could impact open space resources within the Irish Hills Natural Reserve through creation of vegetation management fire buffers within the Reserve and disruption of or impacts to sensitive wildlife movement. The City has found that management of vegetation to reduce fire hazards

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			within a buffer area of up to 100 feet in width within the Irish Hills Natural Reserve would not compromise or unduly impact open space or wildlife resources. However, increased noise, light, interruption of access to water sources (i.e., springs and seeps) in Drainages 1, 2, and 3 and indirectly through increased road kills, use of rodenticides or pesticides and increased urban-wildland interface conflicts (e.g., human or domestic pet-wildlife interactions) as discussed under Policy 7.3.3 – Wildlife Habitat and Corridors, above could impact sensitive wildlife. Therefore, the Project is potentially inconsistent with this Policy.
8.6.1 – Loss of Open Space	The City may permit loss of an open space resource as described in Goals 8.2.1 and 8.2.2 only when: Preserving the resource would permanently deprive the landowner of all reasonable use, and acquisition by the City or a conservation organization is not feasible, or There is a demonstrated need, based on public health, safety, or welfare, and there is no practical alternative to loss of the resource.	Consistent	The Project site is not currently designated as open space. Implementation of the Project would not result in the direct loss of City open space; however, as described in Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* implementation of the Project has the potential to result in the disturbance of habitat and vegetation within designated open space areas of the Irish Hills Natural Reserve through compliance with state-mandated defensible space requirements. Impacts associated with the disturbance of these open space areas would be mitigated through implementation of MM HAZ-2. Refer to Section 3.7, *Hazards, Hazardous Materials, and Wildfire.*
8.6.3.G – Required Mitigation	Any development that is allowed on a site designated as Open Space or Agriculture, or containing open-space resources, shall be designed to minimize its impacts on open space values on the site and on neighboring land. Hillside development shall comply with the standards of the LUE, including minimization of grading for structures and	Potentially Consistent	Although the Project site is not currently designated as open space, the LUCE Special Focus Area SP-3 requires preservation of a minimum of 50 percent of the site as open space and notes the one purpose of FRSP is to provide flexibility that will secure the appropriate development of the site while protecting sensitive environmental resources. Based on City policy, sensitive resources on the Project site include sensitive habitats and plant

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	access, and use of building forms, colors, and landscaping that are not visually intrusive (See also Chapter [COSE Policy] 9.21.1). Creek corridors, wetlands, grassland communities, other valuable habitat areas, archaeological resources, agricultural land, and necessary buffers should be within their own parcel, rather than divided among newly created parcels. Where creation of a separate parcel is not practical, the resources shall be within an easement. The easement must clearly establish allowed uses and maintenance responsibilities in furtherance of resource protection.		species, wildlife corridors, slopes, historic structures, and open space resources. Proposed housing development would minimize aesthetic impacts to existing open space or agriculture through compliance with the LUE, including use of landscaping, building forms, and colors that are not visually intrusive. The Project would not include subdivisions on the underlying parcel, and the existing 7.1-acre agricultural easement would be reconfigured predominantly within the site and maintained through dedication of land or payment of in-lieu fees.
8.7.2.C – Enhance and Restore Open Space	Remove invasive, non-native species in natural habitat areas, and prevent the introduction or spread of invasive, non-native species and pathogens.	Potentially Consistent	The Project would include habitat restoration efforts through designation of open space and realignment of Froom Creek that would involve removal of non-native species and planting of native vegetation. The Draft FRSP includes policies which would require the removal of existing invasive plants and noxious weeds prior to landscape installation.
9.2.1 – Views to and from public places, including scenic roadways	Preserve and improve views of important scenic resources from public places...including streets and roads.	Potentially Inconsistent	Proposed development would impact scenic public views and community character, particularly as experienced from highly scenic public trails within the Irish Hills Natural Reserve, and views from public roads towards the Irish Hills. Existing development and riparian vegetation along the borders of the Project site would largely shield views of the Project from LOVR, and the Project would generally blend-in or be consistent with surrounding development when viewed from public roads. However, as discussed in Section 3.1, *Aesthetics*, views from scenic trails and vista points within the Irish Hills Natural Reserve looking

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
			down on the Upper Terrace and adjacent areas of Madonna Froom Ranch would be significantly impacted as a result of the Project. Therefore, the Project would be potentially inconsistent with this policy.
9.3.6 – View blockage along scenic highways	Determine that view blockage along scenic roadways is a significant impact.	Potentially Consistent	The section of LOVR adjacent to the Project site is designated as having a moderate scenic value and the LOVR Overpass is designated as having high scenic value. U.S. 101 is not designated as a state scenic highway in the vicinity of the Project, though it is eligible. Views of the Project site are currently limited from both of these roadways and would remain intermittent after development of the Project. Impacts to scenic views along these roadways were considered less than significant and the Project would be consistent with this policy.
10.1.3 – Water Quality	Protect and maintain water quality in aquifers, Laguna Lake, streams, and wetlands that supports all beneficial uses, agriculture, and wildlife habitat.	Potentially Consistent	The Draft FRSP includes BMP strategies and policies including the use of bioswales, rain gardens, and detention basins to facilitate rainwater percolation and reduce surface water runoff to manage stormwater and runoff onsite. the Project would be subject to RWQCB regulations and permitting requiring implementation of BMPs for erosion control during and following site construction.
10.2.1 – Water Quality	The City will employ the best available practices for pollution avoidance and control, and will encourage others to do likewise. "Best available practices" means behavior and technologies that result in the highest water quality, considering available equipment, life-cycle costs, social and environmental side effects, and the regulations of other agencies.		
10.2.2 – Ahwahnee Water Principles	In planning for its water operations, programs and services, the City will be guided by the Ahwahnee Water Principles and will encourage individuals, organizations, and other agencies to follow these policies:	Potentially Consistent	The Project would generate additional long-term demands on City water supplies, but the Draft FRSP contains goals, policies, and regulations derived from the City's COSE and Climate Action Plan that would ensure consistency with this policy. These policies include the use of natural

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	A. Community design should be compact, mixed-use, walkable and transit-oriented so that automobile generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible. B. Natural resources such as wetlands, flood plains, recharge zones, riparian areas, open space, and native habitats should be identified, preserved and restored as valued assets for flood protection, water quality improvement, groundwater recharge, habitat, and overall long-term water resource sustainability. C. Water holding areas such as creekbeds, recessed athletic fields, ponds, cisterns, and other features that serve to recharge groundwater, reduce runoff, improve water quality and decrease flooding should be incorporated into the urban landscape. D. All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater. E. Permeable surfaces should be used for hardscape. Impervious surfaces such as driveways, streets, and parking lots should be minimized so that land is available to absorb storm water, reduce polluted urban runoff, recharge groundwater and reduce flooding. F. Dual plumbing that allows grey water from showers, sinks and washers to be reused for landscape irrigation should be		features (e.g., bioswales, retention basins) to manage stormwater onsite, native and non-invasive drought tolerant landscaping, high-efficiency appliances, and use of recycled water in irrigated areas within the residential and commercial zones. Project construction would entail expansion of onsite natural water retention features. Froom Creek and associated riparian would be realigned and expanded along the eastern border of the Project site, and would direct stormwater flows to a 4.5-acre stormwater detention basin located offsite within the Mountainbrook Church easement. This proposed stormwater detention basin would include storage capacity for up to 22 acre-feet of stormwater and would allow for percolation and recharge of underlying groundwater.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	included in the infrastructure of new development, consistent with State guidelines. G. Community design should maximize the use of recycled water for appropriate applications including outdoor irrigation, toilet flushing, and commercial and industrial processes. Purple pipe should be installed in all new construction and remodeled buildings in anticipation of the future availability of recycled water. H. Urban water conservation technologies such as low-flow toilets, efficient clothes washers, and more efficient water-using industrial equipment should be incorporated in all new construction and retrofitted in remodeled buildings. I. Ground water treatment and brackish water desalination should be pursued when necessary to maximize locally available, drought-proof water supplies.		
Housing Element (HE)			
2.3	For housing to qualify as "affordable" under the provisions of this Element, guarantees must be presented that ownership or rental housing units will remain affordable for the longest period allowed by State law, or for a shorter period under an equity-sharing or housing rehabilitation agreement with the City.	Potentially Consistent	While final details would be determined through Project permitting, the FRSP includes policies that require the Applicant to provide for deed-restricted housing for low and moderate-income households, consistent with the General Plan.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
2.4	Encourage housing production for all financial strata of the City's population, in the proportions shown in the Regional Housing Needs Allocation, for the 2014 - 2019 planning period. These proportions are: extremely low income, 12 percent, very low income, 12 percent; low income, 16 percent; moderate income, 18 percent; and above moderate income, 42 percent.	Potentially Consistent	The Project proposes development of a variety of residential housing with a minimum of 5 percent low- and 10 percent moderate-income affordable dwelling units in accordance with the Expansion Area Inclusionary Housing Requirements. In other words, 15 percent of the total units would be subject to resale and rental restrictions to address low- and moderate-income household needs within the City. The Project would also develop 404 units of senior housing meeting key General Plan HE objectives.
4.2	Include both market-rate and affordable units in apartment and residential condominium projects and intermix the types of units. Affordable units should be comparable in size, appearance and basic quality to market-rate units.	Potentially Consistent	The FRSP includes policies that require the Applicant to provide for deed-restricted housing for low and moderate-income households, consistent with the General Plan. The Project The FRSP states that an affordable housing project is proposed on a portion of the proposed R-4 site near Los Osos Valley Road.
Noise Element (NE)			
1.3 – New Development Design and Transportation Noise Sources	New noise-sensitive development shall be located and designed to meet the maximum outdoor and indoor noise exposure levels of Table 2.	Potentially Consistent	Implementation of mitigation measures would reduce exterior and interior noise levels for residential uses resulting from noise sources to acceptable levels defined by the General Plan NE Table 2 (See Section 3.10, *Noise*).
1.4 – New Transportation Noise Sources	Noise created by new transportation noise sources shall be mitigated to not exceed City-specified indoor and outdoor maximum noise exposure levels.	Potentially Consistent	Implementation of mitigation measures would reduce exterior and interior noise levels for residential uses resulting from noise sources to acceptable levels defined by the General Plan NE Table 2 (See Section 3.10, *Noise*).
1.6 – New Development and Stationary Noise Sources	New development of noise-sensitive land uses may be permitted only where location or design allow the development to meet the standards of Table 2 for existing stationary noise sources.	Potentially Consistent	Implementation of mitigation measures would reduce exterior and interior noise levels for residential uses resulting from noise sources to acceptable levels defined by the General Plan NE Table 2 (See Section 3.10, *Noise)*.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
1.7 – New or Modified Stationary Noise Sources	Noise generated by new stationary sources, or by existing stationary noise sources which undergo modifications that may increase noise levels, shall be mitigated so as not to exceed the exposure standards for lands designated for noise-sensitive uses, as measured at the property line of the receiver. The City's NE lists mitigation strategies in a descending order of desirability. If preferred strategies are not implemented, it is the responsibility of the Applicant to demonstrate through a detailed noise study that the more desirable approaches are either not effective or not practical, before considering other design criteria contained in the General Plan.	Potentially Consistent	Implementation of mitigation measures would reduce exterior and interior noise levels for residential uses resulting from noise sources to acceptable levels defined by the General Plan NE Table 2 (See Section 3.10, *Noise)*.
1.10 – Existing and Cumulative Impacts	The City shall consider mitigation where existing or cumulative increases in noise levels significantly impact noise-sensitive land uses, including rerouting traffic, noise barriers, reducing traffic speed, retrofitting buildings, and exaction of fees.	Potentially Consistent	The Project would result in short-term construction noise impacts but would not significantly contribute to existing surrounding noise levels. Long-term FRSP residential buildout would not result in a considerable contribution to cumulative significant noise impacts due to the Project's negligible contribution to the cumulative noise environment. See Section 3.10, *Noise*.
Safety Element (SE)			
2.1 – Flood Hazard Avoidance and Reduction	C. No new building or fill should encroach beyond, or extend over, the top-of-bank of any creek. E. Within new development areas, such as the potential expansion areas shown in Figure 2 of the LUE, substantial displacement of flood waters should be avoided by: 1. Keeping a substantial amount of flood-prone land in the vicinity as open space;	Potentially Consistent	The Project would include a major realignment of Froom Creek through the Specific Plan area and the confinement of the flood waters to the newly widened channel of Froom Creek, the Calle Joaquin wetlands, and the proposed Mountainbrook Church flood detention basin. Currently flood-prone lands would be removed from the floodplain and become available for development. New buildings would be sited a minimum of 35 feet from the top of the bank of Froom Creek and located above the 100-year flood level; creek

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	2. Enlarging man-made bottlenecks, such as culverts, which contribute to flood waters backing up from them; 3. Accommodating in such places uses which have relatively low ratios of building coverage to site area, for which shallow flooding of parking and landscape areas would cause minimum damage. 4. Requiring new buildings to be constructed above the 100-year flood level. F. Creek alterations shall be considered only if there is no practical alternative, consistent with the COSE. G. Development close to creeks shall be designed to avoid damage due to future creek bank erosion. Property owners shall be responsible for protecting their developments from damage caused by future bank loss due to flood flows.		channelization and realignment are necessary to accommodate development of the site as proposed in the Draft FRSP and alleviate the bottleneck and capacity constraints at the U.S. 101 box-culvert. The Project would be consistent with the intent of this policy to minimize or avoid flood hazards. Refer to Section 3.4, *Biological Resources*, and Section 3.8, *Hydrology and Water Quality*.
3.0 – Adequate Fire Service	Development shall be approved only when adequate fire suppression services and facilities are available or will be made available concurrent with development, considering the setting, type, intensity, and form of the proposed development.	Potentially Consistent	The Specific Plan area is within the acceptable 4-minute response time for fire protection services. The SLOFD has reviewed the Project has and determined that adequate fire suppression services and facilities are available to serve the Project. See Section 3.12, *Public Services and Recreation.*
3.1 – Wildland Fire Safety	F. Wildland fire hazard severity zones shall be classified as prescribed by CAL FIRE. Areas within the City, including "Very High" Fire Hazard Severity Zones, if any, shall be classified by the City's Fire Code Official based on findings supported by substantial evidence in the record as required by Government Code Section 51179 and considered by City Council at a public hearing. Meaningful, early notification and	Consistent	The Lower Area and Upper Terrace (a total of approximately 97 acres) are designated as a Moderate FHSZ, and the highest elevation area (of approximately 13 acres) is located within a Very High FHSZ. No development would be constructed within the Very High FHSZ (refer to Figure 3.7-1). The Project does not propose a new subdivision within areas of Very High FHSZ. The Very High FHSZ would be designated and preserved for open space. As discussed in Section 3.7, *Hazards, Hazardous Materials, and Wildfire*, a 100-foot-

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	input shall be obtained from nearby neighborhoods which may be affected. G. New subdivisions shall be prohibited in areas of "Very High" wildland fire hazard unless part of conservation or open space acquisition program. Development of existing parcels shall require a development plan to manage fuels, maintain a buffer zone, and provide adequate fire protection to the approval of the Chief Building Official. The development plan must be consistent with Policies required by the City's COSE. H. The City of San Luis Obispo is considered a "Community at Risk" due to the threat of wildfire impacting the urban community. The City shall continue to enhance the fire safety and construction codes for new buildings in order to reduce the risk of urban fires that may result from wildfires. Citywide building code enhancements should include: Fire resistant exterior wall coverings; Sprinkler protection in attic areas; and Ember resistant vent systems for attics and under floor areas and other provisions identified in CBC Chapter 7A.		wide vegetation and fuel management buffer would be required around all new development and implementation of mitigation requiring fire reduction practices and management strategies would reduce fire hazards to a less than significant level.
4.5 – Avoiding Faults	Development shall not be located atop known faults. Applications for the following types of discretionary approvals within 100 meters (330 feet) of any fault that is previously known or discovered during site evaluation shall be subject to review and recommendation by a State-registered engineering geologist: change to a more intensive land-use designation; subdivision into five or more parcels; development of	Potentially Consistent	A section of the Los Osos Fault runs through both the Madonna Froom Ranch and Villaggio portions of the site. Based on the proposed land use plan, the fault lines would cross residential (R-3-SP), open space (C/OS-SP), and public facility (PF-SP) land uses. The Draft FRSP and land use plan would incorporate recommendations of the site-specific subsurface fault investigation. FRSP buildout would incorporate required setbacks of buildings from faults identified in the subsurface

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	multifamily, commercial, industrial, or institutional buildings.		investigation and outlined in Section 3.2.3, Fault Lines, of the Draft FRSP. No development would be located atop any known faults. See Section 3.6, *Geology and Soils*.
4.6 – Avoiding Slope Instability	Development shall not be located on or immediately below unstable slopes, or contribute to slope instability. Any development proposed in an area of moderate or high landslide potential shall be subject to review and recommendation by a State-registered engineering geologist.	Consistent	The non-seismic landslide potential at the Project site is considered to be low based on site-specific geological investigations prepared for the Project. The Draft FRSP incorporates site-specific geologic investigation recommendations regarding slope stability and liquefaction. Incorporation of these recommendations would reduce potential for structural damage and risk from slope instability or liquefaction to a less than significant level. See Section 3.6, *Geology and Soils.*
4.7 – Avoiding Liquefaction Hazards	Development may be located in areas of high liquefaction potential only if a site-specific investigation by a qualified professional determines that the proposed development will not be at risk of damage from liquefaction. The Chief Building Official may waive this requirement upon determining that previous studies in the immediate area provide sufficient information.		
9.3 Program – Response Performance Standards	The City will evaluate fire-flow capacities and identify deficiencies through testing and modeling of the water system. For identified deficiencies, the Utilities Department will propose remedies to meet recommended service levels based on Insurance Service Organization ratings and other objective criteria.	Potentially Consistent	The Project would provide adequate water flow per adopted City standards. See Section 3.14, *Utilities and Energy Conservation*.
Water and Wastewater Management Element (WWME)			
2.1.7 – Annexation Criteria	Allows annexation of areas outside City limits if they are infill areas with access to existing City wastewater service.	Potentially Consistent	Following annexation to the City, the Project would be located within City limits and the City's URL; access to existing City services including water and wastewater would be available. See Section 3.14, *Utilities and Energy Conservation*.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
B 2.2.2 – Service Capacity	The City's wastewater collection system and Water Reclamation Facility shall support population and related service demands consistent with the General Plan.	Potentially Consistent	The City's WRRF has adequate capacity to accommodate dry-weather wastewater flows generated by the Project; however, peak wastewater flows may exceed the WRRF capacity under wet-weather conditions. The Project would also contribute to cumulative capacity constraints experienced at the Laguna lift station. However, the Project, like similar cumulative development within the City and serviced by these facilities, would be required to pay fair share fees towards the improvement of these facilities. See Section 3.14, *Utilities and Energy Conservation*
B 2.2.3 – Wastewater Service for New Development	New development shall pay its proportionate or "fair share" of expanded treatment and collection system capacity and upgrades. New development will only be permitted if adequate capacity is available within the wastewater collection system and/or Water Reclamation Facility.		
Circulation Element (CE)			
1.7.2 – Promote Alternative Forms of Transportation	Complete a network of bicycle lanes and paths, sidewalks and pedestrian paths within existing developed parts of the City and extend the system to serve new growth areas; and complete improvements to the city's transit system serving existing developed areas and provide service to new growth areas.	Potentially Consistent	The proposed circulation system provides for development of pedestrian, bicycle, and transit facilities and the connection to existing facilities. See Section 3.13, *Transportation*.
3.1.7 – Transit Service Access	New development should be designed to facilitate access to transit service.	Potentially Consistent	The Project would include installation of a bus stop and facilitation of the extension of bus service to the Specific Plan area. However, the Project site is located at the southwestern extent of the City and far removed from high-transit service areas. Transit demand within the vicinity of the Project is considered low. Implementation of the Project would increase demand for transit services within the vicinity of the Project site. However, implementation of identified mitigation would ensure adequate transit service is provided. Refer to Section 3.13, *Transportation.*
4.1.4 – New Development	The City shall require that new development provide bikeways, secure bicycle storage,	Potentially Consistent	The Project would provide dedicated bikeways and would be required to provide bicycle parking per

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
	parking facilities and showers consistent with City plans and development standards. When evaluating transportation impacts, the City shall use a Multimodal Level of Service analysis.		the City Municipal Code Section 17.16.060, which mandates that bicycle parking equal to 15 percent of vehicle parking be provided. The Project would complete an important gap in the planned regional Class II bicycle lane along LOVR. See Section 3.13, *Transportation.*
5.1.2 – Sidewalks and Paths	The City should complete a continuous pedestrian network connecting residential areas with major activity centers as well as trails leading into City and County open spaces.	Consistent	The Project would include fully developed pedestrian facilities within the Specific Plan area and connections to adjacent development, including Irish Hills Plaza though the proposed emergency access connection to Irish Hills Plaza, LOVR frontage improvements, and mitigation requiring improvements to pedestrian and bicycle facilities See Section 3.13, *Transportation.*
5.1.4 – Pedestrian Access	New or renovated commercial and government public buildings shall provide convenient pedestrian access from nearby sidewalks and pedestrian paths, separate from driveways and vehicle entrances.	Potentially Consistent	Sidewalks and pedestrian pathways separate from driveways and/or vehicle entrances are proposed to connect residential and commercial development of the Specific Plan area to the Irish Hills Plaza, along Froom Creek, to the Irish Hills Natural Reserve and between the Upper Terrace and Lower Area of Villaggio. Proposed pedestrian connections would provide convenient pedestrian access through the site and to adjacent development. See Section 3.13, *Transportation*.
15.1.2 – Development along Scenic Routes	The City will preserve and improve views of important scenic resources from streets and roads. Development along scenic roadways should not block views or detract from the quality of views.	Potentially Consistent	Development of the Project would change the visual character of the area as viewed from the Irish Hills Natural Reserve. However, important public views from proximate streets and roads across the Project site would be preserved by development setbacks from LOVR and the reestablishment of riparian vegetation along the LOVR ditch. See Section 3.1, *Aesthetics*.

Table 3.9-4. City General Plan Policy Consistency Analysis (Continued)

Policy/Goal	Summary	Preliminary Consistency Finding	Discussion
Parks and Recreation Element (PRE)			
3.13.1 – Parks System	The City shall develop and maintain a park system at a rate of 10 acres of parkland per 1,000 residents. Five acres shall be dedicated as a neighborhood park. The remaining five acres required under the 10 acres per 1,000 residents in the residential annexation policy may be located anywhere within the City's park system as deemed appropriate.	Potentially Consistent	Implementation of mitigation providing for and maintaining 12.31 acres of parkland, including 6.16 acres developed as a neighborhood park, would ensure consistency with this policy. The Project would provide a 2.9-acre trailhead park including benches, picnic tables, and a playground that are characteristic of a neighborhood park as defined by the City's PRE and are within a 0.5- to 1.0-mile walking distance from all new residences.
3.15 – Neighborhood Parks	- San Luis Obispo residents shall have access to a neighborhood park within 0.5 to 1.0-mile walking distance of their residence. -All residential annexation areas shall provide developed neighborhood parks at the rate of five acres per 1,000 residents. -In neighborhoods where existing parks do not adequately serve residents, mini-parks may be considered.		

Sources: City of San Luis Obispo 1996; 2006; 2014b; 2014a; 2014c; 2015; 2018.

Table 3.9-5. County General Plan Policy Consistency Summary

Policy/Goal	Summary	Consistency Finding	Discussion
Goal BR5	Wetlands will be preserved, enhanced, and restored.	Potentially Consistent	The Project proposes to relocate an existing 3.2-acre detention basin to an approximately 4.5-acre proposed stormwater detention basin within the Mountainbrook Church easement outside of the Specific Plan area. This area would remain under the jurisdiction of the County following annexation of the Specific Plan area to the City as part of the Project. Development of the proposed stormwater detention basin has potential to affect wetlands, riparian, and grassland habitats. Impact associated with this aspect of the Project could be reduced through protection, avoidance, or restoration of habitat. Once constructed, the proposed stormwater detention basin would not inhibit wildlife movement through this portion of the site. Development of the proposed stormwater detention basin in this area would not significantly adversely affect views of the natural landscape from rural areas of the County. See Section 3.4, *Biological Resources*.
Policy BR 1.1- Protect Sensitive Biological Resources	Protect sensitive biological resources such as, wetlands, migratory species of the Pacific flyway, and wildlife movement corridors through: 1. environmental review of proposed development applications, including consideration of cumulative impacts, 2. participation in comprehensive habitat management programs with other local and resource agencies, and 3. acquisition and management of open space lands that provide for permanent protection of important natural habitats.		
Policy BR 1.15 Restrict Disturbance in Sensitive Habitat during Nesting Season	Avoid impacts to sensitive riparian corridors, wetlands, and coastal areas to protect bird-nesting activities.		
Policy BR 1.10- Identify and Protect Ecologically Sensitive Areas	Protect and enable management of ecologically sensitive areas to the maximum extent feasible.		
Policy BR 1.11 Protect Wildlife Nursery Areas and Movement Corridors	Identify, protect, and enable the management of connected habitat areas for wildlife movement. Features of particular importance to wildlife for movement may include, but are not limited to, riparian corridors,		

Table 3.9-5. County General Plan Policy Consistency Summary (Continued)

Policy/Goal	Summary	Consistency Finding	Discussion
	shorelines of the coast and bay, and ridgelines. Identification and designation of wildlife corridors will not interfere with agricultural uses on private lands. (Refer to AGP 29 in the Agriculture Element).		
Goal VR1	The natural and agricultural landscape will continue to be the dominant view in rural parts of the county.		
Policy VR 7.1 Nighttime Light Pollution	Protect the clarity and visibility of the night sky within communities and rural areas, by ensuring that exterior lighting, including streetlight projects, is designed to minimize nighttime light pollution.	Potentially Consistent	Exterior lighting would not be erected within the proposed stormwater detention basin area. Therefore, the Project would be consistent with this policy.

3.9.4 Environmental Impact Analysis

3.9.4.1 Thresholds of Significance

Appendix G of the State CEQA Guidelines states that a project would have a significant impact on land use if it would:

a) Physically divide an established community; or

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

Non-Applicable Threshold(s)

1) Threshold (a) *(Divide an established community)*: The Project would not physically divide an established community based on the lack of residential land uses within the Specific Plan area as the site is bordered by existing agricultural and industrial land.

3.9.4.2 Impact Assessment Methodology

Sources of land use information reviewed for this analysis include the LUCE Update and associated EIR; the City and County General Plan; SLOCOGRTP/SCS; the ALUP; the Airport Land Use Compatibility Report (Johnson Aviation 2014); and the Draft FRSP, as well as available geographic data provided by the City and County Geographic Information Systems (GIS). Recent EIRs, including the LUCE Update EIR and the Avila Ranch Specific Plan and San Luis Ranch Specific Plan EIRs prepared by the City, were also reviewed.

The Project's potential consistency with relevant General Plan policies and programs (Appendix G Threshold 'b') is evaluated in Section 3.9.3, *Consistency with Plans and Policies.* Associated land use impact analyses are also provided in Impacts LU-1 and LU-2 and within individual resource sections of this EIR. Only those Project elements that have the potential to conflict with a stated goal, policy, or program are highlighted in this section. A conflict with an adopted plan or policy is typically identified as a potentially significant impact only if there is a corresponding related averse physical change in the environment, such as loss of sensitive biological resources.

The EIR land use consistency analysis considers whether the Project would be consistent with regional and local plans, policies, and regulations applicable to the Project consistent

with Section 15125(d). A project must be consistent with every policy and objective in the General Plan to be approved. It is considered consistent with the provisions of the identified regional and local plans if it is compatible with and will further the objectives and policies of the plans. This discussion primarily focuses on those goals and policies that relate to avoiding or mitigating environmental impacts and assesses if any inconsistency with these standards would result in a significant physical impact on the environment.

3.9.4.3 Project Impacts and Mitigation Measures

Land use impacts associated with construction and operation of the Project are discussed below and summarized in Table 3.9-6.

Table 3.9-6. Summary of Project Impacts

Land Use Impacts	Mitigation Measures	Residual Significance
LU-1. The Project would allow urban development above the 150-foot elevation and would relocate portions of the Froom Ranch Dairy complex, which would potentially conflict with City General Plan policies adopted for the purpose of avoiding impacts to visual, biological, and cultural resources and wildfire hazards.	MM BIO-1 MM BIO-2 MM BIO-3 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-9 MM BIO-10 MM BIO-11 MM BIO-12 MM BIO-13 MMBIO-14 MM CR-9 MM CR-10 MM CR-11 MM CR-12 MM CR-13 MM CR-14 MM HAZ-2 MM HAZ-3 MM HAZ-4 MM HAZ-5 MM TRANS-21 MM TRANS-22 MM TRANS-23	Significant and Unavoidable
LU-2. The Project would potentially be inconsistent with existing easements and setback requirements onsite.	None Required	Less than Significant

Impact LU-1 The Project would allow urban development above the 150-foot elevation and would relocate portions of the Froom Ranch Dairy complex, which would potentially conflict with City General Plan policies adopted for the purpose of avoiding impacts to visual,

biological, and cultural resources and wildfire hazards (Significant and Unavoidable).

City LUCE and General Plan COSE policies that protect sensitive biological, open space, and visual resources include protections reflected in Policy 6.4.7, *Hillside Planning Areas*, which prohibits development above the 150-foot elevation within the Irish Hills area. These policies are intended to protect environmentally sensitive resources (such as sensitive habitats and species) and to reduce adverse impacts related to emergency access, unstable geology, flooding, wildfire hazards, and visual resource degradation. Implementation of a General Plan Amendment that would allow development above the 150-foot elevation, and more specifically development within the environmentally sensitive Upper Terrace, would result in potentially significant and unavoidable impacts to aesthetic and visual resources, biological resources, and emergency access and fire hazards , as analyzed in Section 3.1, *Aesthetics*, Section 3.4, *Biological Resources*, and Section 3.7, *Hazards, Hazardous Materials, and Wildfire*. Potential impacts due to unstable geology would be less than significant, as described in Section 3.6, *Geology and Soils.* Further, the Project would relocate four historic structures onsite and integrate them in the proposed public park, which would have a significant impact to historic resources, as described in Section 3.5, *Cultural and Tribal Cultural Resources*. Potential environmental impacts resulting from the Project's inconsistency with land use plans and policies are summarized below

Aesthetics

The Project site is highly visible to trail users in the Irish Hills Natural Reserve trail system where sweeping views across the Project site are available, particularly overlooking the Upper Terrace and the western edge of Madonna Froom Ranch above 150 feet in elevation. General Plan COSE Policy 9.2.1, *Views to and from public places*, is designed to protect public views, including those from such places as the heavily used trail network in the Irish Hills Natural Reserve. City LUE Policy 6.4.7, *Hillside Planning Areas*, was intended in part to protect sensitive hillside views by prohibiting development above the 150-foot elevation in the Project vicinity. Project development, particularly within the Upper Terrace and the areas of Madonna Froom Ranch closest to the Irish Hills Natural Reserve and above the 150-foot elevation would result in *significant and unavoidable* impacts to aesthetic resources for recreationalists along trails such as the Ocean View Trail and the Filipponi Ranch Connector Trail. Such impacts would be in direct conflict with adopted City policies and would create significant physical environmental impacts.

Biological Resources

The Project site provides rich natural communities and habitats, including wetlands and serpentine bunchgrass grassland, as well as California bay woodland. The Upper Terrace is particularly rich in these biological resources and development in this area is potentially inconsistent with City policies for resource protection.

Proposed development within the Upper Terrace would impact sensitive native grassland communities, seven rare plant species of local concern (including populations of a federal endangered plant), sensitive wetland habitats along Drainages 1, 2, and 3, and wildlife corridors and passage through this area. Such development would directly impact and degrade special status species and sensitive habitats potentially in conflict with multiple adopted City policies such as General Plan COSE Polices 7.3.2, *Species of Local Concern*, 7.3.3, *Wildlife Habitat and Corridors*, 7.5.4, *Preservation of Grassland Communities and Other Habitat Types*, 7.7.7, *Preserve Ecotones*, 7.7.8, *Protect Wildlife Corridors*, 8.2.2, *Open* Space within the Urban Area, 8.3.1, *Open Space within an Urban Area*, 8.3.2, *Open Space Buffers*, and 8.6.1, *Loss of Open Space*. In addition, the Project would include a General Plan Amendment to LUE Policy 6.4.7, *Hillside Planning Areas*, which restricts development above the 150-foot elevation, in part to protect sensitive habitats and resources. The Project would result in *significant and unavoidable* physical impacts to biological resources, potentially inconsistent with adopted City policies.

Historic Resources

As documented in Section 3.5, *Cultural and Tribal Cultural Resources*, the Project site contains the historic Froom Ranch Dairy complex (P-40-040991), including seven existing structures associated with the historic dairy and Froom family constituting a potential historic district under the City's Historic Preservation Ordinance, the CRHR, and the NRHP. While four structures (i.e., the main residence, creamery, dairy barn, and granary) considered significant historic resources as individual structures would be relocated, restored, and repurposed to maintain their historic integrity, the Project would result in the demolition and permanent loss of three structures identified as contributing to the Froom Ranch Dairy historic district (i.e., the shed, bunkhouse, and old barn), which would be a

significant and unavoidable impact following mitigation. This loss would be potentially inconsistent with City policy.

Emergency Access and Wildfire Hazards

Development of the Upper Terrace of Villaggio would locate residential uses at the wildland-urban interface where potential fire risks are considered moderate to high. Project residential buildout would also introduce potential sources of ignition from increased activity (e.g., individuals smoking on recreational trails, outdoor barbeques, and malfunctioning landscaping maintenance equipment). The Project proposes a number of emergency access routes that in the event of fire or other emergency, would provide adequate ingress/egress for evacuating civilians and emergency response personnel to the Project site; however, development of the Project would potentially restrict access for firefighting personnel to the Irish Hills Natural Reserve and diminish their ability to combat fires approaching proposed development from the north and west. Given the potential for structural damage, injuries, and/or loss of life due to wildland fires, impacts would be *potentially significant.*

Mitigation Measures

MM BIO-1 shall apply.

MM BIO-2 shall apply.

MM BIO-3 shall apply.

MM BIO-4 shall apply.

MM BIO-5 shall apply.

MM BIO-6 shall apply.

MM BIO-9 shall apply.

MM BIO-10 shall apply.

MM BIO-11 shall apply.

MM BIO-12 shall apply.

MM BIO-13 shall apply.

MM BIO-14 shall apply.

MM CR-9 shall apply.

MM CR-10 shall apply.

MM CR-11 shall apply.

MM CR-12 shall apply.

MM CR-13 shall apply.

MM CR-14 shall apply.

MM HAZ-2 shall apply.

MM HAZ-3 shall apply

MM HAZ-4 shall apply.

MM HAZ-5 shall apply.

MM TRANS-21 shall apply.

MM TRANS-22 shall apply.

MM TRANS-23 shall apply.

Residual Impacts

Despite mitigation to reduce impacts, implementation of a General Plan Amendment to Hillside Policy 6.4.7, *Hillside Planning Areas,* and development and operation of the Project above the 150-foot elevation would result in substantial impacts to biological resources, aesthetics, and wildfire hazards. Mitigation would also not avoid the significant loss of historic resources associated with the Froom Ranch Dairy complex. Since implementation of feasible mitigation measures would not fully mitigate potential impacts resulting from development above the 150-foot elevation and significant irreversible loss of biological and historical resources, impacts related to land use policy consistency would be *significant and unavoidable.*

Impact LU-2 The Project would potentially be inconsistent with existing easements and setback requirements onsite (Less than Significant).

Realignment of Froom Creek and associated riparian habitat would potentially conflict with adopted local and regional water quality and creek corridor protection policies, and would potentially result in impacts to biological resources and conflict with City creek

setback requirements. The Project would also potentially conflict with the intent of the onsite agricultural easement.

Setback from Realigned Froom Creek

The Project would realign Froom Creek and would include channel and bank improvements within the Project site. Consistent with setbacks defined in the City's Zoning Ordinance, the FRSP requires 35-foot setbacks from Froom Creek and 20-foot setbacks from other site drainages, including Drainages 1, 2, and 3. Proposed recreational amenities within the 35-foot setback area would include a 6-foot-wide pervious multi-use trail, benches, and trash cans. The trail would not include night lighting. While pervious walkways and benches are allowed within creek setbacks in accordance with the City's Zoning Ordinance, the installation of waste facilities and other proposed amenities within the setback would require an exception determination and hearing of the Community Development Department. The Community Development Department has established a set of required findings that must be met in order to approve an exception to established uses within designated setback areas. Assuming compliance with existing policies and approval from the Community Development Department, realignment and revegetation of Froom Creek would be consistent with City setback policies. Associated impacts would be *less than significant.*

Onsite Easements

As discussed above, the Project is encumbered by several easements. The area recorded under the 7.1-acre open space and agricultural easement is preserved for agricultural activities and biological restoration and may not be developed as currently recorded. This easement currently includes a contiguous block of land with soils that are prime if irrigated This area is not currently, or historically, irrigated and supports limited equestrian grazing. The Project would reconfigure the 7.1-acre easement into two areas of 5.5 acres and 1.6 acres, which would reduce the viability of existing grazing operations or other agricultural operations since livestock would be unable to access the 1.6-acre portion of the easement. However, realignment of the easement would support conservation of habitat and biological resources, particularly the protection of existing wetlands within this 1.6-acre portion east of Calle Joaquin, which is consistent with the terms of the easement. Thus, adjustment of the 7.1-acre easement would continue to meet the objectives and LAFCO requirements of the 2010 Open Space and Agricultural Conservation Easement agreement.

Regarding the 2018 Memorandum of Option and easement rights, the Project would entail purchase of easement rights within the Mountainbrook Church property to develop a proposed stormwater detention basin. This action would be consistent with the Memorandum of Option and easement rights currently held by the Madonna Family Trust (owner) and the Mountainbrook Church. With regard to the 2001 Open Space Easement and 2010 Deed of Easement for Ingress and Egress, based on the land use plan proposed under the Draft FRSP, implementation of the Project would not alter these existing easements. Therefore, implementation of the Project would not result in any conflicts with these easements or inconsistency with local or regional policies. However, if during preparation of the final land use plan revisions to the easements are required, the City may require adjustments of the final site design of the Project or adjustment of these easements between all applicable parties to ensure continued access and protection prior to final approval of the Project. Impacts associated with these existing easements would be *less than significant.*

3.9.4.4 Cumulative Impacts

The Project is one of many planned and/or proposed residential and commercial developments in undeveloped open or agricultural lands along edges of the City, such as the San Luis Ranch Specific Plan and Avila Ranch Development projects. Construction of the Project would incrementally contribute to the trend of conversion of the southern end of the City from undeveloped agricultural land and open lands to developed urban uses, with resultant losses of open space and habitats, increases in impervious surfaces, night lighting, noise, and traffic that accompany such development. These changes would both directly and indirectly affect sensitive habitats and wildlife species. Proposed related projects, including the San Luis Ranch Specific Plan and the Avila Ranch Development Plan, could result in incremental impacts to biological resources, population and housing, and aesthetics within the cumulative region of influence. However, all pending/future projects would be required to comply with development standards and General Plan policies of the City. Potential impacts would be assessed and mitigated in accordance with CEQA and applicable City policies prior to approval. Implementation of mitigation measures would ensure consistency with the City's General Plan goals and policies and Zoning Regulations such that the Project would not cumulatively contribute to the loss of open space or agricultural land beyond that projected in the City's LUCE Update and EIR. Project buildout in conjunction with other pending/future projects (see Table 3.0-1) are considered within the City LUCE buildout by 2057 (see Section 3.11, *Population and Housing)*. Nevertheless, the Project, in combination with planned buildout of the City's

General Plan and implementation of other pending or approved cumulative development within the City, would continue to incrementally contribute to the loss of biological and historical resources and inconsistency with City General Plan policies relating to biological, aesthetic, wildfire, and historic resources. Therefore, cumulative impacts related to land use and planning would be *significant and unavoidable*.

While the Project is potentially inconsistent with current ALUP development standards for Safety Areas, it would not be expected to result in airport-related safety hazards, particularly when evaluated against the identified Caltrans Handbook Safety Compatibility Zones for San Luis County Regional Airport, the pending update to the ALUP, and the ALUC's preliminary determination of the Project's compatibility with the redefined safety areas (see Section 3.7, *Hazards, Hazardous Materials, and Wildfire*). As such, the Project is not expected to cumulatively contribute to potential airport noise and/or safety issues. Implementation of mitigation measures would ensure that the Project would provide acceptable levels of accessible open space, and that the Project would comply with all applicable zoning development standards.

Therefore, cumulative impacts to land use caused by the development of the Project in combination with other related pending/future projects, would be *less than significant*. The Project's contribution to potential cumulative impacts would be less than considerable given implementation of proposed mitigation measures to ensure consistency with General Plan policies, design standards, and Zoning Ordinance regulations.

3.10 NOISE

This section describes the existing noise environment and evaluates the potential noise and vibration impacts that could result from short-term construction and long-term operation of the Project.

3.10.1 Environmental Setting

3.10.1.1 Fundamentals of Sound and Environmental Noise

Noise

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. Noise is typically defined as unwanted sound that interferes with normal activities or otherwise diminishes the quality of the environment. Prolonged exposure to high levels of noise is known to have several adverse effects on people, including hearing loss, communication interference, sleep interference, physiological responses, and annoyance. The noise environment typically includes background noise generated from both near and distant noise sources as well as the sound from individual local sources. These can vary from an occasional aircraft or train passing by to continuous noise from sources such as traffic on a major road.

The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. In terms of human response to noise, studies have indicated that a noise level increase of 3 dBA is barely perceptible to most people, a 5-dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Everyday sounds normally range from 30 to 100 dBA. Examples of various noise levels in different environments are shown in Table 3.10-1.

Several rating scales have been developed to analyze the adverse effect of community noise (a.k.a. environmental noise) on people. Since community noise fluctuates over time, these scales consider the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Each noise metric applicable to this analysis is defined as follows:

- L_{eq} (equivalent energy noise level) is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during

exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night. L_{eq} is one of the most frequently used noise metrics as it considers both duration and sound pressure level. Typically L_{eq} is summed over a 1-hour period.

- CNEL (Community Noise Equivalent Level) is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 PM to 10:00 PM and a 10 dBA "weighting" added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 CNEL. CNEL is often used due to its utility in identifying noise-related sleep disturbance effects, often a key community concern for increases in noise levels. Most California noise laws specify levels using the CNEL metric and most federal laws use the L_{eq} metric. The City noise thresholds utilize the CNEL and L_{dn} metric.
- L_{dn} (day-night average noise level) is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 L_{dn}. The City noise thresholds utilize the CNEL and L_{dn} metric.
- L_{min} (minimum instantaneous noise level) is the minimum instantaneous noise level experienced during a given period of time.
- L_{max} (maximum instantaneous noise level) is the maximum instantaneous noise level experienced during a given period of time.
- Noise levels from a particular source decline (attenuate) as distance to the receptor increases.[1] Other factors, such as the weather and reflecting or shielding by buildings or other structures, intensify or reduce the noise level at a location. A common method for estimating roadway noise, which dissipates more quickly than stationary sources as the noise source (vehicle) moves away from the receptor, is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., mostly asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., contains natural earth or vegetation, such as grass).
- Noise from stationary or point sources (including construction noise) is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures. Generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm can reduce noise levels by up to 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior noise reduction of newer residential units is generally 30 dBA or more (FHWA 2014).

[1] With regard to noise, a receptor is defined as a stationary far-field position at which noise or vibration levels are specified (U.S. Department of Transportation 2012).

Table 3.10-1. Representative Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Power Saw	—110—	Rock Band
Jet Fly-over at 1000 feet		Crying Baby
Subway	—100—	
Gas Lawnmower at 3 feet		
Rail Transit Horn/ Tractor	—90—	
Heavy Construction Truck at 50 feet/ Street Sweeper at 50 feet		Food Blender at 3 feet
Concrete Mixer Truck at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Rail Transit in Station/ Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	Sewing Machine
Air Conditioner		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
		Refrigerator
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Source: Caltrans 1998.

Groundborne Vibration

In the context of noise, groundborne vibration is the vibration, or oscillation, of the ground, floor, and walls. The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a rumble noise. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called groundborne noise. Groundborne vibration is almost never annoying to people who are outdoors. Although the motion of the ground may be

perceived, without the effects associated with the shaking of a building, the motion does not provoke the same adverse human reaction. In addition, the rumble noise that usually accompanies the building vibration is perceptible only inside buildings. The ground motion caused by vibration is measured as particle velocity in inches per second; in the U.S., this is referenced as vibration decibels (VdB) (Harris Miller & Hanson Inc. 2006).

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration include construction equipment (e.g., heavy haul trucks, concrete trucks) and traffic on rough roads. If a roadway is smooth, the groundborne vibration from automobile traffic is rarely perceptible, although larger trucks carrying heavy loads can generate perceptible vibration. The range of interest (velocity level) for groundborne vibration is from approximately 50 VdB to 100VdB. General human response to different levels of groundborne vibration velocity levels are described in Table 3.10-2. A velocity level of 50 VdB is the typical background vibration velocity level, while a velocity level of 100 VdB is the general threshold where minor damage can occur in fragile buildings (Harris Miller Miller & Hanson Inc. 2006).

Table 3.10-2. Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Response
65 VdB	Approximate threshold of perception for many humans.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Harris Miller Miller & Hanson Inc. 2006.

3.10.1.2 Existing Noise Environment

Noise generated from vehicular traffic along area roadways, such as LOVR are substantial contributors to existing noise levels on the Project site.

The Project site is bordered by the Irish Hills Natural Reserve to the west, retail and commercial businesses within the Irish Hills Plaza to the north, LOVR and automobile dealerships to the northeast, hotels along Calle Joaquin to the southeast, and Mountainbrook Church to the south. There are three primary sources of noise within the area: roadways such as U.S. 101 which lies 700 to 1,000 feet to the east, and LOVR, which immediately borders the site to the northeast; the Airport located 2 miles to the east; and operation of nearby commercial businesses.

Existing noise levels within the Project vicinity fall within typical suburban levels. Higher noise levels are found proximate to roadway corridors and also near commercial centers where loud speakers from automobile centers and truck loading bay at shopping centers create local higher peak noise levels. Quieter areas include those near residential neighborhoods and the rural Irish Hills, located farther from noise generation sources. The City's General Plan Noise Element (NE) generally identifies noise levels at the Project as being below 60 dB. Overall, airport noise is similarly low given the limited number of overflights and distance from runways and is considered to be less than 50 dB under the Airport's current ALUP (ALUC 2005).

A range of source material was reviewed and utilized in determining the existing noise setting. The City's General Plan NE was adopted in 1996 and thus existing noise levels from that 23-year old document are out of date. Similarly, the ALUP noise contours were last updated in 2005, are more than 14 years old, and are currently being updated. The two most recent sources for noise levels on the Project site and vicinity include the 2014 LUCE Update EIR and the Applicant-prepared Acoustics Assessment, completed in 2017. These two documents therefore form the primary basis for describing the existing noise setting.

The LUCE Update EIR was a citywide document that utilized general programmatic information and analysis that may not precisely reflect the physical conditions of the Project site or vicinity. The Acoustics Assessment utilized six onsite noise measurements taken on a Saturday morning between 10:00 AM and 12:00 PM. These measurements are used as a basis for onsite noise modeling analyzed in the Acoustics Assessment. The

findings of the LUCE Update EIR and the Acoustics Assessment for existing onsite noise levels are discussed below (see also below Section 3.10.3.2, *Impact Assessment Methodology*).

Roadway Noise

U.S. 101 generates the highest noise levels in the Project vicinity. Located approximately 700 to 1,100 feet east of the Project site, this segment of U.S. 101 carries traffic volumes between 65,300 and 80,000 average daily trips (ADT) (Caltrans 2017). LOVR also generates substantial roadway noise in the Project vicinity. LOVR extends immediately adjacent along the northern Project site boundary for approximately 1,700 feet, and carries approximately 30,000 ADT (City of San Luis Obispo 2014). Portions of LOVR that are farther away from the site, as well as Calle Joaquin and other nearby collector roads, carry relatively low traffic volumes, do not generate substantial noise levels on the Project site, and, therefore, are not discussed further in this section.

The City's LUCE Update EIR provides general noise modeling of roadway traffic noise measured from the centerline of U.S. 101 and LOVR based on roadway traffic volumes, but does not consider natural or manmade features, such as topography, vegetation, walls, or buildings, that may block and reduce noise volumes (City of San Luis Obispo 2014, Table 4.11-1). The LUCE Update EIR indicates that the 60 dBA to 65 dBA noise corridors (the maximum acceptable exterior noise level generated by transportation noise sources for sensitive land uses based on City adopted noise guidelines) from the centerlines of U.S 101 and LOVR extend well onto the Project site (Table 3.10-3; Figure 3.10-1).

Table 3.10-3. LUCE Update EIR Projected Roadway Noise Levels within Project Site

	Roadway Noise Source	
Description	**U.S. 101**	**LOVR**
Distance to Project site[1] (ft)	700 - 1,100	40
Distance of 65 dBA CNEL noise contour from roadway centerline[2] (ft)	1,260 - 1,560	75
Distance of 60 dBA CNEL noise contour from roadway centerline (ft)	7,140	239

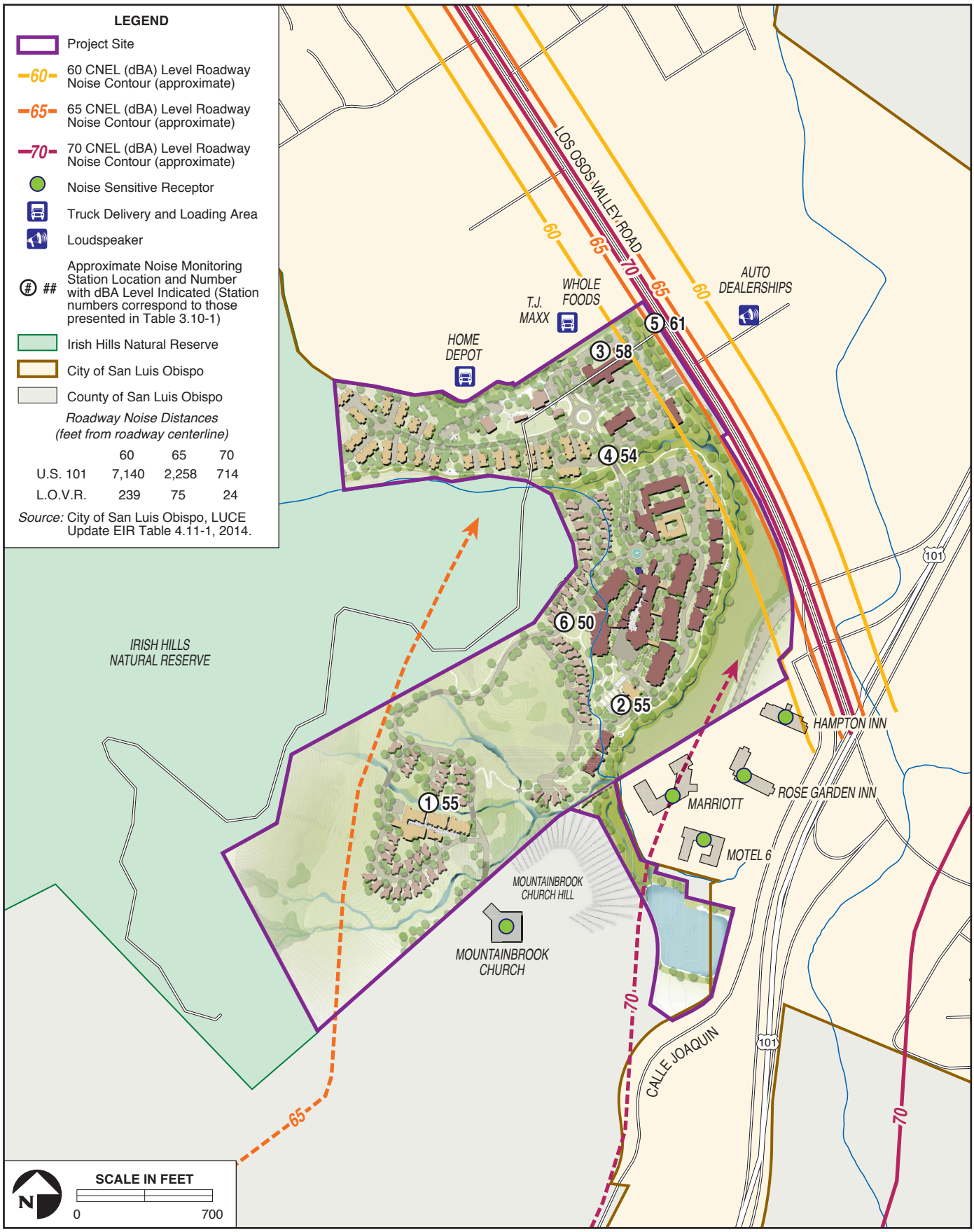
[1]As measured from roadway centerline.
[2]As projected in the LUCE Update EIR.
[3]Source: City of San Luis Obispo 2014. Roadway traffic noise modeling conducted by Ascent Environmental, Inc.

Although U.S. 101 lies between 700 and 1,100 feet to the south and east of the Project site, noise corridor modeling from the LUCE Update EIR indicates that the entire Project site may be located within the 60 dBA CNEL generated by traffic along U.S. 101, with well

over 50 percent of the south and east ends of the Project site projected to fall within the 65 dBA CNEL contour. The 60 dBA CNEL for LOVR, which immediately borders the site to the east, may extend west as far as 240 feet into the Project site; the 65 dBA CNEL may extend as far as 35 feet into the Project site (see Figure 3.10-1).

However, roadway noise corridor modeling in the LUCE Update EIR does not consider reductions in noise resulting from nearby topographic or manmade features that block or redirect sound waves. In the case of the LOVR noise corridor, level topography and a lack of manmade barriers appear to render the programmatic LUCE Update EIR noise corridor modeling generally accurate. However, for U.S. 101, the outlying flank of the Irish Hills that support Mountainbrook Church and the KSBY radio station, four hotels along Calle Joaquin between U.S. 101 and the Project site, and the elevated LOVR overpass likely result in substantial reductions to noise from U.S. 101 to levels well below those modeled in the LUCE Update EIR. This conclusion is also substantiated by the results of the Acoustic Assessment, as further discussed below.

Mountainbrook Church sits on a hill that rises over 200 feet in elevation and largely or entirely blocks noise generated by vehicles on U.S. 101 to the south. The LOVR overpass has a similar noise attenuating effect for vehicular noise to the north. Of the Project site's approximately 1,700 feet of frontage directly facing U.S. 101 between the Mountainbrook Church hill and the LOVR overpass, the four-story Hampton Inn and Suites, three-story Courtyard by Marriot, two-story Motel 6, and one-story Rose Garden Inn provide additional substantial barriers to noise generated by U.S. 101. As noted in Section 3.10.1.1 *Fundamentals of Sound and Environmental Noise*, a single row of buildings between the receptor and the noise source generally reduces the noise level by approximately 5 dBA, while a solid wall or berm (e.g., LOVR overpass) can result in noise level reductions between 5 to 10 dBA. While gaps between hotel buildings may have potential for exposure to noise from U.S. 101, LUCE Update EIR noise modeling was general and did not consider site-specific features or conditions; therefore, the LUCE Update EIR likely overestimates noise levels within the Project site from U.S. 101 by 5 to 10 dBA. However, conservatively, the southern portion of the site along Froom Creek may remain potentially exposed to noise levels of approximately 60 dBA (Figure 3.10-1).



wood.

Noise Environment

FIGURE 3.10-1

The Applicant-prepared Acoustics Assessment includes onsite noise measurements and noise modeling based upon these measurements (Appendix I). Onsite noise measurements were conducted for the Acoustics Assessment at six locations within the Project site between 10:00 AM and 12:00 PM on Saturday, April 22, 2017. These measurement locations recorded noise levels of 61 dBA adjacent to LOVR and 55 dBA in the south-central area of the site, approximately 300 feet north of the Courtyard by Marriott hotel (see Table 3.10-4; Figure 3.10-1).

Although the Acoustics Assessment briefly mentions other noise sources in the Project vicinity (e.g., airport noise, commercial businesses), it focuses on noise generated by traffic, particularly from LOVR and U.S. 101 as these generate the greatest level of noise at the Project site and are the most subject to change under the Project (Appendix I).

Table 3.10-4. Measured Noise Levels within the Project Site[1]

Station No.	Location[2]	L_{dn} /CNEL
1	Along Calle Joaquin and the southeastern boundary of the site	55 dBA
2	South central site approximately 200 feet north of Marriot Hotel	55 dBA
3	Northeastern interior of the site; 200 feet from LOVR	58 dBA
4	Northeastern interior of the site; 300 feet from LOVR	54 dBA
5	Along the boundary of Project site and LOVR	61 dBA
6	Southeastern interior of the site; 300 feet from Calle Joaquin	50 dBA

Source: Lord and Taubitz 2017.
[1]Roadway noise measurements conducted on Saturday, April 22, 2017, between 10:00 AM and 12:00 PM.
[2]See Figure 3.10-1 for precise locations.

As part of the Acoustics Assessment, an acoustic model with noise level contours was generated for the site based on topography, noise sources, and measured noise level values (Appendix I). The Acoustics Assessment found that the interior areas of the site generally fall within the 50 to 60 dBA CNEL noise contour, primarily generated by vehicular traffic on LOVR and more distant U.S. 101.

Airport Noise

The Airport is located approximately 1.8 miles east of the Project site; aircraft flying in the vicinity at above 1,000 feet in elevation several times a day generate intermittent low-level noise. The Project site is approximately 1,000 feet from the 50 dBA CNEL contour mapped within the ALUP, representing the noise environment from aircraft flying in the vicinity of the Project site (ALUC 2005). The General Plan NE indicates the Project site lies over 1 mile from the projected 60 dBA CNEL noise contour within the ALUP. Thus, Airport

activities only generate episodic noise on the Project site from aircrafts flying overhead, and overall noise levels resulting from Airport operations are less than 50 dBA CNEL.

Stationary Sources

Noise is also generated from commercial uses that border the Project site, particularly Irish Hills Plaza to the north, as well as automobile dealerships along Auto Park Way to the northeast, and four hotels to the east. Operational noise generated by these commercial uses includes semi-truck deliveries (85 dBA L_{max} at 50 feet) and associated backup alarms, parking lot sweeping (82 dBA L_{max} at 50 feet), landscape maintenance, rooftop heating and cooling equipment, and loudspeakers from automobile dealerships (89 dBA L_{max} at 50 feet) (FHWA 2013; see Table 3.10-1). Noise generated from such adjacent uses primarily affects the northern area of the Project site associated with Madonna Froom Ranch. Given proximity and types of activities, loading dock activity at the Irish Hills Plaza likely generates the highest levels of noise adjacent to the Project site. Although these operational activities are periodic in nature and do not typically result in high levels of continuous noise, noise levels of 65 dB L_{max} would extend as far as 95 feet into the Project site, with noise levels increasing with proximity to the activity.

Businesses adjacent to the Project site within Irish Hills Plaza include Home Depot, TJ Maxx, and Whole Foods. The loading docks of these businesses are located approximately 60 to 70 feet from the Project site's northern boundary and directly face the Project. These businesses receive regular deliveries by large semi-trucks, as well as deliveries from smaller vendors with variable schedules and frequency. TJ Maxx typically has one semi-truck delivery that occurs from 6:30 AM to 8:30 AM on weekdays, with occasional deliveries on Saturdays and during holidays (TJ Maxx 2019). Home Depot typically has 10 to 15 daily weekday deliveries by semi-trucks that occur between 6:00 AM and 9:00 PM (Home Depot 2019). Whole Foods receives between 5 to 7 deliveries every day of the week by refrigerated semi-trucks that can occur from 5:00 AM to 1:30 PM Whole Foods 2019). In total, TJ Maxx, Whole Foods, and Home Deport receive a combined average of 82 weekly deliveries via semi-trucks to loading docks adjacent to the Project site, as well as multiple smaller deliveries (e.g., UPS, FedEx). In addition to the noise resulting from operation of semi-trucks, deliveries generate additional noises from equipment such as refrigeration units, forklifts, and loudspeakers. Additionally, backup alarms are required by law to be audible above background noise levels.

While vehicular noise identified in the Acoustics Assessment from LOVR and U.S. 101 constitute the main source of ambient noise levels onsite, periodic high noise levels generated by adjacent commercial uses also extend into the Project site.

3.10.1.3 Sensitive Receptors

Noise sensitive uses, or sensitive receptors, generally include single- and multi-family residences, schools, libraries, medical care facilities, retirement/assisted living homes, guest lodging, recreational areas, and places of worship. Such uses can be sensitive to increases in both short-term and long-term noise due to a range of issues, such as sleep disturbance and disruption of conversations, lectures or sermons, or decreased attractiveness of exterior use areas, such as patios, backyards, outdoor pool decks, or parks. Of particular concern is exposure of sensitive receptors to long-term elevated interior noise levels and sleep disturbance, which can be associated with health concerns.

No sensitive land uses are currently located within the Project site. Sensitive land uses in the Project vicinity include Mountainbrook Church and the hotels along Calle Joaquin. Mountainbrook Church is located approximately 75 feet from the southern boundary of the Project site and 580 feet from the Upper Terrace. The church is open daily and offers religious services throughout the week, including classes and programs for children and youth, with most programs offered during evenings and weekends. Four hotels (Rose Garden Inn, Courtyard by Marriott, Hampton Inn & Suites, and Motel 6), three of which have outdoor pools (Rose Garden Inn, Courtyard by Marriott, and Motel 6), are located approximately 40 to 160 feet to the east of the site boundary. These facilities lie along Calle Joaquin with setbacks of 75 to 230 feet between the roadway and the noise-sensitive uses (hotel rooms or pools). The closest school is Pacific Beach High School, which is approximately 0.27 mile northwest of the Project site. The closest existing residential area is approximately 0.3 mile northeast of the Project site.

Additionally, the Project site is located adjacent to the Irish Hills Natural Reserve, an approximately 1,110-acre City-owned natural open space area supporting substantial public recreational trails, as well as a wide variety of native habitats and wildlife species. Irish Hills Natural Reserve supports over 8 miles of trails, including Neil Havlik Way and the Froom Creek Trail, segments of which closely border the Project site. Although the exact distance from the Project boundary varies along these trails, the shortest distance is approximately 70 feet at the Project's northwest boundary. These trails draw hikers, trail runners, mountain bikers, and school groups attracted to the Reserve's natural and undeveloped character. This area also supports several special status wildlife species that

can be sensitive to noise – for discussion of possible noise impacts on wildlife (e.g., foraging, nesting, and reproductive activities), see Section 3.4, *Biological Resources*.

3.10.2 Regulatory Setting

Noise is governed primarily by federal, state, and local laws that would apply to future development under the Project. Federal, state, and local regulations that are directly relevant to the Project are summarized below.

3.10.2.1 Federal

Federal Transit Administration Criteria

The Federal Transit Administration (FTA) developed methodology and significance criteria to evaluate vibration impacts from surface transportation modes (i.e., passenger cars, trucks, buses, and rail) in the Transit Noise Impact and Vibration Assessment (Harris Miller Miller & Hanson Inc. 2006). For residential buildings (Category 2), the threshold applicable to these projects is 80 VdB.

Federal Noise Control Act (1972)

Public Law 92-574 regulates noise emissions from operation of all construction equipment and facilities; establishes noise emission standards for construction equipment and other categories of equipment; and provides standards for the testing, inspection, and monitoring of such equipment. This Act gives states and municipalities primary responsibility for noise control.

3.10.2.2 State

State of California's Guidelines for the Preparation and Content of Noise Element of the General Plan (1987)

These guidelines reference land use compatibility standards for community noise environments as developed by the California Department of Health Services, Office of Noise Control. Noise levels up to 60 L_{dn} or CNEL are determined to be normally acceptable for single-family residential land uses. Noise levels up to 65 L_{dn} or CNEL are determined to be normally acceptable for multi-family residential land and transient lodging (e.g., hotels) land uses. Noise levels up to 70 CNEL are normally acceptable for nursing homes, hospitals, neighborhood parks, and business commercial land uses.

The California Administrative Code Title 24, Noise Insulation Standards

These standards regulate interior noise levels for all new residences to 45 L_{dn} or below. If exterior noise levels exceed 60 L_{dn}, Title 24 requires the preparation of an acoustical analysis showing that the proposed design would limit the noise level to or below the interior 45 L_{dn} requirement.

3.10.2.3 Local

City of San Luis Obispo General Plan, Noise Element and Noise Guidebook (1996)

According to state law, a Noise Element is required in all city and county general plans. The City's maximum noise exposure standards for noise-sensitive land use (specific to transportation noise sources) are shown in Table 3.10-5. Since residential land uses are considered noise-sensitive, there are recommended maximum noise exposure guidelines.

Policy 1.3. New Development Design and Transportation Noise Sources. New noise-sensitive development shall be located and designed to meet the maximum outdoor and indoor noise exposure levels of Table 3.10-5.

Policy 1.4. New Transportation Noise Sources. Noise created by new transportation noise sources, including road, railroad, and airport expansion projects, shall be mitigated to not exceed the levels specified in Table 3.10-5 for outdoor activity areas and indoor spaces of noise-sensitive land uses which were established before the new transportation noise source.

Policy 1.6. New Development and Stationary Noise Sources. New development of noise-sensitive land uses may be permitted only where location or design allow the development to meet the standards of Table 3.10-5 for existing stationary noise sources.

Table 3.10-5. City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Transportation Noise Sources

Land Use	Outdoor Activity Areas[1]	Interior Spaces		
	L_{dn}[2] or CNEL	L_{dn}[2] or CNEL	L_{eq}[3]	L_{max}
Residences, hotels, motels, hospitals, nursing homes	60	45	--	60
Theaters, auditoriums, music halls	--	--	35	60
Churches, meeting halls, office building, mortuaries	60	--	45	--
Schools, libraries, museums	--	--	45	60
Neighborhood parks	65	--	--	--
Playgrounds	70	--	--	--

[1] If the location of outdoor activity areas is not shown in the column, the outdoor noise standard shall apply at the property line of the receiving land use.
[2] L_{dn} (day-night average noise level) is the is the energy-averaged noise level measured over a 24-hour period, with a 10-dB penalty assigned to noise events occurring between 10:00 PM and 7:00 AM and a 5-dB penalty assigned to noise events occurring between 7:00 PM and 10:00 PM.
[3] L_{eq} (equivalent noise level) is the constant or single noise level containing the same total energy as a time-varying sound, over a certain time. If the location of outdoor activity areas is not shown, the outdoor noise standard shall apply at the property line of the receiving land use.
Source: City of San Luis Obispo 1996.

Policy 1.7. New or Modified Stationary Noise Sources. Noise generated by new stationary sources, or by existing stationary noise sources which undergo modifications that may increase noise levels, shall be mitigated so as not to exceed the exposure standards for lands designated for noise-sensitive uses, as measured at the property line of the receiver.

The City's General Plan NE lists mitigation strategies in a descending order of desirability. If preferred strategies are not implemented, it is the responsibility of the Applicant to demonstrate through a detailed noise study that the more desirable approaches are either not effective or not practical, before considering other design criteria contained in the General Plan.

Policy 1.8. Preferred Noise Mitigation Approaches. When approving of new development of noise-sensitive uses or noise sources, the City will require noise mitigation in the descending order of desirability shown below.

1.8.1. Mitigating Noise Sources

A. Arrange activity areas on the site of the noise-producing project so project features, such as buildings containing uses that are not noise-sensitive, shield neighboring noise-sensitive uses;

B. Limit the operating times of noise-producing activities;

C. Provide features, such as walls, with a primary purpose of blocking noise.

1.8.2. Mitigating Outdoor Noise Exposure

A. Provide distance between noise source and recipient;

B. Provide distance plus planted earthen berms;

C. Provide distance and planted earthen berms, combined with sound walls;

D. Provide earthen berms combined with sound walls;

E. Provide sound walls only;

F. Integrate buildings and sound walls to create a continuous noise barrier.

1.8.3. Mitigating Indoor Noise Exposure

A. Achieve indoor noise level standards assuming windows are open;

B. Achieve indoor noise level standards assuming windows must be closed (this option requires air conditioning or mechanical ventilation in buildings).

Policy 1.10. Existing and Cumulative Impacts. The City would consider the following mitigation measures appropriate where existing noise levels significantly impact noise-sensitive land uses, or where cumulative increases in noise levels resulting from new development significantly impact existing noise-sensitive land uses:

A. Rerouting traffic onto streets that can maintain desired levels of service, consistent with the *Circulation Element*, and which do not adjoin noise-sensitive land uses;

B. Rerouting trucks onto streets that do not adjoin noise-sensitive land uses;

C. Constructing noise barriers;

D. Reducing traffic speeds through street or intersection design methods;

E. Retrofitting buildings with noise-reducing features;

F. Establishing financial programs, such as low-cost loans to owners of a noise-impacted property, or developer fees to fund noise-mitigation or trip-reduction programs.

New development of noise-sensitive land uses may only be permitted where standards are met via location or design, as outlined in Table 3.10-6.

Table 3.10-6. City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Stationary Noise Sources

	Daytime (7:00 AM to 10:00 PM)	Nighttime[2] (10:00 PM to 7:00 AM)
Hourly L_{eq} in dB[1, 2]	50	45
Maximum level in dB[1, 2]	70	65
Maximum impulsive noise in dB[1, 3]	65	60

[1] As determined at the property line of the receiver. When determining effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property-line noise mitigation measures.
[2] Noise level measurements shall be made with slow meter response.
[3] Noise level measurements shall be made with fast meter response.
Source: City of San Luis Obispo 1996.

City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control)

The City's Municipal Code (Section 9.12.060) specifies noise standards for various categories of land use. These limits, shown in Table 3.10-7, would apply to long-term operation of the site, and are not applicable during construction. Prohibitions applied to creating noise for maximum time periods from any source within the City are shown in Table 3.10-8.

Where technically and economically feasible, construction activities shall be conducted so that maximum noise levels at affected properties would not exceed 75 dBA for single-family residential, 80 dBA for multi-family residential, and 85 dBA for mixed residential/commercial land uses, as shown in Table 3.10-9 and Table 3.10-10 (Municipal Code, Section 9.12.050). Except for emergency repair of public service utilities, or where an exception is issued by the City Community Development Department, no operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work shall occur daily between the hours of 7:00 PM and 7:00 AM, or any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial property line.

Table 3.10-7. City of San Luis Obispo Exterior Noise Limits

Zoning Designation[1]	Time Period	Maximum Acceptable Noise Level (dBA[2])[3]
Low- and Medium-Density Residential (R-1 and R-2); Conservation/Open Space (C/OS)	10:00 PM – 7:00 AM	50
	7:00 AM – 10:00 PM	55
Medium- and High-Density Residential (R-3 and R-4)	10:00 PM – 7:00 AM	50
	7:00 AM – 10:00 PM	55
Office and Public Facility (O and PF)	10:00 PM – 7:00 AM	55
	7:00 AM – 10:00 PM	60
Neighborhood, Retail, Community, Downtown and Tourist Commercial (C-N, C-R, C-C, C-D, C-T)	10:00 PM – 7:00 AM	60
	7:00 AM – 10:00 PM	65
Service Commercial (C-S)	Any Time	70
Manufacturing (M)	Any Time	75

[1] The classification of different areas of the community in terms of environmental noise zones shall be determined by the Noise Control Office(r) based upon community noise survey data. Additional area classifications should be used as appropriate to reflect both lower and higher existing ambient levels than those shown. Industrial noise limits are intended primarily for use at the boundary of industrial zones rather than for noise reduction within the zone (Ord. 1032 § 2 [part] 1985)
[2] dBA (A-weighted decibel scale) emphasizes the range of sound frequencies that are most audible to the human ear (between 1,000 and 8,000 Hertz).
[3] Levels not to be exceeded more than 30 minutes in any hour.
Source: City of San Luis Obispo 2008.

Table 3.10-8. Maximum Time Periods for Increased Noise Levels

Noise Standard for Existing Land Use	Maximum Time Period Allowed
+0 dB	30 minutes/hour
+5 dB	15 minutes/hour
+10 dB	5 minutes/hour
+15 dB	1 minute/hour
+20 dB	Any time

Source: City of San Luis Obispo 1996.

Table 3.10-9. Maximum Noise Levels for Nonscheduled, Intermittent, Short-Term Operation (Less than 10 Days) of Mobile Equipment at Residential Properties

Zoning Category	Time Period	Noise Level (dBA)
Single-Family Residential	Daily 7:00 AM to 7:00 PM, except Sundays and legal holidays	75
Multi-Family Residential		80
Mixed Residential/Commercial		85
Single-Family Residential	7:00 PM to 7:00 AM, all day Sunday and legal holidays	50
Multi-Family Residential		55
Mixed Residential/Commercial		60

Source: City of San Luis Obispo 2008.

Table 3.10-10. Maximum Noise Levels for Repetitively Scheduled, Relatively Long-Term Operation (10 Days or More) of Stationary Equipment at Residential Properties

Zoning Category	Time Period	Noise Level (dBA)
Single-Family Residential	Daily 7:00 AM to 7:00 PM, except Sundays and legal holidays	60
Multi-Family Residential		65
Mixed Residential/Commercial		70
Single-Family Residential	Daily 7:00 PM to 7:00 AM, including all day Sunday and legal holidays	50
Multi-Family Residential		55
Mixed Residential/Commercial		60

Source: City of San Luis Obispo 2008.

3.10.3 Environmental Impact Analysis

3.10.3.1 Thresholds of Significance

Noise levels for the Project must comply with relevant noise policies, standards, and ordinances. Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts related to noise. Specifically, the Guidelines state that a proposed project may have a significant adverse impact related to noise if the project would:

a) Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies;

b) Result in the generation of excessive groundborne vibration or groundborne noise levels; and

c) For a project located in the vicinity of a private airstrip or airport land use plan or, where such a plan has not been adopted within 2 miles of a public airport or public use airport, the project would expose people residing or working in the project area to excessive noise levels.

3.10.3.2 Impact Assessment Methodology

This analysis was based on review and analysis of the City General Plan NE, the 2014 LUCE Update EIR, the County General Plan NE, the ALUP, the Federal Highway Administration (FHWA) Highway Noise Prediction Model (FHWA-RD-77-108; FHWA Model), the Applicant-prepared Acoustics Assessment for the Project (Appendix I), and

third party peer review of this Acoustics Assessment by the EIR consultant's technical noise specialist.

Construction Noise

Noise impacts related to construction traffic are assessed against noise levels permitted in in the City Municipal Code Section 9.12.060. Noise associated with construction trips is considered an intermittent rather than ongoing noise source, and impacts are accordingly assessed in relation to Table 3.10-8, *Maximum Time Periods for Increased Noise Levels*. Projected construction noise levels are analyzed based on typical construction equipment required for Project development, construction BMPs, and distance between sensitive receptors and anticipated construction activities.

The construction noise impact analysis assumes that Project development would occur over a five-year period in four phases as detailed in Table 2-7, Section 2.0, *Project Description*. Each phase of construction would involve different equipment and activities that would at times overlap and potentially amplify noise levels. For example, the Project would require import of 220,000 cy of soil and 2,300 cy of rock over five years. Utilizing a conservative worst-case approach, the analysis assumes the use of smaller haul trucks and determined Project development could require up to 22,000 heavy haul truck trips.[2] Construction traffic would also include earth and rock export/import, construction material deliveries, and cement trucks.

Although precise numbers are not known, most of the approximately 22,000 heavy truck trips, particularly those associated with hauling of earth and rock, are assumed to access the site directly via the proposed main entrance at LOVR and Auto Park Way during the 21 months of Phase 1 and much of the 29 months of Phase 2. However, after occupancy of residential units in Villaggio's Lower Area toward the end of Phase 2, construction traffic, including a smaller portion of heavy trucks, would access the proposed stormwater detention basin area from Calle Joaquin and the Upper Terrace via Mountainbrook Church's private roadway. Potential impacts of haul trucks traffic on sensitive receptors are analyzed based on the estimated noise level generated by a heavy haul or cement trucks and the estimated distance of sensitive receptors from roadways carrying heavy haul truck

[2] Estimated trips are based on a worst-case estimate for use of single box trucks. Haul truck capacities typically range from 10 cy with a single box to 20 cy with a double box; use of larger single box trucks with a 14-cy capacity is also common. Although major haul projects typically use larger load, 14 to 20 cy load trucks, the final mix of truck sizes cannot be known and will be based on economics, availability, and access routes, making precise numbers difficult to forecast.

traffic. Analysis of noise impacts from construction traffic trips are considered for two potential construction haul routes:

1. Primary heavy haul truck trip access during Phase 1, much of Phase 2 and all of Phase 4 would be through the main Project site entry at LOVR and Auto Park Way, via LOVR. Trucks would use internal Local Road "C" or an interim road along this alignment to access the site and the Upper Terrace during rough grading, but not after the occupancy of units in the Lower Area of Villaggio in the later stages of Phase 2. Construction traffic for the Madonna Froom Ranch residential and commercial development would use the main Project entrance off LOVR.

2. Deliveries of construction materials and heavy equipment along with cement trucks for foundation pours at the Upper Terrace would use the Mountainbrook Church access route.

Construction noise levels were estimated using data published by the FHWA regarding the noise-generating characteristics of typical construction equipment (see Table 3.10-11). Construction noise levels diminish rapidly with distance, at a rate of approximately 6 dBA per doubling of distance as equipment is generally stationary or confined to specific area or access routes during construction. For example, a noise level of 86 dBA measured at 50 feet from the noise source would be reduced to 80 dBA at 100 feet from the source, and by another 6 dBA (to 74 dBA) at 200 feet from the source. The noise levels from construction at the offsite sensitive uses can be determined with the following equation from the High-Speed Ground Noise and Vibration Impact Assessment, Final Report:

$$L_{max} \text{ at sensitive use} = L_{max} \text{ at 50 feet} - 20 \text{ Log}(D/50)$$

Where: L_{max} = noise level of noise source, D = distance from the noise source to the receiver, and L_{max} at 50 feet = noise level of source at 50 feet (U.S. Department of Transportation 2012).

Table 3.10-11. Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 Feet
Back Hoe	73–95
Backup Alarm	88
Compressors	75–87
Concrete Mixer	75–88
Concrete Mixer Truck	79
Concrete Pump Truck	81
Concrete Pumps	81–85
Cranes (derrick)	86–89
Cranes (moveable)	75–88
Forklift	80
Generators	71–83
Haul Trucks (operation)	82–95
Haul Trucks (transportation)	85
Jackhammers	81–98
Paver	85–88
Pneumatic Tools	85
Pumps	68–72
Saws	72–82
Scraper/Grader	80–93
Semi-truck	85
Tractor	77–98
Vacuum Street Sweeper	82
Vibrator	68–82

Note: Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.
Sources**:** U.S. Department of Transportation 2013; FHWA 2006.

As set forth in the City Municipal Code, Section 9.12.050, construction activities within the City are generally permissible between 7:00 AM and 7:00 PM on weekdays and Saturdays. During these hours, the City permits long-term construction noise (in excess of 10 days) up to 70 dBA for commercial sensitive receptors, and 65 dBA for residential sensitive receptors (refer to Table 3.10-9) or up to 20 dBA above normally acceptable levels for any instantaneous noise event (refer to Table 3.10-8). Construction noise in excess of these levels would be considered significant.

Vibration Levels Associated with Construction Equipment

Construction-related groundborne vibration levels were estimated using the 2013 Caltrans Transportation and Construction Vibration Guidance Manual. Caltrans provides thresholds of significance for vibration and a methodology for calculating vibration levels at a certain distance from the generating source. Table 3.10-12 indicates vibration levels at which humans would be affected. Table 3.10-13 identifies anticipated vibration velocity levels in inches per second (in/sec) for standard types of construction equipment based on distance from the receptor. Vibration impacts are assessed by estimating the vibration levels of Project construction equipment and the distance of sensitive receptors to the vibration source. Vibration impacts include those from excavation and other onsite construction activities, as well as those associated with heavy haul trucks and concrete trucks.

Vibration levels at sensitive uses are determined using the following equation:

$$PPV_{Projected} = PPV_{Ref} (25/D)^{n}$$

Where: PPVRef = reference Peak Particle Velocity (in/sec) at 25 feet; D = distance from equipment to the receiver in feet; n = 1.1 (a recommended conservative value pertaining to attenuation rate of vibration through ground).

Table 3.10-12. Caltrans Vibration Annoyance Potential Criteria

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

[1] Transit sources are defined as temporary sustained vibration of a mechanical system.
Source: Caltrans 2013.

Table 3.10-13. Vibration Source Levels for Construction Equipment

Construction Equipment	Vibration Level (in/sec) at 25 feet	Vibration Level (in/sec) at 50 feet	Vibration Level (in/sec) at 100 feet
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks (e.g., cement truck)	0.076	0.035	0.017
Jackhammer	0.035	0.016	0.008
Small Bulldozer	0.003	0.001	0.0004

Source: Caltrans 2013.

Operational Roadway Noise

Policy 1.4 of the City's General Plan NE sets maximum noise exposure standards for noise-sensitive land use specific to transportation noise sources (refer to Table 3.10-5). Noise in excess of these levels would be considered significant. Project-generated increases in roadway noise levels are considered in terms of potential to increase traffic volumes above existing conditions. Project implementation would increase traffic and traffic-generated noise on nearby roadways. In addition, future Project residents could be exposed to noise generated on adjacent roadways.

Analysis of mobile source noise impacts includes review of LUCE Update EIR estimated roadway noise levels in the Project vicinity for U.S. 101 and LOVR, and the Acoustics Assessment prepared for the Project for existing and future roadway noise level estimates within the Project site (Appendix I). As discussed in Section 3.10.1.2, *Existing Noise Environment*, the LUCE Update EIR noise modeling does not account for physical features, such as the Mountainbrook Church hill or hotels along Calle Joaquin, and therefore overstates onsite noise levels from U.S. 101. The Acoustics Assessment appears to most accurately reflect roadway noise levels from LOVR and is therefore used for assessment of those impacts.

Stationary Noise Sources

Commercial operation noise levels are estimated using data regarding the noise-generating characteristics of typical commercial equipment published by the FHWA, Environmental Health Perspectives, and the U.S. Department of Transportation (see Table 3.10-14). The City's Municipal Code (Section 9.12.060) specifies noise exposure standards for future uses within the Project site (Table 3.10-7). Noise generated from residential or other non-commercial uses within and adjacent to the Project site are estimated based on the typical dBA levels generated from urban uses, such as heating, ventilation, and air conditioning (HVAC) equipment, delivery trucks, and other common uses, as well as the distance of major adjacent noise generating sources (e.g., loading docks).

Table 3.10-14. Noise Ranges of Typical Commercial Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 Feet
Backup Alarm	88[1]
HVAC	55[2]
Forklift	80
Loudspeakers	89
Pneumatic Tools	85
Semi-truck	85
Vacuum Street Sweeper	82

Note: Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.
[1]While this represents typical backup alarm levels, alarms are required by law to be audible above ambient noise levels.
[2]This represents noise levels following typical attenuation methods including fitting with noise shielding cabinets or placement on a roof or mechanical equipment room.
Sources**:** U.S. Department of Transportation 2013; FHWA 2006; Holzman 2011.

Assessment of potential impacts to future residents from roadways and adjacent uses accounts for existing measured and mapped noise levels, as well as Project design features intended to minimize impacts to future residents (e.g., inclusion of noise-reducing building materials).

3.10.3.3 Project Impacts and Mitigation Measures

Potentially sensitive uses that could be affected by Project construction noise and vibration, as well as Project operational noise impacts include Mountainbrook Church, hotels along Calle Joaquin, passive recreational uses within the Irish Hills Natural Reserve, and future noise-sensitive Project components, particularly residential uses in Villaggio's Lower Area, which are proposed to be occupied during intensive construction activities associated with later phases. In addition, future Project residents could be exposed to existing and future roadway noise and noise generated from adjacent commercial operations. Noise from aircraft overflights do not generate high noise levels under current and projected airport operations. Short-term construction and long-term operational impacts are analyzed for the existing and future noise environment, and appropriate noise-control mitigation measures are recommended below.

Table 3.10-15. Summary of Project Impacts

Noise Impacts	Mitigation Measures	Residual Significance
NO-1. Project construction, including site grading and heavy truck trips, would generate noise levels that exceed thresholds established in the City's General Plan Noise Element and Noise Guidebook resulting in potentially significant impacts to proximate sensitive receptors.	MM NO-1 MM NO-2 MM NO-3	Less than Significant with Mitigation
NO-2. Project construction activities (e.g., excavation, transportation of heavy equipment) could result in exposure of sensitive receptors and buildings to excessive groundborne vibration.	None Required	Less than Significant
NO-3. Long-term operational noise impacts would include higher roadway noise levels from increased vehicle traffic generated by the Project, Project operational noise, and exposure of future residents to high noise levels that could result in the exceedance of thresholds in the City's General Plan Noise Element and Noise Guidelines.	None Required	Less than Significant
NO-4. Future residents and occupants of the Project could be exposed to periodic high noise levels from nearby commercial uses (e.g., delivery trucks, forklifts, backup alarms) that would exceed City thresholds for residential land uses.	MM NO-4	Less than Significant with Mitigation

Impact NO-1 Project construction, including site grading and heavy truck trips, would generate noise levels that exceed thresholds established in the City's General Plan Noise Element and Noise Guidebook resulting in potentially significant impacts to proximate sensitive receptors (Less than Significant with Mitigation).

Project construction would extend over a five-year period and include approximately 570,000 cy of grading, with 220,000 cy of imported fill for the construction of proposed development within the Project site, including 404 senior housing units within Villaggio and up to 174 multi-family residential units, with over 2 miles of new roads and driveways, utilities, and major drainage improvements, including realignment and widening of Froom Creek. Each phase of construction would involve different equipment and activities that would at times overlap and potentially amplify construction-related noise levels. Utilizing a conservative worst-case approach, it is assumed that Project construction would utilize smaller haul trucks, requiring up to 22,000 heavy haul truck trips for import/export of fill

material.[3] Construction traffic would also include earth and rock export/import, construction material deliveries, and cement trucks. The analysis assumes these trips would occur within the Project site. However, after occupancy of residential units in Villaggio's Lower Area toward the end of Phase 2, construction traffic, including a smaller portion of heavy trucks, would access the proposed stormwater detention basin area from Calle Joaquin and the Upper Terrace via Mountainbrook Church's private roadway.

Construction activities would generate increased noise that could impact surrounding uses, particularly the use of earth moving equipment (e.g., bulldozers) and heavy haul trucks. Construction noise levels vary depending on the amount and types of equipment used, timing, and location of the activity in relation to the receptor (refer to Table 3.10-11).

Site preparation and grading would involve roughly 60 acres and occur in different locations in Phases 1 through 3. Rough grading and transport of excess material within the site, as well as import of more than 220,000 cy of fill and rock by heavy haul trucks during these phases, would generate increased onsite and offsite noise levels. High levels of construction noise would be generated by excavation equipment, internal haul truck trips, and importation of fill from offsite. Grading and importation of fill would initially precede and then be overlapped with construction of roadways, building pads, and utilities.

Rough grading and site preparation during Phases 1 through 3 would generate the highest construction noise levels due to operation of heavy equipment and heavy haul trucks. Specifically, rough grading, heavy truck trips, and construction in areas of the site proximate to sensitive receptors (such as hotels along Calle Joaquin, the Irish Hills Natural Reserve, and Mountainbrook Church) would generate potential impacts. Noise would also occur from sources such as backup warning devices, which would be audible offsite.

Construction activities proximate to Calle Joaquin, including realignment of Froom Creek and construction of the proposed stormwater detention basin and Lower Area of Villaggio could impact sensitive receptors, such as hotel guests. Periodic maximum construction noise levels are estimated to be as high as 85 dB at the nearest hotel building and 81 dB at the nearest hotel pool. Construction close to Mountainbrook Church (e.g., the emergency access road, haul truck trips) could generate noise levels of up to 91 dB (Table 3.1-16).

[3] Estimated trips are based on a worst-case estimate for use of single box trucks. Haul truck capacities typically range from 10 cy with a single box to 20 cy with a double box; use of larger single box trucks with a 14-cy capacity is also common. Although major haul projects typically use larger load 14- to 20-cy load trucks, the final mix of truck sizes cannot be known as it will be based on economics, availability, and access routes, making precise numbers difficult to forecast.

Generally, noise levels generated by construction activities would be reduced by 20 to 30 dB within structures, depending on building materials.

Hikers, mountain bikers, and other users of the trails in the Irish Hills Natural Reserve would also be exposed to noise impacts from all phases of Project construction. Depending upon the phase of the Project, noise levels for trail users could reach 90 dBA with users exposed to such noise levels for 15 to 30 minutes depending upon the trail and mode of use (e.g., walking vs. mountain bike).

In addition, the Project phasing would allow occupancy of the Lower Area of Villaggio to be occupied as early as 2022. Occupancy would precede later construction phases of the Upper Terrace and Madonna Froom Ranch. While grading of the site would be complete by 2022, fine grading and vertical construction of the Upper Terrace and Madonna Froom Ranch would continue between 2022 and 2025, which would generate noise from trucks and heavy construction equipment. Senior independent living residences, the Villaggio Health Care Administration building, and senior assisted living facilities occupied in 2022 would be considered sensitive receptors to noise from Project construction. Grading, onsite transport of cut material between the Upper Terrace and Madonna Froom Ranch areas, and import of offsite fill to the Madonna Froom Ranch Area would potentially generate excessive noise levels from heavy construction equipment and heavy haul trucks.

To protect future residents in Villaggio's Lower Area from excessive construction noise generated during Phases 3 and 4 (see Section 2.0, *Project Description*), the Applicant proposes to strategically schedule grading of the Upper Terrace (Phase 3) to occur at the same time as grading activities associated with Phase 1 and 2. All major grading and earthmoving, including balancing soils within the Project site, would occur prior to occupancy of any units within the Specific Plan area. Once occupancy begins, the Project would reroute construction trips to the Upper Terrace, including any heavy haul or materials delivery trips, along Calle Joaquin to the Mountainbrook Church driveway and parking lot instead of through the local roads constructed to serve the Project. This circulation approach would move sources of substantial construction noise offsite and away from sensitive receptors residing onsite within the Lower Area once it is constructed. This proposed construction phasing would therefore reduce the potential for exposure of sensitive elderly populations to the most intensive construction activities and noise levels associated with development under the Project.

Overall, Project construction maximum noise levels could reach as high as 89 to 92 dBA at surrounding sensitive uses, including hotels along Calle Joaquin, Mountainbrook Church

and within the Irish Hills Natural Reserve (see Table 3.10-16). The City Municipal Code permits construction noise up to 70 dBA for commercial sensitive receptors and up to 20 dBA above normally acceptable levels for any instantaneous noise event. Project construction activities could exceed these thresholds both in peak noise and duration; therefore, impacts are *potentially significant*.

Table 3.10-16. Maximum Estimated Outdoor Construction Peak Noise Levels at Sensitive Receptors (Unmitigated)

	Mountainbrook Church	Nearest Hotel Building	Nearest Hotel Pool	Neil Havlik Way Trail
Minimum distance from construction activity (feet)	60	100	140	70
Construction Noise (dBA L_{max})	91	92	89	90

Note: Noise levels at sensitive uses were determined with the following equation from the High-Speed Ground Noise and Vibration Impact Assessment, Final Report: L_{max} = L_{max} at 50 feet. – 20 Log(D/50), where L_{max} = noise level of noise source, D = distance from the noise source to the receiver, L_{max} at 50 feet = noise level of source at 50 feet. Noise levels represent the lower and upper limits of graders as displayed in Table 3.10-11. Noise levels have been rounded up to the nearest whole number.
Source: U.S. Department of Transportation 2012.

Mitigation Measures

MM NO-1 *Except for emergency repair of public service utilities, or where an exception is issued by the Community Development Department, no operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work shall occur between the hours of 7:00 PM and 7:00 AM, or any time on Sundays, holidays, or after sunset, such that the sound creates a noise disturbance that exceeds 75 dBA for single-family residential uses, 80 dBA for multi-family residential uses, and 85 dBA for mixed residential/commercial land uses, as shown in Table 3.10-9 and Table 3.10-10, across a residential or commercial property line.*

Requirements and Timing. Plans submitted for grading and building permits shall clearly indicate construction hours and shall be submitted to the City for approval prior to grading and building permit issuance for each Project phase. To ensure response to and resolution of potential public noise nuisance complaints, plans submitted for grading and building permits shall clearly identify the Project's construction manager (or similar) and 24-hour contact information. At the pre-construction meeting required for all phases of grading and development, all construction workers shall be briefed on

restricted construction hour limitations. A workday schedule shall be adhered to for the duration of construction for all phases.

Monitoring. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules and respond to complaints.

MM NO-2 *For all construction activity at the Project site, noise attenuation techniques shall be employed to ensure that noise levels are maintained within levels allowed by the City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control). Such techniques shall include:*

- *Sound blankets on noise-generating equipment.*
- *Stationary construction equipment that generates noise levels above 65 dBA at the Project boundaries shall be shielded with a barrier that meets a sound transmission class (a rating of how well noise barriers attenuate sound) of 25.*
- *All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.*
- *Temporary sound barriers shall be constructed between construction sites and affected uses.*

Requirements and Timing. The Applicant shall designate the proposed area of operation of stationary construction equipment and depict acoustic shielding around these areas on building and grading plans. Equipment and shielding shall be installed prior to construction and remain in the designated location throughout construction activities. Construction plans shall identify Best Management Practices (BMPs) to be implemented during construction. All construction workers shall be briefed at a pre-construction meeting on how, why, and where BMP measures are to be implemented. BMPs shall be identified and described for submittal to the City for review and approval prior to building or grading permit issuance. BMPs shall be adhered to for the duration of the Project. Construction plans shall include truck routes and shall be submitted to the City prior to grading and building permit issuance for each Project phase.

Monitoring. City staff shall ensure compliance throughout all construction phases. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules.

MM NO-3 *The Applicant shall inform landowners and business operators at properties within 300 feet of the Project site of proposed construction timelines and noise complaint procedures to minimize potential annoyance or nuisance complaints related to construction noise no less than 10 days prior to initiation of any grading and construction activity for any Phase. The notice shall include the name and contact information of the Project's construction manager and contact information for the City's Community Development Department.*

Requirements and Timing. The Applicant shall provide and post signs stating these restrictions and the Project's construction manager's name and contact information at construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction of any Phase. The construction schedule and mailing list shall be submitted to the City Community Development Department 10 days prior to initiation of any earth movement.

Monitoring. City staff shall ensure compliance throughout all construction phases. The Applicant's permit compliance monitoring staff shall perform periodic site inspections to verify compliance with activity schedules and respond to complaints.

Residual Impact

Noise from construction activities associated with Impact NO-1 would be reduced with implementation of MM NO-1 through -3. These measures require that the Applicant limit certain construction activities, provide noise attenuation measures to reduce perceived interior and exterior noise levels, and notice nearby landowners of construction activities and establish methods for addressing complaints. These measures, particularly MM NO-2, would ensure construction noise levels are reduced to levels acceptable under City standards. Therefore, residual impacts to Impact NO-1 would be *less than significant.*

Impact NO-2 Project construction activities (e.g., excavation, transportation of heavy equipment) could result in exposure of sensitive receptors and buildings to excessive groundborne vibration (Less than Significant).

Project construction could increase exposure of sensitive receptors to excessive vibration levels. Based on Caltrans vibration criteria in Table 3.10-12 and Table 3.10-13, sensitive receptors within 100 feet of construction activities could be subject to excessive vibration from construction equipment. Sensitive receptors would include Mountainbrook Church and hotels along Calle Joaquin.

Based on the distance and type of anticipated construction equipment and activities, these sensitive receptors could experience periodic vibrations up to 0.047 in/sec. As construction would be a frequent source of vibration for extended periods, this would be distinctly perceptible. However, vibration levels experienced by offsite sensitive receptors would not exceed the threshold of 0.10 in/sec. These vibrations would be temporary and intermittent due to the nature of construction, and would only occur during the hours of construction, generally 7:00 AM to 7:00 PM except for Sundays and holidays.

With regard to onsite sensitive receptors, as discussed above, to protect future residents in Villaggio's Lower Area from excessive construction noise and vibrations generated during Phases 3 and 4 (see Section 2.0, *Project Description*), the Applicant proposes to strategically schedule grading of the Upper Terrace (Phase 3) to occur at the same time as grading activities associated with Phase 1 and 2, to avoid construction-related impacts of later phases on Lower Area Villaggio occupants. Once occupancy begins, the Project would reroute construction trips to the Upper Terrace via Calle Joaquin to the Mountainbrook Church driveway and parking lot instead of through the local roads constructed to serve the Project. This circulation approach would move sources of construction vibration offsite and away from sensitive receptors residing onsite within the Villaggio Lower Area once it is constructed. This proposed construction approach would reduce potential for exposure of sensitive elderly populations to the most intensive construction activities and groundborne vibrations associated with development under the Project.

Because anticipated vibration levels would be substantially lower than thresholds established by Caltrans (See Table 3.10-12), vibration impacts to offsite sensitive receptors as a result of construction would be *less than significant*.

Impact NO-3 Long-term operational noise impacts would include higher roadway noise levels from increased vehicle traffic generated by the Project, Project operational noise, and exposure of future residents to high noise levels that could result in the exceedance of thresholds in the City's General Plan Noise Element and Noise Guidelines (Less than Significant).

Increased Roadway Noise

The Project would increase traffic on U.S. 101 and LOVR and could contribute to increased noise levels from traffic. Under typical circumstances, projected traffic volumes generally need to double over existing volumes in order for associated noise levels to increase by approximately 3 dBA – the increase in noise level that is generally perceptible to the human ear. As depicted in Table 3.10-17, projected ADT on LOVR are estimated to increase by approximately 16.7 percent as a result of this Project, with an associated increase of less than 1.0 dBA along this roadway. Project generated trips on U.S. 101 are expected to increase by approximately 2.4 percent, which is similarly associated with a less than 1.0 dBA increase. Increased traffic ADTs along Calle Joaquin would be negligible with no perceptible increase in noise levels. Given marginal Project-generated increases in traffic and associated roadway noise levels along U.S. 101, LOVR, and Calle Joaquin, the Project would not result in a significant contribution to the existing noise environment which would result in exceedance of noise standards at nearby offsite receptors. Further, given the Project would not expose future residents to unacceptable noise levels generated at nearby roadways, traffic-related noise impacts are considered *less than significant.*

Table 3.10-17. Projected Traffic and Noise Level Increases along Adjacent Roadways

Roadway Segment	Existing ADT	Projected ADT (% increase)	Projected Noise Level Increase (dBA)
LOVR	31,000	5,183 (16.7%)	< 1
U.S. 101	80,000	1,555 (2.4%)	< 1

Notes: Projected noise level increases were estimated from projected increases in ADT based on the following formula: $dBA=10Log_{10}$ (Projected ADT/Existing ADT).
Source: Caltrans 2017; City of San Luis Obispo 2016.

Exposure of Future Project Residents to High Noise Levels

Roadways near the Project site experience high levels of traffic that could result in noise impacts to future sensitive receptors onsite. The portion of U.S. 101 adjacent to the Project

site carries up to 80,000 ADTs and is located approximately 940 feet from the nearest proposed residential building (in the Lower Area of Villaggio). LOVR also lies adjacent to the Project site and carries approximately 31,000 ADTs. LOVR is located approximately 170 feet from the nearest residential unit in Villaggio's Lower Area, approximately 300 feet from proposed health care facilities within Villaggio's Lower Area, and approximately 170 feet from the nearest proposed multi-family residential unit in Madonna Froom Ranch.

Maximum allowable noise exposure resulting from transportation sources for residences, hotels, and office buildings within the City is 60 dBA in exterior areas and 45 dBA within interior spaces (See Table 3.10-5). Maximum allowable exposure of neighborhood parks within the City is 65 dBA. The Acoustics Assessment prepared for the Project site modeled the 60 dBA noise contour to be outside of these residential areas and proposed neighborhood park and estimates that residential land uses would be approximately 42 to 57 dBA. Noise levels at the proposed neighborhood park are estimated to be 42 to 51 dBA (Appendix I). Therefore, roadway noise levels would not exceed City standards for exterior and interior noise levels under implementation of the Project. Associated impacts are considered *less than significant.*

Operational Activities

Under the Project, long-term operational noise impacts would include noise from operation of HVAC systems, landscaping and maintenance activities, and other typical residential and commercial noise-generating uses.

Noise levels from commercial HVAC equipment can reach 100 dBA at a distance of 3 feet U.S. EPA 1971); however, these units are typically fitted with noise shielding cabinets, placed on the roof or in mechanical equipment rooms to reduce noise levels. Noise from mechanical equipment associated with operation of the Project is required to comply with the CBC requirements pertaining to noise attenuation. Therefore, with the application of these noise reduction techniques, noise from these pieces of equipment does not typically exceed 55 dBA at 50 feet, and would not exceed 45 dBA CNEL in any habitable room as required by Title 24 of the CBC. As such, the operation of HVAC systems would not exceed City exterior noise limits (see Table 3.10-7).

Landscaping and maintenance activities may include the use of equipment such as noise-compliant leaf blowers or hedge trimmers, which would reach levels of 65 dBA at 50 feet. Maximum permissible noise levels for nonscheduled, intermittent, short-term operation of mobile equipment on multi-family residential properties from 7:00 AM to 7:00 PM,

excepting Sundays and holidays, ranges from 80 to 85 dBA (see Table 3.10-9). Expected noise levels of equipment would be further reduced due to the fact that the nearest noise-sensitive receptor is located 100 feet away.

The noise impacts from operation of the proposed development would be typical of similar uses and would not constitute a substantial increase in ambient noise levels at offsite locations and therefore would not exceed interior or exterior ambient noise thresholds at offsite locations. Therefore, impacts related to the operation of stationary equipment and site maintenance activities resulting from the Project would be *less than significant*.

Impact NO-4 Periodic high noise levels from nearby commercial uses (e.g., delivery trucks, forklifts, backup alarms) may exceed City thresholds for residential land uses (Less than Significant with Mitigation).

Residential uses of the Madonna Froom Ranch neighborhood could be exposed to periodic high noise levels from commercial operations in the Irish Hills Plaza Shopping Center, particularly from loading dock operations. Commercial facilities within the Irish Hills Plaza support regular deliveries by large semi-trucks that can occur from 6:00 AM to 9:00 PM and generate noise from semi-trucks, refrigeration units, forklifts, and loudspeakers. Additionally, backup alarms are required and would also create intermittent high noise levels. General maintenance activities for the Irish Hills Plaza, including vacuum street sweeping and dump truck circulation, would also generate intermittent peak noise. Sensitive receptors that would be potentially affected by intermittent high noise levels from adjacent commercial uses include the proposed neighborhood park, hotel, retail/office spaces, and residents in the Madonna Froom Ranch neighborhood. Proposed residences along the northwestern Project boundary and the proposed park would be located within 80 to 220 feet of the Home Depot loading dock and garden shop. The proposed hotel and retail and office spaces are located within 175 to 250 feet of the TJ Maxx and Whole Foods loading docks, while proposed multi-family residences are within 440 feet. Given these intervening distances and noise levels from commercial operations, intermittent exterior noise levels could reach up to 76 dBA at some of the proposed Madonna Froom Ranch residences, 85 dBA within the proposed public park, 77 dB at the proposed hotel, and 74 dB at the proposed retail and office spaces (see Table 3.10-18). While noise levels from HVAC equipment for offsite commercial facilities can reach up to 100 dBA, units compliant with CBC noise attenuation requirements do not typically exceed 55 dBA at 50 feet and would not have a notable impact on the Project site.

Automobile dealerships and associated automobile repair facilities located across LOVR also have the potential to generate noise impacts. Noise sources resulting from these facilities include outdoor loudspeakers and automobile service activities (e.g., pneumatic air guns). Future onsite sensitive receptors potentially impacted by automobile dealership generated noise would include the proposed Villaggio Lower Area health care facilities located approximately 550 feet away and Madonna Froom Ranch multi-family housing located approximately 370 feet away. Given intervening distances and maximum equipment noise levels, periodic exterior noise levels from these sources could reach up to 68 dBA at the proposed Health Care Administration Building and 72 dBA at the proposed multi-family housing units. However, given its intermittent nature and distance from the site, automobile dealership noise would be considered a nuisance, but *less than significant*.

Irish Hills Plaza loading dock receives regular deliveries by large semi-trucks, as well as deliveries from smaller vendors with variable schedules and frequency. Approximately 82 average weekly deliveries via semi-trucks to loading docks adjacent to future sensitive receptors, as well as multiple smaller deliveries (e.g., UPS, FedEx) could lead to substantial noise impacts in excess of adopted City standards. In addition to the noise resulting from operation of semi-trucks, deliveries generate additional noises from equipment such as refrigeration units, forklifts, loudspeakers and backup alarms. As presented in Table 3.10-18, typical noise generated by such activities could range from 68 to 85 dB throughout the Madonna Froom Ranch development. While noise generated by loading dock operations would be heard in exterior areas of the proposed hotel, retail/office uses, and health care facilities, the maximum noise level is not projected to exceed City standards. However, loading dock operational noise could exceed exterior noise standards for the public park and multi-family residential uses. Given the potential for these noise activities to exceed exterior noise limits for park and residential uses within Madonna Froom Ranch, impacts are considered *potentially significant*.

Table 3.10-18. Maximum Noise Level Estimates and Thresholds Resulting from Nearby Commercial Activities

	Park	Hotel	MFR R-3-SP Residences	MFR R-4-SP Housing	Health Care Facilities	Retail/ Office
Maximum Noise Level (dB)	85	77	76	72	68	74
City Exterior Noise Limit – 30 minutes or more[1] (dBA)	60	65	60	55	55	60
City Exterior Noise Limit – 1 minute[2] (dBA)	75	80	75	70	70	75

[1] Noise Standard for Land Use within Section 9.12.060 of the City Municipal Code. Levels not to be exceeded more than 30 minutes in any hour.
[2] Noise Standard for Land Use within Section 9.12.060 of the City Municipal Code. Levels not to be exceeded for more than one minute in any hour.
MFR - Madonna Froom Ranch

Mitigation Measures

MM NO-4. *Prior to approval of park and residential development within the Madonna Froom Ranch area of the Specific Plan, the Applicant shall submit a project-specific noise study that evaluates the potential for noise exposure from adjacent commercial uses and identifies project-specific design measures to attenuate exterior and interior noise consistent with the City's Noise Element and Noise Ordinance. If necessary to reduce noise within acceptable levels, noise reduction measures may include a planted earthen berm, sound wall, or similar noise attenuating feature along the site boundary with Irish Hills Plaza, consistent with Policy 1.8.2 of the Noise Element.*

Requirements and Timing. The Applicant shall incorporate the above mitigation within the final FRSP prior to adoption.

Monitoring. City staff shall ensure compliance with required site design and noise reduction measures within the final FRSP prior to adoption and shall confirm any required noise attenuation measures are shown on construction plans prior to issuance of building permits.

Residual Impact

MM NO-4 would attenuate noise from adjacent commercial deliveries and loading areas, ensuring that proposed residential and park uses would not be exposed to noise exceeding

levels identified within Section 9.12.060 of the Municipal Code. Therefore, residual impacts would be *less than significant with mitigation*.

3.10.3.4 Cumulative Impacts

Development of the Project in conjunction with future cumulative projects would potentially result in an increase in construction-related and traffic-related noise sources in the City.

Construction Impacts

The potential for cumulative construction-related impacts to occur is increased with the Project's five-year construction period. Construction-related noise and groundborne vibration associated with the Project would potentially overlap with some cumulative projects within Table 3.0-1 (that have not yet been approved or constructed). This includes development of two automobile dealerships along Auto Park Way, Towne place Suites, and the San Luis Ranch Specific Plan area. Construction noise generated by the Project and other future development would be localized within the vicinity of the proposed development areas. Project-related construction noise and vibration would be removed from other construction activities and proposed projects pending in the vicinity. The Project, along with other cumulative development projects, would be required to implement site-specific measures to reduce construction-related noise to reduce impacts on surrounding development. Implementation of such measures would ensure noise generated from an individual site is adequately attenuated and would not contribute to cumulatively significant impacts on surrounding uses. Larger cumulative development projects such as the San Luis Ranch Specific Plan project, located approximately 1,800 feet north of the Project site, are located far enough from the Project site that concurrent development activities would not contribute to a cumulative substantial increase in ambient noise due to distance of the noise generators and attenuation from intervening development. Therefore, the Project's construction-related noise and vibration impacts would not considerably contribute to cumulative noise and vibration impacts from construction activities. Cumulative impacts would be *less than significant*.

Operational Impacts

The Project, in combination with approved, pending, and proposed development within the City, would contribute to an increase of long-term traffic and associated traffic noise, as well as operational noise from the proposed new development. The Project does not

propose any uses that would generate noise which would result in a perceptible increase in ambient noise levels offsite, and the Project contribution to the cumulative noise environment would be negligible. Implementation and buildout of the LUCE Update and pending projects in the vicinity would increase traffic volumes and associated noise levels along major transportation routes. The Project would also increase traffic and associated noise levels with approximately 5,183 additional ADT along surrounding roadways such as LOVR, Calle Joaquin, and U.S. 101, although these increases in ambient noise levels would not result in a noticeable increase in noise levels (less than 1 dBA increase). As discussed above, a perceptible increase in roadway noise levels would require traffic volumes to nearly double over existing volumes. Cumulative projects in the area would increase traffic levels and subsequent noise levels primarily on arterials and major roadways by approximately 20 percent (Appendix J); therefore, the noise-related impacts to residential and local streets would be nominal. Development of the Project and implementation of the LUCE Update could cumulatively increase stationary source noise levels; however, the City's Noise Element and Municipal Code contain policies and programs that would address and mitigate potential site-specific impacts for individual projects in the future, including Noise Guidebook Policy 1.4 which requires noise created by all new development be individually mitigated by each project so as not to exceed acceptable outdoor noise levels. Due to requirement for compliance with existing regulations, implementation of project-specific noise mitigation measures, and nominal increases in the ambient noise environment from proposed cumulative development, this cumulative impact would be considered *less than significant*.

3.11 POPULATION AND HOUSING

This section provides information on the existing population, employment characteristics, and housing availability in the City and evaluates the potential effect of the proposed Project on these resources.

3.11.1 Environmental Setting

3.11.1.1 Population

A range of population forecasts for existing population levels and the rate and total amount of projected future growth within the City is available from different sources. As discussed below, there is some variation for both existing population levels and projected rates of growth between available sources.

Existing Population Characteristics

Total Population

San Luis Obispo is one of seven cities located within the County, and is the largest in terms of population. In 2018, the City had a population of 46,548 residents, comprising approximately 16 percent of the County's population of 280,101 (see Table 3.11-1; Department of Finance 2019).[1] Overall, the City has experienced an average annual increase in population of 0.3 percent since 1990. Comparatively, the County has experienced a 0.9 percent average annual increase since 1990.

Table 3.11-1. Population Growth between 1990 and 2019

Population	1990	2000	2010	2019
City of San Luis Obispo	41,958	44,148	45,119	46,548
Average Annual Growth (%)	--	0.5	0.2	0.3
County of San Luis Obispo	217,162	246,681	269,637	280,101
Average Annual Growth (%)	--	1.4	0.9	0.3

Source: Department of Finance 2019; City of San Luis Obispo 2015a.

[1] The California Department of Finance provides population estimates for the City and County. The Department of Finance provides population counts every year, exclusive of residents on federal military installations and group quarters residents in state mental institutes, state and federal correctional institutions, and veteran homes. The most recent annual population data was published in May 2019.

Age Distribution

According to the City's General Plan HE, the City has substantially lower percentages of children/teens aged 1-17 and adults in the primary childbearing years of 25-44 (33 percent) compared to the County (42 percent) and the state (42 percent). Due to the concentration of students attending Cuesta College and California Polytechnic State University – San Luis Obispo (Cal Poly), young adults aged 18-24 are by far the largest age group in the City (35 percent) and greatly exceed the County (15 percent) and the state (11 percent). The City has a slightly higher proportion of senior citizens older than 65 years (12 percent) compared to the state (11 percent). (City of San Luis Obispo 2015).

Population Projections

San Luis Obispo Council of Governments

Based on the 2050 Regional Growth Forecast, SLOCOG projects a continuation of the low to moderate growth rates experienced by the City since 2010, with a medium growth rate of 0.46 percent annual growth projected to 2050.[2] According to SLOCOG's medium growth population projections, the City would experience a population increase of 1,264 residents between 2015 and 2020, and the addition of 1,387 new residents between 2020 and 2025. Between 2015 and 2050, the total populations for the City and the County are projected to increase by 5,722 residents and 44,107 residents, respectively (Table 3.11-2).

Table 3.11-2. SLOCOG Medium Growth Population Projections

Population	2015	2020	2025	2040	2050
City	45,950	47,214	48,601	51,105	51,672
County	276,375	286,657	297,095	315,922	320,482
Increase in City Population (% Annual Growth)		1,264 (0.5%)	1,387 (0.6%)	2,504 (0.3%)	567 (0.1%)
Increase in County Population (% Annual Growth)		10,282 (0.7%)	10,438 (0.7%)	18,857 (0.4%)	4,560 (0.1%)

Source: SLOCOG 2017. Figure 116.

[2] As part of its long-range planning efforts, SLOCOG develops socioeconomic estimates and growth projections including population, households, and employment for cities in the County of San Luis Obispo through enhanced forecasting methods and interactive public outreach. These estimates and projections provide the foundation for SLOCOG's transportation planning and other programs at the regional and small geographic area level, including the Regional Housing Needs Assessment (RHNA). The most recent projections were released in the agency's 2050 Regional Growth Forecast. These growth forecasts are based on 2010 U.S. Census Bureau data.

City of San Luis Obispo

According to the General Plan HE, between 1990 and 2000, the City's population grew 0.5 percent annually, and between 2005 and 2019, the City's population grew by 2,140 persons, a total increase of 4.8 percent, or annual increase of 0.3 percent (Table 3.11-3; City of San Luis Obispo 2015; California Department of Finance 2019).

Table 3.11-3. Population Growth, 2005-2019, San Luis Obispo City, County, and State of California

	City		County		California	
	Population	Rate of Change (%)	Population	Rate of Change (%)	Population	Rate of Change (%)
2005	44,662	-	261,558	-	35,278,768	-
2006	44,522	-0.31	263,727	0.83	36,457,549	3.34
2007	44,389	-0.3	265,786	0.78	36,553,215	0.26
2008	44,521	0.3	268,290	0.94	36,756,666	0.56
2009	44,750	0.51	270,429	0.8	36,961,664	0.56
2010	45,119	0.82	269,637	-0.29	37,253,956	0.79
2011	45,269	0.33	271,969	0.86	37,691,912	1.18
2012	45,312	0.1	271,502	-0.17	37,668,804	-0.06
2013	45,541	0.51	272,177	0.25	37,966,471	0.79
2014	45,950	0.90	276,248	1.50	38,662,601	1.83
2015	46,331	0.83	277,219	0.35	38,952,462	0.75
2016	46,363	0.07	278,405	0.43	39,214,803	0.67
2017	46,705	0.74	279,538	0.41	39,504,609	0.74
2018	46,741	0.08	280,048	0.18	39,740,508	0.60
2019	46,802	0.13	280,393	0.12	39,927,315	0.47

Source: City of San Luis Obispo 2015; California Department of Finance 2019.
Note: The adopted General Plan HE applies to the 2014 to 2019 RHNA cycle and, accordingly, only includes population data through 2013.

The General Plan LUE includes land use designations, policies, and projected levels of development that would accommodate an anticipated maximum City population of 57,200 (with an estimated population of 56,686 in 2035).

3.11.1.2 Employment

As of 2017, there were an estimated 24,213 jobs in the City (U.S. Census Bureau 2017).[3] Of these jobs, educational services, and health care and social assistance sectors accounted

[3] The number of jobs refers to the number of employed persons over the age of 16 within the City.

for 26.8 percent of the jobs. Retail trade jobs comprised 12.6 percent of jobs, and arts, entertainment, recreation, and accommodation, and food services sectors made up 17.7 percent of the total jobs. Top employers within the City include the French Hospital Medical Center, the County, the City, Sierra Vista Regional Medical Center, and Pacific Gas and Electric Company (San Luis Obispo Chamber of Commerce 2018). Comparatively, total jobs within San Luis Obispo County was estimated at 129,280 in 2017 and 23.6 percent of County employment was provided by educational services, health care, and social assistance sectors (Table 3.11-4). Based on these estimates, in 2017, the City's jobs constituted roughly 18.7 percent of the County's total employment (U.S. Census Bureau 2017). Some of the County's largest employers are situated in areas immediately outside the City, including Cal Poly, Cuesta College, and the California Men's Colony (San Luis Obispo Chamber of Commerce 2018).

Table 3.11-4. Division of Labor by Industry within the City and County (2017)

Industry	City		County	
	Number of Jobs	Percent (%)	Number of Jobs	Percent (%)
Agriculture, forestry, fishing and hunting, and mining	269	1.11%	4,480	3.47%
Construction	886	3.66%	10,235	7.92%
Manufacturing	1,585	6.55%	8,841	6.84%
Wholesale trade	509	2.10%	2,820	2.18%
Retail trade	3,044	12.57%	14,851	11.49%
Transportation and warehousing, and utilities	731	3.02%	5,845	4.52%
Information	457	1.89%	2,012	1.56%
Finance and insurance, and real estate and rental and leasing	846	3.49%	5,845	4.52%
Professional, scientific, and management, and administrative and waste management services	2,879	11.89%	13,821	10.69%
Educational services, and health care and social assistance	6,486	26.79%	30,501	23.59%
Arts, entertainment, and recreation, and accommodation, and food services	4,292	17.73%	16,229	12.55%
Other services, except public administration	1,281	5.29%	6,676	5.16%
Public administration	948	3.92%	7,124	5.51%
Total	**24,213**	100.00%	**129,280**	100.00%

Source: U.S. Census Bureau 2017.

As of July 2018, the City's total labor force is estimated at 25,900, of which 25,200 were employed, resulting in an unemployment rate of 2.7 percent (California Employment Development Department 2018a). The annual average unemployment rate in the City was 3.2 percent in 2017 (California Employment Development Department 2018b). These rates are low in comparison to rates from the past decade, which included the effects of the national economic recession from 2008 to 2013. The unemployment rate in the City reached up to 10.9 percent in 2010 (Table 3.11-5).[4] Subsequently, the City has seen a steady decrease in annual unemployment rates since the height of the recession.[5] In July 2018, the County's unemployment rate was 3.1 percent, but during the peak of the recession in 2010, unemployment levels in the County were approximately 10.1 percent and have been historically 2 percent lower than the state's levels, which was 12.2 percent in 2010 (California Employment Development Department 2018a).

Table 3.11-5. City of San Luis Obispo Labor Force and Unemployment 2000-2017

Year	Employed	Unemployed	Total	Unemployment Rate (%)
2000	23,500	1,100	24,600	4.5
2001	24,200	1,100	25,300	4.4
2002	24,600	1,300	25,900	5.2
2003	24,500	1,300	25,800	5.2
2004	24,900	1,300	26,200	5.1
2005	25,400	1,300	26,700	4.7
2006	25,800	1,200	27,000	4.4
2007	26,200	1,300	27,500	4.7
2008	25,900	2,000	27,900	6.3
2009	24,800	2,700	27,500	9.9
2010	24,900	3,000	27,900	10.9
2011	25,200	2,900	28,100	10.3
2012	26,300	2,600	28,800	8.9
2013	26,300	2,100	28,400	7.3
2014	24,200	1,500	25,700	5.9
2015	24,300	1,300	25,600	5.0
2016	24,500	1,200	25,700	4.5
2017	25,100	800	26,000	3.2

Source: California Employment Development Department 2018b.

[4] Unemployment rate is unemployed labor force divided by total size of the labor force.
[5] Labor force is defined as the number of residents within the City that are currently employed or residents that are unemployed looking for employment. Those who choose not to work or are unable to work typically are not calculated as members of the labor force. This differs from the number of jobs available within the City, which also relies on labor force populations outside the City that commute to the City for work.

According to the Regional Growth Forecast, the City had 34,073 jobs as of 2015 (SLOCOG 2017). This employment estimate is 9,860 more jobs than reported by the U.S. Census Bureau and California Employment Development Department data. As noted in Table 3.11-6, SLOCOG anticipates an increase of 10,160 jobs in the City over a 40-year period between 2010 and 2050. This equates to an annual projected employment growth rate of 1.03 percent for the City. In the County, employment is projected to grow by 0.5 percent annually.

Table 3.11-6. SLOCOG Medium Employment Projections

Planning Area	2010	2015	2020	2025	2030	2035	2040	2045	2050
City	33,686	37,536	37,798	39,353	40,804	41,933	42,691	43,238	43,846
County	99,964	114,304	115,842	120,605	125,054	128,512	130,837	132,511	134,375

Source: SLOCOG 2017.

3.11.1.3 Housing

Housing Supply and Number of Households

According to the General Plan HE, the City had 20,553 housing units and 19,193 households with an average household size of 2.29 persons in 2010.[6] Average household size in the City declined from 2.32 persons per household in 2000 to 2.29 in 2010, a decline of approximately 1.3 percent. Based on the 2050 Regional Growth Forecast, the City's average persons per household has increased approximately 1.7 percent since 2010, to 2.33 persons per household as of 2015 (SLOCOG 2017).[7]

Based on the City's maximum 1.0 percent annual growth rate, housing supply within the City is estimated to increase by approximately 5,065 units from 2013 supplies, to a total of 25,762 by the year 2035, an increase of approximately 24.5 percent (Table 3.11-7).

[6] By definition, a household consists of all persons occupying a dwelling unit, whether or not they are related.
[7] Though not reflected in the most current General Plan HE which will guide housing actions through 2019, data provided in the 2050 Regional Growth Forecast prepared in 2017, including the updated City persons per housing ratio of 2.33, will inform the General Plan HE update.

Table 3.11-7. 1.0 Percent City Population Growth Projection

Year	Approximate Maximum Number of Dwelling Units	Anticipated Number of People
2013	20,697	45,541
2015	21,113	46,456
2020	22,190	48,826
2025	23,322	51,317
2030	24,512	53,934
2035	25,762	56,686
Estimated Urban Reserve Capacity		57,200

Source: City of San Luis Obispo 2014a; Table 3..

Housing Demand and Availability

Currently, the demand for housing in the City is extremely high, both for rental and homeownership. As of 2017, the homeowner vacancy rate is 0.7 percent and the rental vacancy rate is 4.0 percent (U.S. Census Bureau 2017). For comparison, the City's housing vacancy rate in 2010 was 7.3 percent with a rental market vacancy rate estimated at 4.5 percent in 2015 (U.S. Department of Housing and Urban Development 2017).[8] As of 2015, City vacancy rates were estimated at only 7.93 percent – a negligible increase above the 2010 rate (SLOCOG 2017). Historically, in 1990, the City's vacancy rate remained at just over 5.0 percent; however, between 2001 and 2003, the rate dropped steeply to 3.5 percent. By comparison, in the 1990s the County vacancy rate hovered at around 11 percent (City of San Luis Obispo 2015).

Natural population increase and formation of new households from the local population have historically accounted for only a small part of the overall demand for housing (City of San Luis Obispo 2015). As average households grow smaller, the existing housing stock accommodates fewer people, exacerbating housing needs, particularly for families and larger households. Three- and four-bedroom houses can be occupied by one or two persons, such as by "empty-nesters" who have remained in larger family homes after grown children have moved out (City of San Luis Obispo 2015). Further, full-time college students, a large portion of the City's population, exert a strong influence on the local housing market. Cal

[8] The housing vacancy rate is one measure of general housing availability. A low vacancy rate, less than 5 percent, suggests that households will have difficulty finding housing within their price range. Conversely, a high vacancy rate may indicate a high number of housing units that are undesirable for occupancy, a high number of seasonal units, or an oversupply of housing. By maintaining a "healthy" vacancy rate of between 5 and 8 percent, housing consumers have a wider choice of housing types and prices to choose from. As vacancy rates drop, shortages generally raise housing costs and limit choices.

Poly had an enrollment of approximately 20,944 students and Cuesta College had an enrollment of approximately 15,572 students in the 2015-2016 academic year (SLOCOG 2017). This high population of college students and associated high demand for student rental housing near these college campuses has resulted in and is often attributed to the consistently low vacancy rates within the City. However, demand for all types of housing remains high throughout the City, as demonstrated by low vacancy rates for both homeowners and renters discussed above.

Housing Affordability

The State of California defines five income categories for the purposes of determining housing affordability and need in communities.[9] These categories are:

- Extremely Low Income: 30 percent or less of the County median income
- Very Low Income: 31-50 percent of the County median income
- Low Income: 51 to 80 percent of the County median income
- Moderate: 81 to 120 percent of the County median income
- Above Moderate: 121 percent or higher than the County median income

The median household income in 2019 for a four-person household was $87,500 for the City (City of San Luis Obispo 2019). In 2018, the median sales price for housing in the City was $749,950. This median sales price would generally be affordable only to above moderate-income categories based on the estimated mortgage payments. Table 3.11-8 identifies the income categories and affordable rents and purchase prices in the City. As the City has a large student population, 33.2 percent of City household incomes were less than $26,950, which fall within the extremely-low income category; however, this group may be inflated as many student households, including families headed by students, are nominally in the lower income categories but have significant financial resources due to parental support, loans, or savings that are not reflected in their current income levels.

[9] A disparity between monthly housing cost and monthly income is referred to as a housing affordability gap. Housing affordability is determined by its cost and by the occupant's income and other sources of purchasing power. Affordability is often described in terms of what portion of household income should be spent on housing. According to the U.S. Department of Housing and Urban Development, the California Department of Housing and Community Development (HCD), and many lending institutions, households should spend no more than 30 percent (25 percent or less for extremely low, very low, and low income groups) of their gross monthly income on housing (City of San Luis Obispo 2016).

Table 3.11-8. Affordable Rent and Purchase Prices for All Income Categories

Income Category	Annual Income[1]	Affordable Rent [2]	Affordable Purchase Price[3]
Extremely Low (≤31%)	≤$26,950	$742 or less	≤$103,775
Very Low (31-50%)	$26,951 - $44,950	$728 - $1,269	$94,500 - $1,269
Low (51 - 80%)	$44,951 - $71,900	$919 - $1,523	$151,050 - $250,350
Moderate (81 – 120%)	$71,901 - $87,500	$1,276 - $2,115	$257,250 - $426,300
Above Moderate (>120%)	≥ $87,501	> $2,115	≥$426,301

[1]Annual incomes are based on median income of four-person households which is $87,500 for the City.
[2]Affordable rent is defined as 30 percent or less of gross income spent on rent for studio and one-bedroom through four-bedroom households.
[3]Affordable purchase price is defined as three times the annual income for extremely low, very low, and low; and as 3.5 times the annual income for moderate and above moderate.
Source: City of San Luis Obispo 2019.

Based upon data from the General Plan HE, average market rate rent for a studio apartment was affordable for some of the City's very low income households (refer to Table 3.11-9). However, as average rent would fall in the middle of the very low range, households at the lower half of the very low income bracket could not afford average market rate rents for a studio unit. Further, large very low income households (i.e., more than two persons) would be overcrowded in studio units. Average market rents for a one-bedroom apartment would be affordable for a small segment of very low income households and all low income households, although overcrowding would be an issue for larger households. Extremely low income families are essentially priced out of the City's housing market. The average two-bedroom rental unit is affordable for a small segment of the City's low income households and all, moderate and above moderate income households, while average rent for three-bedroom homes leaves these affordable for some moderate and all above moderate income households (City of San Luis Obispo 2015).

Regional Housing Needs Assessment (RHNA)

During the General Plan HE's planning period from 2014 to 2019, the City is responsible for accommodating a net increase of 1,144 dwelling units. The quantified objectives promote the development of housing that meets affordability standards for the income groups in the same proportion as the RHNA allocation, and emphasize production of multi-family, higher density housing, where appropriate.[10]

[10] Under state law, each city and county is required to develop programs designed to meet its share of the region's housing needs for all income groups, as determined by the region's council of governments. HCD identifies housing needs for all

Consistent with state law, the City's RHNA is reduced based on the number of dwelling units approved, under construction, or built between January 1, 2014 and June 30, 2014. These units are deducted from the RHNA number for each income category to establish the City's housing construction objectives for the General Plan HE's planning period, 2014 to 2019. The City's adjusted RHNA housing need for the five-year period from 2014 to 2019 is 525 dwelling units, and of these, 386 are needed for low, very low or extremely low income categories (Table 3.11-9).

Table 3.11-9. Remaining RHNA Need Based on Dwelling Units Approved, Under Construction, or Built, 2014 to 2019

(Percent of Area Medium Income)	New Construction Need (RNHA)	Dwelling Units Approved, Under Construction or Built (2014)	Remaining RHNA Need, Dwelling Units
Extremely Low Income (0-30%)	142	5	119
Very Low Income (31-50%)	143	161	
Low Income (51-80%)	179	31	148
Moderate Income (81-120%)	202	13	189
Market Rate (120%+)	478	801	0
Total	**1,144**	**1,011**	**456**
Percent Affordable	**40.5%**	**19.5%**	**57.5%**
Total Need for Newly Constructed Units			**525**

Source: City of San Luis Obispo 2018.

As reported in the City's 2018 General Plan Annual Report (GPAR), 267 affordable housing units have been added to the City since 2014, which aids in fulfilling the Quantified Housing Objectives for the extremely low, very low, and low income categories. Combined with the addition of 189 moderate and 801 above moderate units, the City has made meaningful contributions to the housing stock per the General Plan HE. As of 2018, the City is roughly 60 percent of achieving its Quantified Housing Objectives through 2019. Achieving the quantified objective is not a requirement, yet it is a way to measure how effective the City has been in terms of housing programs and policies to advance the construction of affordable housing. It

regions of the state. Councils of governments then apportion the regional housing need among their member jurisdictions. The RHNA process seeks to ensure that each jurisdiction accepts responsibility, within its physical and financial capability to do so, for the housing needs of its residents and for those people who might reasonably be expected to move there. State housing law recognizes that housing need allocations are goals that jurisdictions seek to achieve; however, they are not intended as production quotas. The allocations are included in each jurisdiction's HE so that plans, policies and standards may be created to help meet housing needs within the HE's planning term.

should be noted, however, that market conditions and the financing environment are the primary drivers that determine the production of affordable housing.

Jobs-to-Housing Ratio

The jobs-to-housing ratio in a jurisdiction is an overall indicator of both availability of jobs within an area, providing residents with an opportunity to work locally, and availability of housing, providing employees with adequate housing opportunities. The jobs-to-housing balance is a planning tool to review whether a community has a healthy balance between jobs and the housing supply available to potentially house workers for those jobs. This balance may be impacted by the match between wage levels and housing costs; whether all workers in a house have employment in the community in which they live; whether preferences are met within the community for either housing or employment; and whether options are available nearby for either housing or employment. According to the 2018 GPAR, the desired target is a jobs-to-housing-units ratio of 1.5:1, which reflects that there is more than one worker living in the average household (City of San Luis Obispo 2018). General Plan LUE Policy 1.5 states that the City's housing stock should keep pace with the growth in employment so that the jobs-housing balance would not worsen.

The 2018 GPAR estimates there were 54,132 jobs and 21,416 housing units in the City. As shown in Table 3.11-10, this creates a jobs-to-housing balance of 2.5:1; however, when considering jobs within the City, as well as those generated by neighboring major employers, the City's jobs-to-housing ratio was 2.7:1 as of 2018. This jobs-to-housing ratio indicates that the City is jobs-rich, in comparison to the countywide ratio of 0.87:1 (City of San Luis Obispo 2018; SLOCOG 2017).

Table 3.11-10. City and Regional Jobs-to-Housing Ratio

Planning Area	Jobs (in City limits)	Housing Units	Jobs–to-Housing Ratio	Jobs (including neighboring major employers)	Jobs-to-Housing Ratio (including neighboring major employers)
City	54,132	21,416	2.5:1	4,660	2.7:1
County	103,584	119,697	0.87:1	-	-

Source: City of San Luis Obispo 2018; SLOCOG 2017.

Projected Housing Development and Buildout Capacity

SLOCOG Regional Growth Forecast

SLOCOG Regional Growth Forecasts project an increase 1,981 housing units, and 8,247 jobs between 2010 and 2035 (SLOCOG 2017). Assuming 550 commercial square feet (sf) per job as estimated in the LUCE Update EIR, there is a demand for 4,535,850 sf of non-residential floor area between 2010 and 2035 within the City.

City General Plan LUE

Potential future development within the City permitted under the land use designations and policies of the LUE could result in approximately 4,904 additional housing units, 11,230 new residents, and 5,081,708 sf of non-residential uses that would support 11,346 new jobs. As of 2019, development within the City has increased by 1,157 housing units, 1,429 residents, and 240,275 sf of non-residential uses since 2014. This results in an estimated remaining 3,747 housing units, 9,801 residents, and 4,841,433 sf of non-residential uses that could be constructed under the adopted LUE. Although the LUE is a long range planning document with a planning horizon of 2035, the total future development capacity under the LUE exceeds the SLOCOG Regional Growth Forecast in population, housing units, and employment (see Table 3.11-11; City of San Luis Obispo 2014b). However, the City's LUE is considered to be more accurate and representative of General Plan buildout projections than those provided by SLOCOG.

Table 3.11-11. SLOCOG Projections vs. LUCE Buildout Capacity for 2035

	SLOCOG Forecast in 2035[1]	LUE Development Capacity in 2035[2]
Population	50,656	57,200
Housing Units	20,771	25,762
Employment	41,933	44,346
New Non-Residential Square Footage from 2010 to 2035[3]	4,535,850	5,081,708

[1] See Table 2.3-4 of LUCE Update EIR.
[2] See Table 3 of LUE
[3] Estimated using 550 commercial sf per job estimated in the LUCE Update EIR.
Sources: SLOCOG 2017; City of San Luis Obispo 2014b.

3.11.2 Regulatory Setting

Population and housing for this Project are governed primarily by federal, state, and local regulations that would apply to future development under the Project. Relevant state and local regulations that are directly relevant to the Project are summarized below.

3.11.2.1 State

State Housing Law

State law (Government Code Section 65580-65589.8) recognizes the vital role local governments play in the supply and affordability of housing. Local governments in California are required to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction, including an HE. The HE law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that, in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems which provide opportunities for, and do not unduly constrain, housing development. HE law also requires the California Department of Housing and Community Development (HCD) to review local HEs for compliance with state law and to report its written findings to the local government.

Regional Housing Needs Plan

The Regional Housing Needs Plan is required under California Government Code Section 65584 to enable regions to address housing issues and meet housing needs based on future growth projections for the area. The State of California determines the number of total housing units needed for each region. The allocation comes after projection modeling based on current General Plan policies and established land use zonings. The allocations are based on "smart growth" assumptions in the modeling and aim to shift development patterns from historical trends towards better jobs-to-housing balance, increased preservation of open space, and development of urban and transit-accessible areas. Regional housing needs are based on the local and regional distribution of income, the need for housing generated by local job growth, the projected growth in the number of households, and the vacancy rate in each community.

3.11.2.2 Local

City of San Luis Obispo General Plan

Land Use Element

Policy LU 1.5 Jobs/Housing Relationship. The gap between housing demand (due to more jobs and college enrollment) and supply should not increase.

Policy LU 1.11 Growth Rates & Phasing.

> ***Policy LU 1.11.1 Overall Intent.*** The City shall manage the city's growth rate to provide for the balanced evolution of the community and the gradual assimilation of new residents. Growth must be consistent with the City's ability to provide resources and services and with state and City requirements for protecting the environment, the economy, and open space.
>
> ***Policy LU 1.11.2 Residential Growth Rate.*** The City shall manage the growth of the City's housing supply so that it does not exceed 1.0 percent per year, on average, based on thresholds established by LUE Table 3, excluding dwellings affordable to residents with extremely low, very low, or low incomes as defined by the HE. This rate of growth may continue so long as the City's basic service capacity is assured. Table 3 of LUE Policy 1.11.2 (summarized in Table 3.11-7 above) shows the approximate number of dwellings and residents which would result from the 1.0 percent maximum average annual growth rate over the planning period. Approved specific plan areas may develop in accordance with the phasing schedule adopted by each specific plan provided thresholds established by Table 3.11-7 are not exceeded. The City Council shall review the rate of growth on an annual basis in conjunction with the General Plan annual report to ensure consistency with the City's gradual assimilation policy.

Housing Element

The City's 5th Cycle (2014-2019) General Plan HE sets forth the City's policies and detailed programs for meeting existing and future housing needs, for preserving and enhancing neighborhoods, and for increasing affordable housing opportunities for extremely low, very-low, low, and moderate income persons and households. It is the primary policy guide for local decision-making on all housing matters. The General Plan HE also describes the City´s demographic, economic, and housing factors, as required by state law.

State housing law requires that each jurisdiction identify the number of housing units that can be built, rehabilitated, and preserved during the General Plan HE's planning period, which ended June 30, 2019. These projections are termed "quantified objectives." Chapter 3 of the General Plan HE includes goals, policies, and programs to accommodate affordable housing programs that meet the City's quantified objectives (City of San Luis Obispo 2015a).

The General Plan HE Goal 2 objective is to accommodate affordable housing production that helps meet the City's quantified objectives. In particular, the following policies and program address the inclusion of affordable units in new residential development:

> ***Policy HE 2.3*** For housing to qualify as "affordable" under the provisions of this Element, guarantees must be presented that ownership or rental housing units will remain affordable for the longest period allowed by state law, or for a shorter period under an equity sharing or housing rehabilitation agreement with the City.
>
> ***Policy HE 2.4*** Encourage housing production for all financial strata of the City's population, in the proportions shown in the Regional Housing Needs Allocation, for the 2014 - 2019 planning period. These proportions are: extremely low income, 12 percent, very low income, 12 percent; low income, 16 percent; moderate income, 18 percent; and above moderate income, 42 percent.
>
> ***Program HE 2.5*** Continue to manage the Affordable Housing Fund so that the fund serves as a sustainable resource for supporting affordable housing development. The fund shall serve as a source of both grant funding and below market financing for affordable housing projects; and funds shall be used to support a wide variety of housing types at the following income levels: extremely low, very low, low, and moderate, but with a focus on production efficiency to maximize housing benefits for the City's financial investment, and to support high quality housing projects that would not be feasible without Affordable Housing Fund support.

The General Plan HE Goal 4 Mixed-Income Housing includes policies directed towards preserving and accommodating existing and new mixed-income neighborhoods. In particular, the following policy and program address the inclusion of affordable units in new residential development:

> ***Policy HE 4.2*** Include both market-rate and affordable units in apartment and residential condominium projects and intermix the types of units. Affordable units should be comparable in size, appearance and basic quality to market-rate units.

> ***Program HE 4.6*** Consider amending the City's Inclusionary Housing Ordinance and Affordable Housing Incentives to require that affordable units in a development be of similar number of bedrooms, character and basic quality as the non-restricted units in locations that avoid segregation of such units.

The City, along with the County and all six other cities within the San Luis Obispo region, entered into their 6th Cycle (2018-2028) planning period on December 31, 2018 for a 10-year production period that will end on December 31, 2028. The City is currently preparing the 6th Cycle General Plan HE update, which is required to be submitted to HCD on December 31, 2020. HCD finalized its RHNA allocation determination for the San Luis Obispo region at 10,810 units for the 10-year production period, and the SLOCOG Board voted unanimously to accept the distribution allocation projection. The number of housing units allocated to the City has been identified as 3,354, which the City anticipates can be accommodated based on existing land use capacity created through the 2014 LUCE Update.

Inclusionary Housing Program

Adopted in 1999 and amended in 2004, the Inclusionary Housing Program implements two core housing programs of the General Plan – that of providing affordable housing for extremely low, very low, low, and moderate income households, and establishing an Affordable Housing Fund. The program requires that most new development projects help meet affordable housing needs by: 1) building the required number of affordable dwelling units as part of a development project (Table 3.11-12a and Table 3.11-12b); 2) dedicating real property, improved or not, for development of affordable housing by the City's Housing Authority or by a non-profit housing provider; 3) paying an in-lieu fee which is used to fund affordable housing throughout the City; or 4) using a combination of the above methods, to the approval of the City Council (City of San Luis Obispo 2015a).

All affordable dwelling units must meet the City's affordable housing standards and be consistent with affordability policies in the General Plan. In addition, the required inclusionary units shall be constructed concurrent with market rate units unless the developer and the City council agree within an affordable agreement to an alternative development schedule. Table 3.11-12a below displays the Inclusionary Housing Requirements and Table 3.11-12b details the associated inclusionary housing adjustment factors.

Table 3.11-12a. Inclusionary Housing Requirements

Type of Development Project[1]		
Residential – Adjust base requirement per Table 2A below		
Location	In City Limits (applies to Project)	Build 3% low[4] or 5% moderate income Affordable Dwelling Units[2], but not less than 1 Affordable Dwelling Unit per project; or Pay in-lieu fee equal to 5% of building valuation.[3]
	In Expansion Area	Build 5% low[4] – and 10% moderate income Affordable Dwelling Units[2], but not less than 1 Affordable Dwelling Unit per project; or Pay in-lieu fee equal to 15% of building valuation.

[1] Residential developments of four or less dwellings are exempt from these requirements.
[2] Affordable Dwelling Units must meet the City affordability criteria.
[3] "Building Valuation" shall mean the total value of all construction work for which a permit would be issued, as determined by the Chief Building Officer.
[4] Low income includes the subsets of extremely low and very low incomes categories.

Table 3.11-12b. Inclusionary Housing Adjustment Factors

Table 2A						
Project Density (du/ac)[1]	Average Unit Size (sf and associated Adjustment Factor[2]					
	Up to 1,100	1,101-1,500	1,501-2,000	2,001-2,500	2,501-3,000	>3,000
36 or more	0	0	.75	1	1.25	1.5
24-35.99	0	0	.75	1	1.25	1.5
12-23.99	0	.25	1	1.25	1.5	1.75
7-11.99	0	.5	1	1.25	1.5	1.75
<7	0	.5	1.25	1.5	1.75	2

[1] Including allowed density bonus, where applicable.
[2] Multiply the total base Inclusionary Housing Requirement (either housing or in-lieu percentage) by the adjustment factor to determine requirement. At least one enforceably-restricted affordable unit is required per development of five or more units.

The Project site is subject to the Expansion Area Inclusionary Housing Requirements which require the Project to build 5 percent low and 10 percent moderate income affordable dwelling units. The developer may, at his or her discretion, choose to pay an in-lieu fee to the City or dedicate real property in lieu of constructing affordable dwellings to meet the requirement. The fee amount and method of payment are subject to approval by the City Community Development Department Director. All in-lieu fees shall be paid prior to release of occupancy of the first dwelling within a residential development. All in-lieu fees are deposited into the Affordable Housing Fund. The Affordable Housing Fund is administered by the City finance director and shall be used exclusively to provide funding for the provision of affordable housing and for reasonable costs associated with the development of affordable housing, at the discretion of the City Council.

3.11.3 Environmental Impact Analysis

3.11.3.1 Thresholds of Significance

The Project would have a significant impact if it would generate substantial unplanned population growth or substantially change the population, housing, and employment compositions in the City or regionally. Significance thresholds for population and housing are based on Appendix G of the CEQA Guidelines. Impacts to population and housing are considered significant if the Project would:

a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); or

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impacts are also considered significant if the Project is found inconsistent with adopted housing goals and policies described in the regulatory setting. Growth inducing impacts relating to installation of new roadways and utility infrastructure are addressed in Section 4.0, *Other CEQA Issues*.

Non-Applicable Thresholds

- Thresholds (b) (*Displace Existing People or Housing*): The Project site does not currently contain a residential population or housing and would not involve offsite impacts within any residential area. Therefore, the Project would not displace substantial numbers of persons or housing and threshold 'b' would not apply. As such, there would be no potentially significant adverse impacts related to these thresholds and this issue will not be analyzed further in this EIR.

3.11.3.2 Impact Assessment Methodology

Sources utilized in the development of this section include the City's General Plan LUE and HE, LUCE Update EIR and supporting appendices, SLOCOG projections, the City's 2018 GPAR, U.S. Census Bureau data, and California Department of Finance data.

Analysis of population and housing impacts is based on data from the City's LUE and HE and U.S. Census Bureau. Demographic and socioeconomic data from these sources are relatively consistent; however, since each of these organizations uses different methods of data collection and analysis, data do not always have the same results and may not represent

the same data year. Accordingly, the population, housing, and employment numbers used in this analysis may vary somewhat, depending upon the source cited. Despite the variations, the data used represents the best available information and provides a meaningful description of the population and housing characteristics of the City and County.

This analysis reviews potential land use changes and future development that would occur under the Project and considers whether these changes would result in substantial adverse impacts on population, housing, and/or employment growth, particularly in relation to existing conditions and to cumulative growth estimated in the LUCE Update EIR. The LUE projections are considered to be the most accurate for defining buildout of the City under the current General Plan, and are considered more representative than SLOCOG growth projections; therefore, SLOCOG growth projections for the City are not utilized in analysis of Project impacts on local growth. This analysis does, however, utilize SLOCOG's persons-per-household projection of 2.33 as it is more recent and more conservative than the City's 2010 estimate of 2.29 persons-per-household. The LUCE Update EIR also considers potential for changes in population and the general effect on the City's jobs-housing balance. Potential related impacts of population and employment growth on issues such as transportation, public services, and other issues are addressed in respective sections of this EIR.

3.11.3.3 Project Impacts and Mitigation Measures

Potential impacts related to population and housing are discussed further below and summarized in Table 3.11-13.

Table 3.11-13. Summary of Project Impacts

Population and Housing Impacts	Mitigation Measures	Residual Significance
PH-1. Residential and commercial development associated with the Project would induce population growth.	None required	Less than Significant
PH-2. The Project would provide additional housing for the City, assisting the jobs-to-housing ratio.	None required	Less than Significant
PH-3. The Project would provide additional affordable housing for the City	None required	Less than Significant

Impact PH-1 Residential and commercial development associated with the Project would induce population growth (Less than Significant).

The Project is expected to generate new population onsite by facilitating the construction of up to 174 multi-family units and 404 senior residential units, 100,000 sf of commercial retail uses, and health care facilities and operations. This development would potentially increase population within the City by 1,231 residents, including 825 residents of Villaggio and 406 residents of Madonna Froom Ranch. The Project would increase the City's population by approximately 2.6 percent. The Project would also create an estimated 332 new jobs, including 150 jobs in Villaggio associated with proposed health care and resident services and 182 jobs in Madonna Froom Ranch associated with proposed retail commercial and hotel uses (see Table 3.11-14). SLOCOG and the City anticipate that population growth will occur in the region, including the City, as a result of natural births, people moving into the region, and other factors. The Project would provide additional dwelling units and amenities to help accommodate projected growth, including senior populations.

Population growth is considered significant only if it is unplanned or unanticipated by the City. The total increase in population under the Project would be well below the projected population under the LUE by 2035, which plans for a future additional population of 10,652 (from 46,248 in 2018 to 57,200 in 2035; refer also to Table 3.11-11 above). Therefore, population increases resulting from the Project would remain within planned growth under the LUE.

The age distribution of the population increase would comprise a greater percentage of senior citizens, in comparison to the existing City population. For instance, of the 1,231 new residents anticipated under the Project, potentially new senior citizens would comprise approximately 825 individuals within Villaggio and 49 individuals of the Madonna Froom Ranch component (approximately 12 percent are estimated to be senior citizens, per existing City population percentage). In total, approximately 874 new senior citizens would be accommodated with implementation of the Project, or 71 percent of the total anticipated population increase. The Villaggio component would therefore help to accommodate the relatively high proportion of senior citizens in the City.

Table 3.11-14. Summary of Estimated Population Generated by the Project

Proposed Zones	Housing Units/sf	Population Factor	Projected Population/ Employment
VILLAGGIO			
R-3-SP Medium-High Density Residential	404 units/ 51 beds	-	-
Independent Living Units	366 units	2.0	732 people
Assisted Living Units	38 units	1.0 (and two units would have double occupancy)	40 people
Health Care Units (Skilled Nursing & Memory Care)	51 beds	1.0 (and two units would have double occupancy)	53 people
Health Care Administration Building	85,670 sf	Supplied by Applicant	150 jobs
Ancillary Uses (wellness center, restaurants, theater, etc.)	84,078 sf		
Total (Villaggio)			825 people 150 jobs
MADONNA FROOM RANCH			
R-3-SP Medium-High Density Residential	130 multi-family units	2.33[1]	303 people
R-4-SP High Density Residential	44 multi-family units	2.33[1]	103 people
C-R-SP Retail-Commercial	100,000 sf	1 job per 550sf[2]	182 jobs
Total (Madonna Froom Ranch)			406 people 182 jobs
TOTAL (TOTAL)			1,231 people 332 jobs

[1] SLO County 2050 regional growth factor
[2] LUCE Update EIR job factor

Employment requirements for Villaggio are anticipated to generate 150 full-time equivalent jobs, with a maximum of 95 employees onsite at any given time. Madonna Froom Ranch would facilitate development of 100,000 sf of retail-commercial space, which would generate employment. The number of employees at a business is typically a factor of the particular operations of a business and, as such, varies greatly. As an example, retail and hotel uses would have different numbers of employees per square footage than office uses. For the purposes of this EIR and due to variability in employment factors, employment generation is quantified based on applying the existing factor of one job per

550 sf.[11] When this factor is applied to proposed retail commercial uses within Madonna Froom Ranch, it is anticipated that retail commercial uses could generate approximately 182 jobs.

The Project would not result in or substantially contribute to a significant housing impact, or a related population impact, because the Project would be consistent with the LUE projected population forecasts and with the residential unit growth requirements specified by LUE Policy 1.10.2. Therefore, the Project would not induce substantial housing or population growth either directly or indirectly and housing and population impacts would be *less than significant*.

Impact PH-2 The Project would provide additional housing for the City, assisting the jobs-to-housing ratio (Less than Significant).

An imbalance between jobs and housing, particularly affordable housing, may result in a range of undesirable environmental impacts and social effects, including:

- Increased commute distances and time;
- Increased energy consumption, GHG, and air pollutant emissions from additional commuters;
- Critical service workers living outside the area (e.g., firefighters, law enforcement personnel, nurses, school teachers);
- Increased business costs and difficulty retaining and recruiting employees;
- Change in demographic composition and impacts to the quality of life and community participation; and
- Indirect impacts on other communities that build housing, such as loss of habitat.

As stated above, as of 2018, the City had an unemployment rate of 2.7 percent. Increased population growth without adequate housing growth could exacerbate the City's existing jobs-to-housing ratio and displace labor force from the City to other areas of the County. This could result in increases in long-distance commuting and associated adverse effects According to the 2018 GPAR, the City currently has a jobs-to-housing ratio of 2.5:1 based on jobs and housing within City limits, which is well above the City's target ratio of 1.5:1. Policy LU 1.5 states the gap between housing demand (due to more jobs and college enrollment) and supply should not increase. For the purposes of this analysis, the effect of the Project is compared with local estimates provided in the City's 2018 GPAR. Further,

[11] LUCE Update EIR job factor.

the LUCE Update EIR noted that the Project has the potential to improve the jobs-to-housing balance within the City.

The Project's proposed construction of 174 units within Madonna Froom Ranch would provide additional housing for the existing and growing labor force. Since the units proposed within Villaggio would provide specialized housing for seniors, the 404 units and 51 beds within Villaggio would not be utilized by the City's labor force, and therefore are not counted as part of the City's housing supply. Further, the Project would also add jobs within the City by facilitating the creation of 332 jobs within proposed retail and commercial uses and within Villaggio health care and service sectors. Overall, the Project would result in both an increased housing supply and an increase in jobs.

With 332 new jobs added to the City's existing 54,132 jobs and 174 multi-family units added to the existing 21,416 housing unit stock, the jobs-to-housing balance would be approximately 54,464 jobs to 21,590 housing units, or similarly remaining at 2.5 to 1. Given this negligible change in the jobs-to-housing ratio, the Project would maintain the City's current jobs-to-housing ratio of 2.5 to 1, ensuring consistency with Policy LU 1.5. The Project would provide a substantial increase in the City's housing supply, including a range of housing types and affordability as well as long-term job growth both within Villaggio and Madonna Froom Ranch. Therefore, impacts relating to the City's jobs-to-housing ratio, would be considered *less than significant.*

Impact PH-3 The Project would provide additional affordable housing for the City (Less than Significant).

The FRSP includes policies that require the Applicant to provide for deed-restricted housing for low and moderate-income households, consistent with the General Plan. In accordance with Municipal Code 17.91, inclusionary affordable units are those in which extremely low, very low, low, and moderate income households can afford to purchase or rent, assuming 30 percent of their annual income is spent on housing (25 percent of income for extremely low income households). As the Project is located in SP-3 under the LUE, it is subject to the Expansion Area Inclusionary Housing Requirements which require the Project to build 5 percent low and 10 percent moderate income affordable dwelling units or pay in-lieu fees equal to 15 percent of building valuation. Policy HE 4.1 requires new development to build housing that is affordable to various economic strata intermixed with other housing rather than segregated into separate enclaves; and Policy HE 4.2 requires both market-rate and inclusionary units to be included in apartment and residential condominium projects and intermixed with all type of units. This policy also requires that

inclusionary units are built to be comparable in size, appearance, and basic quality to market-rate units. Further, the Project would be required to comply with Tables 2 and 2A of the Inclusionary Housing Program as described in the regulatory setting. . As such, impacts would be *less than significant*.

3.11.3.4 Cumulative Impacts

Cumulative buildout permitted under the LUE would include development of areas within existing City boundaries, as well as identified expansion areas. Overall, development under the LUE would increase both the supply of jobs and housing within the City and would maintain the City's jobs-to-housing balance of 2.5:1 (see Impact PH-2). As of 2018, potential future development within the City as allowed under the land use designations and policies of the LUE could result in eventual construction of approximately 3,652 additional dwelling units, and creation of 4,841,433 sf of new non-residential development which would support an estimated 10,810 new jobs. This could result in 8,509 additional residents and 10,810 new jobs. In comparison, over the long-term, full buildout under the LUE is anticipated to increase the jobs-to-housing ratio to 1.8 jobs per residential unit, according to the 2018 GPAR.

A comparison of population and housing unit characteristics conditions in 2010 and those at projected buildout of the LUE in 2035 for the City and County shows that projected population and housing unit growth in the City is anticipated to be commensurate with anticipated growth throughout the County (Table 3.11-15).

Table 3.11-15. City and Countywide Population and Housing Projections, 2010-2035

	Population		Housing Units	
	2010	2035	2010	2035
County of San Luis Obispo	252,631	304,736	117,315	141,888
Average Annual Growth (%)	--	0.8	--	0.8
City of San Luis Obispo	43,937	56,686	20,553	25,762
Average Annual Growth (%)	--	1.1	--	0.6

Source: City of San Luis Obispo 2014c.

Much of the potential residential unit growth identified by the LUE would occur in areas identified for preparation of specific or area plans. In addition to the 174 units within Madonna Froom Ranch, the Avila Ranch Development Project would add approximately 720 units to the City's housing supply, and the San Luis Ranch Specific Plan would add approximately 580 residential units. Moreover, future development proposed under the South Broad Street Area Plan would have the potential to provide approximately 355

additional dwelling units. In total, these projects could result in the development of approximately 1,829 new dwelling units.

In addition to the proposed specific and area plans described above, the LUE identifies six potential future development sites that could provide approximately 412 new housing units. These sites include the Foothill at Santa Rosa area (80 units); Caltrans site (53 units); General Hospital site (41 units); Pacific Beach site (38 units); LOVR Creekside area (159 units); and the Broad Street at Tank Farm Road site (41 units).

While development of these projects would be consistent with the residential unit growth requirements specified by LUE Policy 1.11.2 and Table 3.11-7, there may be pressure to exceed the annual 1.0 percent rate allowed under Policy LUE 1.11.2. However, the Project contribution would remain consistent with LUE and HE policies and would not result in significant cumulative contribution. Further, existing LUE policies requiring that the City manage its housing supply so that it does not exceed a growth rate of 1.0 percent per year, on average, would help to ensure population growth does not exceed planned growth or result in significant cumulative impacts associated with increases in population and housing within the City. Therefore, cumulative impacts would be *less than significant*.

3.12 PUBLIC SERVICES AND RECREATION

This section describes existing and planned public services and evaluates the operation and capacity of these services with the development of the Project. Public services provided within the Project vicinity would include police, fire protection services, schools, and public libraries. Recreation and parks facilities in the area include surrounding neighborhood parks, as well as City owned and maintained open space areas, such as the adjacent Irish Hills Natural Reserve. Table 3.12-1 describes those public agencies providing public services to the Project site and surrounding vicinity.

Adjacent to the Project site in unincorporated San Luis Obispo County are trails and open space within the City owned and maintained Irish Hills Natural Reserve. Photo: sanluisobispo.com

Table 3.12-1. Public Services Serving the Project Vicinity

Public Services Serving Froom Ranch	
Fire Protection	SLOFD, San Luis Obispo County Fire Department (CALFIRE through a contract with the County)
Law Enforcement	City of San Luis Obispo Police Department (SLOPD), San Luis Obispo County Sheriff's Office (County Sheriff)
Public Schools	San Luis Coastal Unified School District
Public Libraries	San Luis Obispo County Library
Public Parks	City of San Luis Obispo Department of Parks and Recreation

For information regarding public transportation and roadways please refer to Section 3.13, *Transportation and Traffic* and for public utilities such as water, wastewater, solid waste, and energy utilities, please refer to Section 3.14, *Utilities and Energy Conservation*.

3.12.1 Environmental Setting

Figure 3.12-1 shows the key existing public facilities operated by the City and County, which are located in the vicinity of the Project site.

wood.

Public Services within the Region

FIGURE 3.12-1

3.12.1.1 Police Services

The San Luis Obispo Police Department (SLOPD) provides law enforcement and community services within the City, and the County of San Luis Obispo Sheriff's Office (County Sheriff) operates within unincorporated areas of the County. The SLOPD operates out of one main police station located at 1042 Walnut Street, southeast of the intersection of Santa Rosa Street (Highway 1) and U.S. 101. Full-time SLOPD staff include 89.5 employees, 61 of whom are sworn police officers who provide law enforcement, supervision, and management duties. The Department supports the City with new development and hires as appropriate based on service requirements (Personal Communication with SLOPD Watch Officer 2018). The SLOPD increased from 59 to 61 sworn police officers in 2019 by adding one School Resource Officer (SRO) and one Cannabis Detective position. The SRO was added to police staffing after the Police Department and City signed a Memorandum of Agreement (MOA) with San Luis Coastal Unified School District. Under the MOA, San Luis Coastal Unified School District agreed to fully fund one full-time police officer position that will be dedicated to the schools within the City of San Luis Obispo. The Cannabis Detective position was established to help manage the cannabis industry being established in the City. This position will conduct background checks on all business applications and owners, prior to the approval of their application. They will also background check all employees, once the business has been approved to operate within the City. As businesses become operational, the Cannabis Detective will conduct regular compliance checks to ensure these businesses are in compliance with their use permits.

Prior to these planned increases, the SLOPD had not increased staffing numbers in over 30 years (SLOPD 2019). Neither the General Plan nor the SLOPD establishes staffing ratio goals for the Department; instead, the SLOPD uses the International Association of Chiefs of Police Model (not a per-capital model) to assess the need for officers and equipment based on many factors related to the amount of police officer time spent on different activities. Additionally, the last time a new SLOPD facility was determined to be necessary was 1987. The City is currently working on design plans for a facility redesign, which is estimated to be a seven- to eight-year process, based on projected demand for size and staffing (SLOPD 2019). The SLOPD is divided into two police bureaus, with a Police Captain commanding each. The Operations Bureau includes Patrol Services, the Traffic Safety Unit, downtown bike officers, the Community Action Team, and Neighborhood Services. The Administration Services Bureau includes the Investigations Unit, Special

Enforcement Team, Communications Division, the Records Unit, Property, Administrative Training/Hiring, and the Department Chaplains (SLOPD 2018).

The nearest County Sheriff's office is at 1050 Monterey Street, located about six minutes from the Project site (typical driving time), and is primarily focused on civil enforcement.

According to the General Plan SE, the SLOPD has a 30 percent available time objective for patrol response. Available time is the portion of total time that a patrol unit is not previously assigned or otherwise unavailable for response to a new emergency call for service. Potential changes in needs for the SLOPD staffing plan are considered as part of overall City budget priorities. Additionally, equipment enhancement programs exist and are also considered in the context of the City budget process and available grants.

The ratio of officers to 1,000 persons in the City of 1.15, which represents a decrease from 1.27 per 1,000 persons in 2014 (Governing 2016). However, based on the City's current 2019 population of 46,802, the ratio of officers to 1,000 persons in the City is currently approximately 1.30.

In 2016, police officers responded to 32,738 calls for service with a permanent population of 45,950 and a daily service population of approximately 90,000 (SLOPD 2017).[1] A five-year average of calls for service and permanent population equates to each resident requiring a rate of 0.67 calls for service per resident per year. One officer responds to an average of 925 calls per year. A new or replaced police station has been identified as important by City voters, particularly due to the age of the existing facility, and would require approximately $43.7 million in funds. The new police facility is expected to follow a seven-year planning period with 20 percent design plans anticipated in the near future.

3.12.1.2 Fire Protection Services

The majority of the Project site is located in a Moderate FHSZ, and the highest elevation areas within the southwestern region of the Project site are located in a High FHSZ within the County LRA (see Figure 3.7-1).[2] As discussed further in Section 3.7, *Hazards, Hazardous Materials, and Wildfire*, high wildfire hazards are identified in the highest elevation areas and are associated with highly flammable chaparral, grassland, and

[1] Daily service population includes residents of the City, as well as the estimated number of workers and visitors present within the City on a given day.
[2] The SRA is the area in the state where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The LRA is an area where local agencies have primary financial responsibility for fire suppression.

woodland habitats in areas of steep slopes from the Irish Hills with no recent history of burn and high amounts and concentrations of biofuel accumulation.

The SLOFD provides emergency and non-emergency fire, rescue, and medical services, through an agreement with CALFIRE, which supports all County firefighting activities through mutual aid agreements, as described below. Emergency services include fire response, advanced life support ("paramedic") emergency medical response, hazardous materials response, technical rescue response, and public assistance. All City engine crews include paramedic staff and equipment capabilities. Non-emergency services include fire and life safety inspections, building inspections, fire code investigations, code compliance, and public education. The SLOFD currently operates four fire stations with a total of 54 full-time employees. Four of these employees are administrative personnel, two are vehicle and equipment mechanics, five are fire prevention and educational staff, and the remaining 45 are firefighters with emergency response capabilities (City of San Luis Obispo 2018). Based on the City's population of 46,802 in 2019 (California Department of Finance 2019), the City currently has a firefighter-to-population ratio of 1:866.

Fire Station One: Constructed in 1996, this station is located south of downtown at 2160 Santa Barbara Avenue. This is the newest fire station in the City and houses the Fire Administrative staff, the Fire Prevention Bureau, the Department's apparatus maintenance shop, the City's Emergency Operations Center, as well as emergency response personnel and apparatus. On the emergency response side, this station is staffed by a Battalion Chief and a four-person paramedic company which responds on a 100-foot tillered quint ladder truck. Also housed at this station is a Type VI wildland response vehicle (Patrol 1), a non-transport medical response unit (Squad 1), and a state-owned Type 1 pumper/engine.

Fire Station Two: Constructed in 1954, this station is located near the Cal Poly campus at 126 North Chorro Street. This is the oldest station in the City and is staffed with a 2017 75-foot quint ladder truck and a reserve Type I pumper/fire engine.

Fire Station Three: Constructed in 1960, this station is located at 1280 Laurel Lane and is the only fire station on the east side of the Southern Pacific Railroad line. The station is staffed with a three-person paramedic engine crew (Type I pumper/fire engine). Additional equipment housed at Fire Station Three includes the reserve Type I pumper/fire engine.

Fire Station Four: This fire station is the closest to the Project site, approximately 0.5 mile northwest of the site at the intersection of Madonna Road and LOVR. Constructed in 1978, this station is the western-most station in the City. The station is staffed with a three-person

paramedic engine crew (Type I pumper/fire engine). Additional equipment housed at Fire Station Four includes an unstaffed Type III fire apparatus.

Existing SLOFD Response Times

Fire Station Four is located at 1395 Madonna Road and is the closest station to the Project site.

According to the General Plan SE, sufficient Fire Department resources should be deployed to facilitate a travel time of emergency response apparatus to all City emergencies requiring the use of lights and siren of 4 minutes or less, 95 percent of the time. In 2016, the City Council directed staff to adopt the more recognized standard of a travel time of 4 minutes or less, 90 percent of the time. Fire Station Four is located at 1395 Madonna Road, approximately 0.5 mile northwest of the Project site. According to Geographic Information System (GIS) analysis and confirmation with SLOFD, the response time for emergencies to the Project site would be approximately 3 minutes, within the General Plan SE minimum travel time goal of 4 minutes or less of travel time (Personal Communication With SLOFD Fire Chief 2018).

Mutual Aid Agreements between SLOFD and CALFIRE

In California, virtually all fire departments are signatories to the California Master Mutual Aid Agreement. SLOFD has current interagency plans in partnership with CALFIRE and is a participant in the California Master Mutual Aid Agreement within Mutual Aid Region 1. The California Master Mutual Aid Agreement establishes a formal process where jurisdictions can give and receive fire or emergency assistance to other members within their mutual aid region when it is needed (CALFIRE 2016a). CALFIRE Fire Station 21 would be the nearest County jurisdictional station to provide responses for the Project site. Fire Station 21 is located approximated 2.7 miles to the east and would have a 9- to 11-minute response time to the Project site along 3.6 miles of roadway (Google Earth 2019).

CALFIRE Fire Station 21: This station is located at the Airport on 4671 Broad Street and is one of the newest fire service facilities in the County. This fire station is staffed with a two-person basic life support engine crew and a single-person airport crash rescue truck. This station does not provide advanced life support (paramedic) services. This station provides other reserve and non-staffed apparatus. The station is also staffed by a Paid Call

Fire Company (non-full time) to service the Heavy Rescue and Water Tender (water truck) (CALFIRE 2016b).

3.12.1.3 Schools

The San Luis Coastal Unified School District (SLCUSD) provides educational services for the City of San Luis Obispo, the City of Morro Bay, and a portion of the unincorporated areas of the County surrounding Avila Beach, Los Osos, the City, and Morro Bay. The SLCUSD operates a variety of educational programs and schools, which include 10 elementary schools, two middle schools, two high schools, one continuation school, and one adult school (SLCUSD 2018a). The closest schools to the Project site are C. L. Smith Elementary School (0.8 mile north), Laguna Middle School (1.1 mile northwest), and Pacific Beach High School (0.2 mile north). The Project site is located within the enrollment boundary for the Pacheco Elementary School, C.L. Smith Elementary School, Bishop's Peak/Teach Elementary School, Laguna Middle School, and San Luis Obispo High School; however, families within the SLCUSD can apply for intra-district transfers to request enrollment at a different school (SLCUSD 2019). Table 3.12-2 summarizes existing capacity and enrollment at SLCUSD schools from the 2016 to 2017 school year.

Table 3.12-2. Existing Capacity and Enrollment at SLCUSD Schools (2016-2017)

School	Capacity	Enrollment	% Utilization	Remaining Capacity (Percent Remaining)
Elementary				
Baywood Elementary	432	305	71	127 (29%)
Bellevue-Santa Fe Charter	154	160	104	-6 (-4%)
Bishop's Peak/Teach Elementary	542	468	86	74 (14%)
Del Mar Elementary	477	375	79	102 (21%)
Hawthorne Elementary	390	372	95	18 (5%)
Los Ranchos Elementary	460	457	99	3 (1%)
Monarch Grove Elementary	470	347	74	123 (26%)
Pacheco Elementary	528	551	104	-23 (-4%)
Sinsheimer Elementary	467	376	81	91 (19%)
C.L. Smith Elementary	452	367	81	85 (19%)
Elementary School Total	**4,372**	**3,778**	**86**	**594 (14%)**
Middle School				
Laguna Middle School	1,118	817	73	301 (27%)
Los Osos Middle School	1,073	599	56	474 (44%)
Middle School Total	**2,191**	**1,416**	**65**	**775 (35%)**
High School				
San Luis Obispo High School	2,034	1,526	75	508 (25%)
Morro Bay High School	1,400	821	59	579 (41%)
Pacific Beach High School	140	53	38	90 (62%)
High School Total	**3,574**	**2,400**	**67**	**1,174 (33%)**

Source: CA Department of Education 2018.

SLCUSD currently provides open enrollment, which allows parents a request to enroll their children at any district school; the district approves requests on a space-available basis. The ideal utilization of an elementary school site is 90 percent, and 85 percent for a middle school site (SLCUSD 2015). While three elementary schools are operating either at or over capacity, C.L. Smith Elementary, the nearest elementary school to the Project site, retains some room for growth (refer to Table 3.12-2; CA Department of Education 2018).

3.12.1.4 Recreation and Parks

The Irish Hills Natural Reserve is located immediately adjacent to the western boundary of the Project site, offering miles of hiking and biking trails.

The City Parks and Recreation Department is responsible for providing the community with park facilities, recreational programs, planning new park facilities, and managing City open space that is accessible to the public. There are 28 parks and recreational facilities located throughout the City, in addition to 10 designated Natural Reserves and open space areas and two bike trails (City of San Luis Obispo 2019). The City contains over 55 miles of open space trails within approximately 3,800 acres of open space. There are at least four designated parks within 1.0 mile of the Project site, including Vista Lago Park (0.9 mile north), Smith Park (0.8 mile north)[3], Laguna Lake Park (0.7 mile north), and De Vaul Park (0.4 mile northwest). Hiking and walking trails are located within the Laguna Lake Park Open Space (located in the City 0.7 mile north), Johnson Ranch City Open Space (located in the County 0.4 mile south), and Irish Hills Natural Reserve (City Open Space located in the County immediately west, and beyond within the City boundary).

The City General Plan Parks and Recreation Element (PRE), Policy 3.13.1 requires that neighborhood and community park facilities be provided at a ratio of 10 acres of parkland per 1,000 persons in expansion areas, of which five acres are required to be neighborhood parks. The City Parks and Recreation Department maintains a total of 205.6 acres of community parks, mini parks, recreation centers, and special recreational features, of which 34.7 acres are neighborhood parks (City of San Luis Obispo 2019). Based on existing

[3] Smith Park is not a City-operated or maintained and is instead operated and maintained as part of the SLCUSD.

population (approximately 46,802 persons) and parks acreage conditions, this results in approximately 3.65 acres of total parkland per 1,000 residents, and 0.74 acre of neighborhood parks per 1,000 residents. Under these conditions, the City needs approximately 297.12 acres of parkland to meet the recreational demand for existing residents, of which 199 acres should be neighborhood parks, to meet the City per capita parkland standard.

3.12.2 Regulatory Setting

Public services and recreational resources are governed primarily by local jurisdictions and state regulations. Regulations that are directly relevant to the Project are summarized below.

3.12.2.1 Federal

Code of Federal Regulations (CFR)

Under 29 CFR 1910.38, when required by an OSHA standard, an employer must have an Emergency Action Plan in writing, kept in the workplace, and available to employees for review. An employer with ten or fewer employees may communicate the plan orally to employees. Minimum elements of an Emergency Action Plan include the following procedures: reporting a fire or other emergency; emergency evacuation, including type of evacuation and exit route assignments; employees who remain to operate critical plant operations before they evacuate; accounting for all employees after evacuation; and employees performing rescue or medical duties.

Under 29 CFR 1910.39, an employer must have a Fire Prevention Plan. A Fire Prevention Plan must be in writing, be kept in the workplace, and be made available to employees for review; an employer with ten or fewer employees may communicate the plan orally to employees.

Under 29 CFR 1910.155, Subpart L, Fire Protection, employers are required to place and keep in proper working order, fire safety equipment within facilities.

3.12.2.2 State

California Code of Regulations Sections

Under this section Title 19 of the CCR, the California State Fire Marshal develops regulations relating to fire and life safety. These regulations have been prepared and adopted to establish minimum standards for the prevention of fire and for protection of life

and property against fire, explosion, and panic. The California State Fire Marshal also adopts and administers regulations and standards necessary under the California Health and Safety Code to protect life and property.

CCR Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any construction of new residential, commercial, and industrial uses within their boundaries to fund the construction of new schools or school facilities. CCR Section 65995 limits the maximum fee that school districts can assess. Section 65996 designates Section 17620 of the Education Code and Section 65970 of the Government Code to be the exclusive method for considering and mitigating development impacts on school facilities.

California Occupation Safety and Health Administration

The California OSHA (CAL-OSHA) requires that a minimum of two firefighters, operating as a team, conduct interior firefighting operations while a minimum of two firefighters must be positioned outside and remain capable of rapid intervention and rescue if needed pursuant to the State of California's "Two-In, Two-out" law [29 CFR 1910.134(g)(4)]. If there are only three firefighters assigned to a fire engine, the engine company must wait for back-up to arrive before being able to engage in interior firefighting operations to be in compliance with CAL-OSHA regulations.

Quimby Act (1975)

The Quimby Act gives cities and counties the authority, by ordinance, to require the dedication of land or payment of in-lieu fees, or a combination of both, for park and recreation purposes as a condition of approval of a tract map or parcel map. The Quimby Act allows fees to be collected for up to five acres of parkland per 1,000 residents to serve the needs of residents of the subdivision and the greater public residing in the City.

3.12.2.3 Local

City of San Luis Obispo General Plan

The City provides public services, emergency protection services, and public parks and recreational facilities to residents of the City. Applicable regulations that would affect the provision of public services are based on local policies and other regulations that place requirements on the level of service that must be provided. Established local policies that would apply to the Project are contained in the plans and policies section of the following General Plan Elements.

Safety Element (SE)

Policy 3.0 Adequate Fire Service. Development shall be approved only when adequate fire suppression services and facilities are available or will be made available concurrent with development, considering the setting, type, intensity, and form of the proposed development.

Policy 9.3 Program: Response Performance Standards. The City will evaluate fire-flow capacities and identify deficiencies through testing and modeling of the water system. For identified deficiencies, the Utilities Department will propose remedies to meet recommended service levels based on Insurance Service Organization ratings and other objective criteria.

The following response-time programs are intended to apply to recurrent types of emergencies, not rare, area-wide disasters.

a) The Fire Department has set a response-time objective of 4 minutes. The Fire Department's standard of coverage recommends that a three-person engine company, with paramedic, meet this standard 95 percent of the time.

b) The Police Department has set a 30 percent available-time objective for patrol response. "Available time" is the fraction of total time that a patrol unit is not previously assigned or otherwise unavailable for response to a new emergency call for service.

c) The Public Works Department and the Utilities Department will set response-time objectives, based on the values at risk and acceptable levels of risk, and will work to achieve the objectives. Typical incidents requiring timely response are water main breaks and large tree downs in the street.

Policy 9.21 Program: Development Review. City fire, police, public works, and utilities personnel will review applications for subdivisions and development projects, for consistency with safety objectives.

Parks and Recreation Element (PRE)

Policy 3.13.1 The Parks System. The City shall develop and maintain a park system at a rate of ten acres of parkland per 1,000 residents. Five acres shall be dedicated as a neighborhood park. The remaining five acres required under the ten acres per

1,000 residents in the residential annexation policy may be located anywhere within the City's park system as deemed appropriate.

Policy 3.14.4 New significant residential developments and annexations, shall provide sufficient athletic fields to meet the demands of the youth who will reside in the development.

Policy 3.15.1 Neighborhood Parks. San Luis Obispo residents shall have access to a neighborhood park within 0.5 to 1.0 mile walking distance of their residence.

Policy 3.15.3 Neighborhood Parks. All residential annexation areas shall provide developed neighborhood parks at the rate of five acres per 1,000 residents.

Policy 3.15.4 Neighborhood Parks. In neighborhoods where existing parks do not adequately serve residents, mini-parks may be considered.

Policy 3.16.4 Community Center. While major facilities shall be designed to meet multi-generational needs, there shall also be space available to address the unique needs of the senior population.

Policy 5.0.1 Facilities. The City shall continue to acquire and develop parkland through the development review and annexation process.

Policy 5.0.2. Facilities. For annexation areas, at least ten acres of developed parkland for each 1,000 new residents shall be provided by the developer.

3.12.3 Environmental Impact Analysis

3.12.3.1 Thresholds of Significance

The thresholds of significance listed below are based on Appendix G of the CEQA Guidelines. The effects of the Project on public services would be considered a significant impact if 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:

a) Fire protection;
b) Police protection;
c) Schools;

d) Parks; and/or

e) Other public facilities.

The effects of the Project on recreation would be considered a significant impact if the project would:

a) 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; or

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

3.12.3.2 Impact Assessment Methodology

This section evaluates the adequacy of existing police and fire protection services, public schools, parks and recreational facilities to serve the Project, including any planned improvements to these services. The analysis identifies Project-related increases in demand for such services, the adequacy of existing and planned services or facilities to meet such demand and the possible indirect effects on existing residents as a result of such increases in demand. Finally, this section reviews whether Project increases in demand for such services would create a need for new or physically altered facilities, the construction of which could cause significant environmental impacts.

Public Services

To assess impacts on public service systems, existing and forecast capacities of service providers were obtained from the LUCE Update EIR, SLCUSD, SLOFD and SLOPD management personnel, and General Plan documents. The goals and policies of the General Plan SE provided additional information used to establish thresholds for levels of significance for public services. SLOFD and SLOPD provided guidelines for determining potential impacts to police and fire protection services, specifically staffing and service demands. For determining impacts, the Project is evaluated for its likelihood to reduce the City's 30 percent available-time sworn officer objective established in the General Plan SE. Impacts to fire protection services are evaluated in the context of SLOFD's adequate response time and anticipated number of calls for emergency services based on the type of development proposed under the Project. Information and personal communications from CALFIRE and SLCUSD contributed to the analysis.

As the Project site would be annexed into the City, development of the Project site with residential and commercial uses would increase demand on City services, including fire protection, police protection, and other City-supported public services. The City has a system of required developer impact fees and dedications established to address direct demand for new facilities associated with new development, while potential increases in property tax revenue associated with valuation of new residential units, businesses, and other revenues (e.g., sales tax) would help offset the increased ongoing cost of provision of public services to new residential and commercial uses. As discussed in Section 3.11, *Population and Housing*, population estimates are based on the most recent SLOCOG 2050 regional growth factor, as detailed in Table 3.11-14, *Summary of Estimated Population Generated by the Project*.

Recreation

Information and forecast capacities of the City's recreational facilities were obtained from the 2014 LUCE Update EIR, City Parks and Recreation Department staff, and General Plan documents. Project-related increases in population were assessed to identify increased demand for parks and recreational facilities. The goals and policies of the General Plan PRE provide additional information used to establish thresholds for levels of significance.

Because Villaggio would serve an older population (60 years and older), the unique needs of senior populations were reviewed and researched to identify potential unique or different recreational demand reflective of the needs of a senior population. Other environmental documents associated with senior living facilities were also examined, including projects in the cities of Los Angeles, Sacramento, and Buellton as well as the County of Monterey (City of Buellton 2013; City of Los Angeles 2003; 2008; County of Monterey 2018; City of Sacramento 2016). These environmental documents found that residents in assisted living facilities, which are not as active as residents in independent living facilities, are served by onsite recreational facilities and generally do not require additional offsite amenities beyond those provided at the facility. However, these documents found that independent living residents required a mix of recreational amenities, including recreational facilities within the senior living center and offsite recreational facilities consistent with the standards of the local jurisdiction's parks and recreation department. Senior citizen interest associations and action plans from the U.S. Department of Health & Human Services and American Association of Retired Persons (AARP) were also reviewed to determine the interests and needs of senior populations (U.S. Department of Health & Human Services 2018; AARP 2016). These associations generally advocate for the needs

of senior citizens to remain active in a variety of recreational pursuits, though they did not provide quantified data on the recreational demand of senior populations.

3.12.3.3 Project Impacts and Mitigation Measures

Implementation of the Project has the potential to increase population and associated demand on public services and parks and recreational facilities. The Project would result in the following impacts to public services, parks, and recreational facilities. Impacts are described further below and summarized in Table 3.12-3.

Table 3.12-3. Summary of Project Impacts

Impacts on Public Services, Parks, and Recreational Facilities	Mitigation Measures	Residual Significance
PS-1. The Project would increase demand on the SLOPD for police protection services.	None required	Less than Significant
PS-2. The Project would increase the demand on SLOFD and CALFIRE for fire protection services and create potential declines in firefighter-to-population ratios; however, the Project would be located within the accepted response time performance area. Development of senior residential uses, which are associated with higher than average calls for emergency medical service, would increase emergency calls for service	None required	Less than Significant
PS-3. The Project would generate increases in enrollment at public schools (especially C.L. Elementary and Laguna Middle Schools).	None required	Less than Significant
PS-4. The Project would increase the demand for public parkland and neighborhood parks from increased residential population.	MM PS-1 MM PS-2	Less than Significant with Mitigation

Impact PS-1 The Project would increase demand on the SLOPD for police protection services (Less than Significant).

The Project would annex the Project site to the City, placing the site under the jurisdiction of the SLOPD for providing law enforcement services, and would result in development of 578 residential units, 100,000 sf of retail-commercial space, a 2.9-acre public park, and additional facilities within Villaggio such as health care facilities, a recreation center, restaurants, and theaters. At full buildout, the Project site would support a population of approximately 1,231 residents, as well as patrons or users of the 100,000-sf retail-commercial space, public park, and other amenities and facilities within the Specific Plan

area. New residential and non-residential development as part of the Project would increase the existing City population of 46,802 people by approximately 2.6 percent to 48,033 people, increasing demand for SLOPD police protection services and responses to incidents. Because the Project would be implemented over approximately five years, increases in call volumes for SLOPD services would occur incrementally over that period of time. Without additional resources, such increases in call volumes could incrementally affect levels of service to both future Project residents and existing City residents.

Existing SLOPD staff levels are adequate to meet the General Plan SE standard of 30 percent available-time sworn officer objective for patrol response. According to SLOPD response records, SLOPD staff has exceeded this standard and has achieved a 32 to 24 percent available-time objective for patrol response (SLOPD 2016), which the SLOPD continues to strive to maintain (Personal Communication with SLOPD Watch Officer 2018). Project-created increases in population may necessitate the need to hire additional officers or purchase new police equipment to maintain adequate response time objectives. The City currently has a ratio of 1.30 officers per 1,000 residents. Based on the current City population of 46,802, the addition of 1,231 residents as a result of implementation of the Project (total population of 48,033) would incrementally reduce this ratio to 1.27. Therefore, the Project would not reduce the available-time sworn officer objective below the General Plan SE's target goal.

For long-term police staff planning, the SLOPD and the City Council would address departmental budget, staffing, and equipment needs as part of the annual budgetary process. This review allows for SLOPD to determine any increases in police resources and equipment if needed. The SLOPD is funded through general fund revenues generated by property, sales, and transient occupancy taxes, all of which are expected to increase in proportion to new development within the City. Such increases in revenues could be used to hire additional officers and purchase equipment to maintain or improve SLOPD service levels over time to meet changing demands, if determined appropriate by the City Council. While changes in police staffing would largely address this impact, recruiting and hiring additional sworn officers requires allocation of funding and would need to be implemented in a timely manner during Project construction over the next decade.

Measures have been included in the Draft FRSP to decrease Project demand for police protection services, which would help reduce any indirect impacts to City residents associated with such increased demand and allow more flexibility for City allocation of resources. For instance, the Draft FRSP includes Section 4.8, Security Planning, which

details security initiatives designed to be consistent with SLOPD's Crime Prevention Through Environmental Design Principles. Additionally, Program 4.8a of the Draft FRSP assures coordination with SLOPD in the preparation of a security plan prior to issuance of building permits, including consideration for onsite first responders and private security staff. Villaggio's proposed perimeter fencing, gated entry, and onsite security personnel would also be considered in the security plan, which would likely reduce the number of police calls and associated demand on police services.

While the Project would incrementally increase demand for police services, the increase would not result in the need for new or physically altered facilities the construction of which would cause significant environmental impacts. Therefore, impacts to police protection services would be adverse but *less than significant.*

Impact PS-2 The Project would increase the demand on SLOFD and CALFIRE for fire protection services and create potential declines in firefighter-to-population ratios; however, the Project would be located within the accepted response time performance area. Development of senior residential uses, which are associated with higher than average calls for emergency medical service, would increase emergency calls for service (Less than Significant).

Project development of approximately 578 residential units with an estimated 1,231 new residents, as well as additional employees and patrons of new commercial-retail development, the proposed public park, and other onsite facilities would alter the existing firefighter-to-population ratio of 1:862.

Fire protection for this Project would be provided by the SLOFD and CALFIRE. The first responders to a structural fire would consist of SLOFD, while response to a wildfire would consist of both SLOFD and CALFIRE resources. SLOFD would also respond to emergency medical (paramedic) and assistance calls within the Project site. In addition, new development would be subject to the SLOFD standards and California Fire Code in all proposed buildings, including installation of fire hydrants, building sprinklers, provision of adequate water supply and pressure, placement of fire extinguishers, provision of adequate fire access to buildings, and other requirements. According to the SLOFD and the General Plan SE, response times (travel times) to urban development should be a maximum of four minutes, 90 percent of the time under General Plan SE Policy 9.3(A). In terms of response times, the closest SLOFD fire station (Station Four) is located at 1395 Madonna Road, approximately 0.5 mile west of the Project site with a three-minute response time

(Google Earth 2019). Therefore, the Project would be within the City's and SLOFD's established adequate response time of four minutes.

Buildout of the Project would incrementally reduce the City's existing firefighter-to-population ratio from 1:862 to 1:885. To maintain the existing firefighter-to-population ratio, the Project would require approximately 1.2 new firefighters. However, the SLOFD currently anticipates adequate resources exist to serve the Project consistent with its established 4-minute response time goal without the need for additional personnel. Further, the 2016 SLOFD Master Plan also requires construction of a permanent station when the entire southern area of the City reaches 90 percent buildout. The new station would likely be constructed on the east side of U.S. 101, but would serve the southern portions of the City and help ensure the SLOFD is able to continue to meet its response time goal (SLOFD 2016). Therefore, implementation of the Project would not result in the need for construction of a new fire station or similar facilities.

Based on the Project's location within the adequate safe response time area of service, standard residential and commercial land uses proposed under the Project are considered to be reasonably served by existing SLOFD resources with payment of the City's appropriate capital facilities fees. The Project, however, would also develop 404 units of new senior housing, assisted living, and health care uses (e.g., senior residential uses). The SLOFD considers certain development and uses, including senior residential development, to be uses which would result in a higher than normal amount of calls for service compared to other types of development. Senior residential uses in the City have historically generated higher levels of calls for service. The SLOFD believes the Project would not result in a significant increase in demand for fire or emergency response services, and that adequate resources and staff exist to serve the proposed development (SLOFD 2019). Given adequate staffing and response times exist to serve the Project and no expansion of existing facilities would be required as a result of Project implementation, impacts would be adverse but *less than significant.*

Impact PS-3 The Project would generate increases in enrollment at public schools (especially C.L. Elementary and Laguna Middle Schools) (Less than Significant).

The Project would result in the development of approximately 578 residential units. However, Villaggio is not expected to generate school-aged populations. Therefore, this analysis only considers the 174 multi-family units proposed for Madonna Froom Ranch. Based on SLCUSD student generation rates used in the SLCUSD Enrollment Projections

Capacity Analysis, it is estimated that Project development would generate approximately 37 additional school-age children (see Table 3.12-4; CA Department of Education 2018).

Table 3.12-4. Project Student Generation

Grade Level	Generation Rates Multi-Family Units (students per unit)	Proposed Units Multi-Family Units	Additional Students[1]
K-6	0.116	174	20
7-8	0.032	174	6
9-12	0.066	174	11
TOTAL (K-12)	**0.214**	**174**	**37**

Source: CA Department of Education 2018.
[1] Rounded to the nearest whole value.

Assuming that the increase of students attributable to the Project would attend the schools for which the Project site is located within the enrollment boundary at the respective education levels, all respective schools for each grade level would have remaining capacity to accommodate an increase in student population from the Project, with the exception of Pacheco Elementary (see Table 3.12-5). While Pacheco Elementary enrollment currently exceeds its capacity, alternative elementary schools with which the Project site is located within the enrollment boundary (e.g., C.L. Smith Elementary and Bishop's Peak/Teach Elementary) have available capacity to accommodate new students associated with the Project. Although proximate schools have adequate capacity for the generated student population, the students may attend schools in the area that are over 90 percent capacity, resulting in a potential exceedance of SLCUSD's ideal school utilization rates (90 percent capacity for elementary schools and 85 percent capacity for middle schools). In these instances, schools may require increased classroom space, new teachers, and additional equipment at the school serving the Project vicinity. Nevertheless, enrollment and capacity have the potential to vary by school year, and the district currently accepts open enrollment, and students could be accommodated at other district schools upon request and availability.

Table 3.12-5. Student Accommodation by Nearest Schools

Nearest School	Remaining Capacity at Schools	Project Contribution	Capacity to Accommodate?
Pacheco Elementary (K-6)	-23	20	**No**
C.L. Smith Elementary (K-6)	85	20	Yes
Bishop's Peak/Teach Elementary	74	20	Yes
Laguna Middle School (7-8)	301	6	Yes
San Luis Obispo High School (9-12)	508	11	Yes

Source: CA Department of Education 2018.
[1] Rounded to the nearest whole value.

In addition, the SLCUSD currently requires all new residential and commercial development to pay developer fees to offset potential impacts of increased enrollment on City school facilities (Government Code Section 65996), which is considered to be full mitigation for potential impacts. These fees are currently assessed at $3.79 per sf of residential development and $0.61 per sf of commercial development (SLCUSD 2018b). Fees would be estimated for residential development when building plans and sizes are finalized; the proposed 100,000 sf of commercial uses would require approximately $61,000 in fees. Given district-wide capacity and the payment of impact fees for school facilities, impacts on school facilities associated with the Project would be adverse but *less than significant.*

Impact PS-4 The Project would increase the demand for public parkland and neighborhood parks from increased residential population (Less than Significant with Mitigation).

As detailed within Section 3.11, *Population and Housing*, the Project is anticipated to generate approximately 1,231 new residents (including 37 school-age children), which would utilize Project-proposed recreational facilities, as well as existing parks and recreational facilities within the City and surrounding area (e.g., Irish Hills Natural Reserve). Increased use of existing neighborhood parks or parkland in the City and County, including trails in the Irish Hills Natural Reserve, would accelerate physical deterioration of existing facilities. The Project proposes a 2.9-acre public park and a public trail along realigned Froom Creek that would potentially affect existing resources onsite as described in this EIR, including impacts to aesthetic, biological, cultural, and soil resources. Further, the City's General Plan PRE requires Expansion Areas and all residential annexation areas such as the Project site to provide developed neighborhood parks at the rate of five acres per 1,000 residents and at least ten acres of developed parkland for each 1,000 new

residents. The Project site is an Expansion Area defined by the General Plan and would be an annexation to the City. As such, City policies would require additional parkland to serve the Project's future residential populations. As described in Section 3.12.3.2, Villaggio would serve an older population with unique needs from typical residential uses. Therefore, the Madonna Froom Ranch and Villaggio components of the Project are discussed separately in the following sections.

Villaggio

Senior citizen populations generally seek recreational facilities such as gyms and exercise rooms, outdoor/indoor pools, indoor socialization centers, walking paths, and similar facilities that may facilitate persons with reduced mobility (AARP 2016). The Project includes a variety of resident-only recreational facilities onsite to serve the needs of senior citizens. Recreational opportunities and facilities such as an outdoor swimming pool, gym, pickle ball, bocce ball, community gardens, theater, outdoor seating areas, library, and craft rooms would be included within Villaggio. Additionally, Villaggio would provide walking paths, including the proposed Froom Creek Trail and internal trails throughout the developed areas. Access would also be available to the existing public trails within the Irish Hills Natural Reserve for Villaggio residents via gated access points.

As detailed within Section 3.11, *Population and Housing*, the anticipated increase in residential population by 825 persons within Villaggio would incrementally increase use of and demand for parks and recreational facilities. Villaggio would contain 38 assisted living units and 51 skilled nursing and memory care beds, totaling approximately 93 persons that would require special recreational needs with facilities that would accommodate persons needing mobility support and transportation. The onsite recreational amenities would provide the range of amenities to serve these special recreational needs for 93 residents. Villaggio would also support an estimated 732 independent living/active senior residents. Both groups of residents would be able to utilize onsite recreational facilities provided within Villaggio, but active seniors would also likely use offsite parks and open spaces, hiking trails, and other outdoor amenities, including the Irish Hills Natural Reserve, City-owned and maintained trails and open spaces, City parks, community centers (e.g., SLO Senior Center), and sports facilities such as tennis courts. Increased demand generated by the Project and use of existing public recreational facilities by Villaggio would contribute to the use and physical deterioration of existing facilities.

As described above, Villaggio's proposed onsite amenities are considered adequate to serve up to 93 senior residents with special recreational needs, so recreation demands of

the Project would be reduced from that typically anticipated under City standards. To meet the goals and policies of the General Plan PRE and decrease the rate of deterioration of existing facilities from increased demand, the Project's increase of 732 independent living population would require development of an additional 7.32 acres of parkland including at least 3.66 acres of neighborhood park within the City, which would be partially satisfied by the proposed public park within Madonna Froom Ranch and proposed public recreational facilities such as the Froom Creek Trail, as described below. As this requirement would not be met entirely with onsite recreational facilities, the potential impact associated with Villaggio's residents contribution to increased rates of physical deterioration of existing facilities offsite and the need for additional recreational facilities to adequately serve this population consistent with City policy is considered *potentially significant*.

Madonna Froom Ranch

As detailed within Section 3.11, *Population and Housing*, Madonna Froom Ranch is anticipated to generate approximately 406 new residents, including approximately 37 school-age children. Based on the anticipated increase in new residents of Madonna Froom Ranch, increased use and demand by Project residents may result in accelerated physical deterioration of existing facilities.

The Project would provide onsite public amenities that would partially offset the impact of increased demand for City park and recreational facilities generated by Madonna Froom Ranch. This includes a 2.9-acre public park that would provide the basic elements of a neighborhood park as defined within the General Plan PRE, including benches, picnic tables, restrooms, and a playground. In addition, the Project would develop a publicly accessible Froom Creek Trail that would extend from the existing trail system in the Irish Hills Natural Reserve through the Specific Plan area with a terminus near the Calle Joaquin wetlands.

Based exclusively on the population anticipated for Madonna Froom Ranch, at least 4.06 acres of public park would be required to meet the General Plan PRE Policies 3.13.1, 3.15.1, and 5.0.2, of which approximately 2.03 acres would need to be a neighborhood park. The Project would provide 2.9 acres of neighborhood park, thereby meeting the City's standard, but would be deficient in approximately 1.16 acres of required public parkland. As this requirement would not be met with onsite recreation facilities, Madonna Froom Ranch residents would contribute to increased rates of physical deterioration of

existing facilities and the need for additional recreational facilities to adequately serve this population consistent with City policy.

In total, the Project would increase demand for recreation area and amenities from an increase in 1,138 residents (discounting 93 assisted living residents that would be served by onsite amenities provided by Villaggio). This residential population increase would require an additional 11.38 acres of public parkland with 5.69 acres dedicated as neighborhood park, consistent with General Plan PRE Policies 3.13.1, 3.15.1, and 5.0.2. A portion of the total requirement for parkland would be satisfied by the 2.9-acre public park proposed within Madonna Froom Ranch, leaving an unmet requirement of 8.48 acres of parkland with at least 2.79 acres of dedicated neighborhood park area. Without this required parkland, the Project's residents would substantially increase demand and use of recreation facilities in the City, contributing to accelerated deterioration and need for maintenance of existing recreation areas and facilities. Therefore, the Project would result in a *potentially significant* impact to recreational facilities.

This EIR evaluates maximum build-out potential under the FRSP; ultimate development within the Specific Plan area and associated populations may fall below levels analyzed in this EIR. Because the exact number of units and residents that will ultimately populate the Specific Plan area is currently unknown, mitigation has been identified to ensure development under the Specific Plan is consistent with General Plan PRE policies.

Mitigation Measures

MM PS-1 ***Public Parkland Requirements for Villaggio.*** *Mitigation shall be calculated based on actual buildout populations within Madonna Froom Ranch. At the discretion of the Community Development Department and City of San Luis Obispo Parks and Recreation Department, and to ensure that parkland would satisfy the needs of the proposed population of Villaggio, the Applicant shall either:*

a. Identify, purchase, and develop up to 7.32 acres of parkland, including 2.79 acres of neighborhood park, within the City's Sphere of Influence, consistent with City General Plan PRE Policies 3.13.1, 3.15.1, 5.0.1, and 5.0.2. If feasible, land for development of neighborhood park space should be identified within interior areas of the City Sphere of Influence to maximize use and access; or

b. Provide a contribution of fees in-lieu of dedication of parkland, restricted solely for parkland acquisition and improvement.

Plan Requirements and Timing. The development of parkland and/or dedication of fees shall be completed by the Applicant prior to issuance of building permits. While coordinating with the City Parks and Recreation Department, the Applicant shall modify the FRSP to demonstrate the provision of recreational facilities to meet the demand of Villaggio residents if an onsite option is selected.

Monitoring. The City shall ensure compliance with General Plan PRE Policies 3.13.1, 3.15.1, 5.0.1, and 5.0.2, and shall ensure the above measure is implemented prior issuance of building permits.

MM PS-2 ***Public Parkland Requirements for Madonna Froom Ranch.*** *The Applicant shall identify, designate, dedicate, and/or develop up to 1.16 acres of public parkland into the Froom Ranch Specific Plan to be operational at the time of buildout of the Project. Mitigation shall be calculated based on actual buildout populations within Madonna Froom Ranch and may be implemented using one of the following options, at the discretion of the Community Development Department and City Parks and Recreation Department:*

a. The Applicant shall designate an additional area of up to 1.16 acres of public facilities land use with the intention of providing parkland, within the Specific Plan area, consistent with City General Plan PRE Policies 3.13.1, 3.15.1, 5.0.1, and 5.0.2, or

b. The Applicant shall identify and purchase or dedicate up to 1.16 acres of parkland within the City's Sphere of Influence, or

c. The Applicant shall provide a contribution of fees in-lieu of dedication of up to 1.16 acres of parkland, restricted solely for parkland acquisition and improvement.

Plan Requirements and Timing. The development of parkland and/or dedication of fees shall be completed by the Applicant prior to issuance of building permits. While coordinating with the City Parks and Recreation Department, the Applicant shall modify the FRSP to demonstrate the

provision of recreational facilities to meet the demand of Madonna Froom Ranch residents if an onsite option is selected.

Monitoring. The City shall ensure compliance with General Plan PRE Policies 3.13.1, 3.13.1, 5.0.1, and 5.0.2, and shall ensure the above measure is implemented prior to issuance of building permits.

Residual Impacts

With the implementation of MM PS-1, the Project would ensure that adequate recreational resources exist within the City to serve the additional demands generated by the proposed residential population of Villaggio following Project implementation. This would ensure that in aggregate, ten acres per 1,000 independent-living senior residents would be provided in park and recreational improvements and/or payment of fees would occur to meet the standards of the City Parks and Recreation Department as well as the requirements of Policies 3.13.1, 3.15.1, 5.0.1, and 5.0.2 within the General Plan PRE. With the implementation of MM PS-2, the Project would provide either the dedication of needed parkland or proportionate in-lieu fees to the City for public park space or community facilities for the Madonna Froom Ranch residential population. This dedication of parkland or payment of in-lieu fees for additional parkland would ensure the Project meets City requirements for the development of parkland and offsets the Project's demand on parks and recreational facilities. In addition, provision of this parkland would help alleviate overuse of any existing recreational facilities within the City or surrounding County areas, such that use of such facilities by new residents of the Project would not result in substantial physical deterioration of existing facilities. Provision and development of additional offsite parkland may have secondary environmental effects that would be subject to separate environmental review and approvals. Therefore, the Project site would result in impacts to parks that are *less than significant with mitigation*.

3.12.3.4 Cumulative Impacts

Public services within the Project vicinity are primarily provided by the City, supplemented by interagency mutual aid agreements between SLOFD and CALFIRE for fire protection services and a Memorandum of Understanding between SLOPD, the County Sherriff's Department, and Cal Poly's California State University (CSU)-operated University Police Department. Cumulative impacts to public services are largely related to citywide population growth. Please refer to Section 3.11, *Population and Housing* for a detailed growth forecast.

In addition to resident population growth, new employment associated with commercial, retail, and recreational uses would increase daytime populations and visitation with associated demand for public services and recreational facilities. Planned and pending development in the City includes multiple mixed-use commercial and residential projects. These projects are also expected to expand residential space and contribute to additional population increases in the City, thereby cumulatively increasing demand for the City's public services and recreational facilities.

The Project, in conjunction with approved, pending, or proposed development projects in the City, proposed land use changes under the LUCE Update, and associated population growth, would incrementally increase overall demand for public services including fire protection, police protection, schools, and parks. The Project's contribution to potential cumulative impacts to public services and recreation is described below.

Police Protection

New development proposed as part of the Project would contribute to cumulative citywide population growth and associated increases in demand for police protection provided by the SLOPD. Overall growth within the City is anticipated to cause an increase in demand for police services that may conflict with General Plan goals for available-time for patrol response.

Existing SLOPD staffing levels exceed the officer per 1,000 resident ratio. Per the LUCE Update EIR, if no additional police officers were hired by the City's General Plan buildout year of 2035 (projected resident population of 56,686), cumulative growth and increased population would decrease the officers-to population ratio in the City from the ratio of 1.30 to a ratio of 1.06. To meet increased demand for police protection services and maintain 30 percent available time objective, SLOPD may be required to hire additional law enforcement officers. Though the Project would not individually result in the demand for any new officers due to it's associated incremental increase in demand for service and existing sufficiency of services, the Project, in addition to all cumulative development within the City, would contribute to the potential increase in demand for added police staffing. However, as noted above, the City Council would address SLOPD departmental budget, staffing, and equipment needs as part of the annual budgetary process. This review allows SLOPD to determine whether any increases in police resources and equipment is needed. The SLOPD is funded through general fund revenues generated by property, sales, and transient occupancy taxes, all of which are expected to increase in proportion to new development within the City. Such increases in revenues could be used to hire additional

officers and purchase equipment to maintain or improve SLOPD service levels over time to meet changing demands, if determined appropriate by the City Council. Though not directly attributed to an increase in demand for services, the new or replaced police station that was identified as important by City voters due to the age of the existing facility is anticipated to be completed in the near future and may also help to accommodate these future cumulative demands. Therefore, the Project's contribution towards cumulative impacts would be *less than significant* for police services.

Fire Protection

Development proposed under the Project would contribute to cumulative citywide population growth and associated increases in demand for fire protection services provided by the SLOFD from the four existing fire stations. As the Project would be adequately served by existing fire protection facilities and services, the Project's contribution to cumulative impacts would not be considerable. However, as several future developments in the City would be located in the vicinity of the Project, including the Avila Ranch Development Plan and the San Luis Ranch Specific Plan, additional demands would be placed on the SLOFD and the mutual aid agreement with CALFIRE. As indicated by the 2016 Fire Department Master Plan, a fifth fire station in the southern portion of the City would be required to maintain adequate fire protection services within the City under buildout of the LUCE Update (SLOFD 2016). Upon development of the fifth fire station, cumulative impacts to fire protection services on the southern side of the City would continue to be less than significant. Further, an Interim Fire Station is planned under the approved Avila Ranch Development Plan and would provide fire protection services within the southern extent of the City until the fifth fire station becomes operational. Therefore, the Project would not result in a cumulatively considerable contribution to impacts to fire protection services and cumulative impacts would be *less than significant*.

Schools

Per the LUCE Update EIR, the total estimated enrollment generation that would result from LUE buildout, based on development of approximately 4,904 new dwelling units (2,420 single-family dwellings and 2,484 multi-family units), is projected to be 911 new students. Land use changes anticipated to occur under the Project could add up to 37 new school-aged residents, contributing to future over-capacity at certain schools and potentially requiring increased classroom space, new teachers, and additional equipment at the schools serving the Project site. Thus, the Project and other projected growth in the City would contribute incrementally to increased enrollment demands within the SLCUSD.

Due to district budget constraints, new dwellings will have serious adverse consequences for school staffing, facilities, and programs unless new development adequately mitigates the adverse impact on school facilities. Mitigation in the form of development fees ($3.79 per square foot of residential development and $0.61 per square foot of commercial development) is assessed with issuance of construction permits. School district fees are collected by the City and used by the district to fund school infrastructure needs (SLCUSD 2018). Given the payment of developer fees for school facilities under the Project (which constitutes full mitigation pursuant to SB 50), the Project's contribution to cumulative impacts would not be considerable and potential cumulative impacts would be *less than significant*.

Parks and Recreation

The Project would contribute to increased demand for parks and recreational facilities due to approved, pending, or proposed citywide development and associated population growth (refer to Table 3.0-1). The implementation of cumulative development projects in the City, in combination with the Project, would result in substantial increased use of, and demand for, parks and recreational facilities.

The General Plan PRE requires that neighborhood and community park facilities be provided at a ratio of ten acres of parkland per 1,000 persons. Under existing conditions, the City Parks and Recreation Department maintains a total of 28 parks and sports facilities, 10 designated Natural Reserves and open spaces, two bike trails, and landscape areas totaling approximately 206 acres to support the current estimated City population of 46,802 (City of San Luis Obispo 2019). This equates to 4.4 acres per 1,000 residents, which is significantly less than what is required under City standards. The future population of 56,868 individuals as projected under development of land uses permitted under the LUE would require a projected need of approximately 363 acres of additional parkland. However, with the implementation of MM PS-1 and PS-2, the Project would not result in a considerable contribution to cumulatively considerable impacts as the Project would mitigate its potential impact and provide adequate parkland consistent with City standards along with payment of development impact fees to accommodate the recreational needs of future Project residents. Further, other projects in the area, such as the San Luis Ranch Specific Plan and Avila Ranch Development Plan projects, would also be contributing additional parkland for the City to support the associated population increases in each area. Ultimately, the Project would not result in cumulatively considerable deterioration of

existing facilities or service levels and this impact would be *less than significant with mitigation*.

3.13 TRANSPORTATION AND TRAFFIC

This section describes transportation facilities and operations and analyzes the potential environmental effects of the Project on transportation as defined by CEQA and City regulations and policies. This analysis summarizes the Traffic Impact Study (TIS) for the Project, which considers transportation services and infrastructure that may be affected by Project implementation, referred to as the study area.

3.13.1 Environmental Setting

The Project site lies at the western edge of urban development within the City and is bound by LOVR to the east, Calle Joaquin and Mountainbrook Church to the south, Irish Hills Plaza to the north, and Irish Hills Natural Reserve to the west. The Project site's location at the urban edge and the configuration of existing development and open space provides relatively little connectivity with the surrounding roadway system. Given existing development patterns, wetlands, and drainage and roadway configuration, direct access to the Project site is limited to a single driveway off LOVR.

The Project's main entrance would be installed on LOVR at Auto Park Way and LOVR improvements would include sidewalks, a new signalized intersection, and a new transit stop.

Roads immediately adjacent to the Project site include LOVR and Calle Joaquin. LOVR has approximately 1,700 feet of frontage along the eastern site boundary. LOVR is a four-lane roadway with a center median/turning lane and provides Class II bicycle lanes in both directions. The northbound (NB) side of LOVR is striped for parallel parking and provides a 10-foot-wide sidewalk. The southbound (SB) side of LOVR along the Project site frontage does not provide parking or a sidewalk and is curbed adjacent to an open drainage ditch that supports large stands of willow riparian vegetation that runs the length of the Project site.

Calle Joaquin runs through the southeastern corner of the Project site but is generally separated from much of the Project site by the Calle Joaquin wetlands and four existing hotels. Calle Joaquin is a two-lane roadway that extends south from LOVR for approximately 2,400 feet along the southern boundary of the Specific Plan area, providing

access to four hotels, Mountainbrook Church, and the KSBY offices and transmitter before terminating at Filipponi Ranch almost 1 mile south of LOVR. From LOVR and along the segment adjacent to the hotels, Calle Joaquin is bordered with sidewalks and planter strips on both sides. From the hotels to KSBY, Calle Joaquin is a two-lane rural road with unimproved shoulders along either side. Calle Joaquin does not provide access to the Project site.

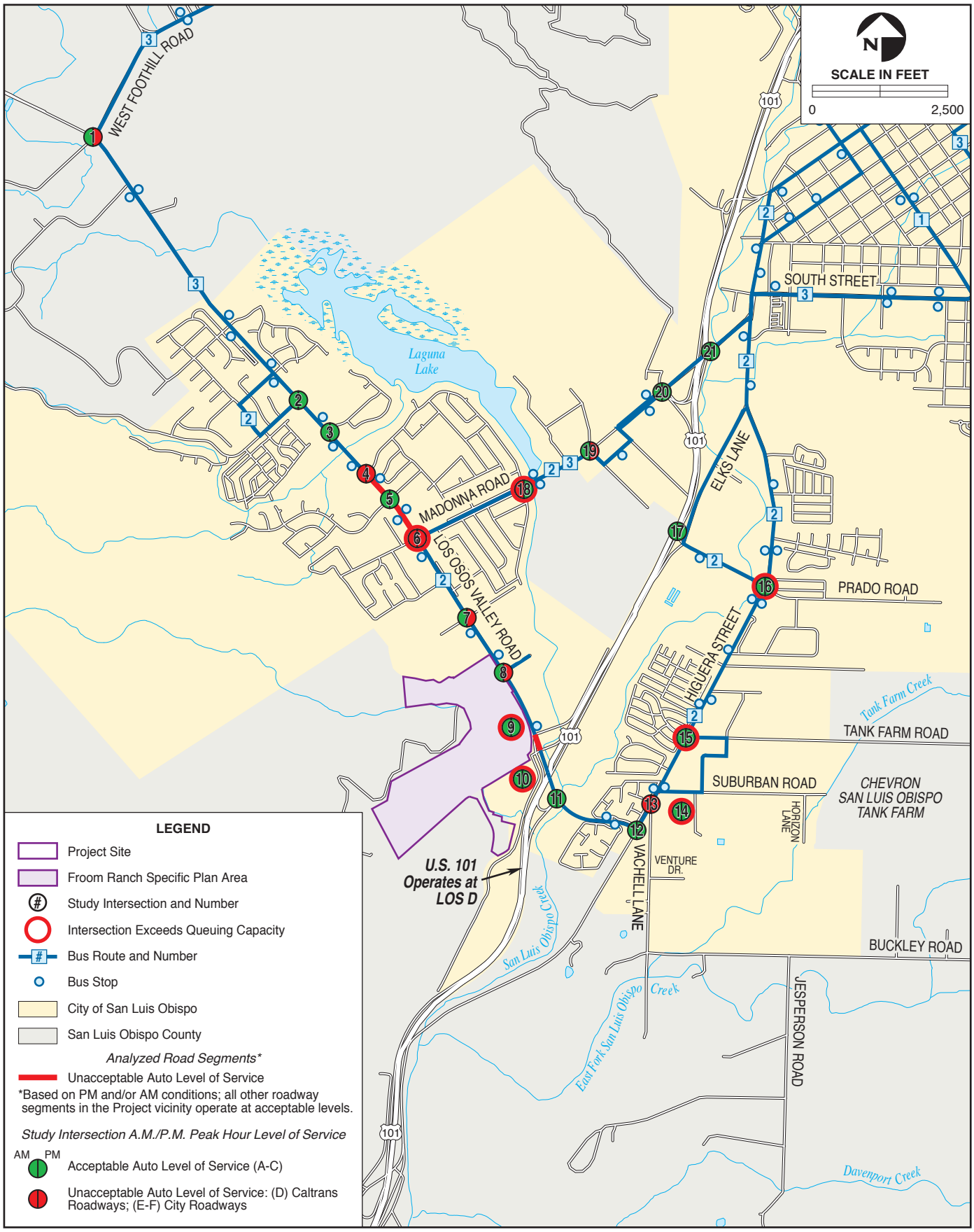
3.13.1.1 Existing Roadway Network

The existing driveway to the Project site would be improved to provide access to both Madonna Froom Ranch and Villaggio.

Roadway facilities in the vicinity include regional freeways and highways managed by Caltrans and local-serving roads and arterials managed by either the City or the County (Figure 3.13-1). U.S. 101 is located approximately 0.15 mile east of the Project site. Regional motor vehicle access to the Project site is provided via U.S. 101 at an interchange with LOVR. Local access to the vicinity is provided via LOVR, South Higuera Street, and Madonna Road. Direct access to the Project site is provided from a single dirt driveway located approximately 150 feet south of the edge of Irish Hills Plaza and 225 feet north of the intersection of LOVR and Auto Park Way. Roadways that provide access to the Project site and vicinity are further described below. Roadways are functionally classified in the City General Plan CE depending on their existing or planned configuration and role in the transportation network.

U.S. 101 is a north-south, four-lane freeway through the City. Outside of the City, U.S. 101 provides access to the City of Paso Robles to the north and the Five Cities area to the south. U.S. 101 is functionally classified as an Urban Principal Arterial and is part of the National Truck Network. It is a primary route for all vehicular traffic leaving from and coming to the City.

LOVR is a north-south arterial street that extends from South Higuera Street in the City to Pecho Valley Road in the City of Los Osos. This roadway provides motor vehicle access to U.S. 101 approximately 0.5 mile west of South Higuera Street and is functionally classified as an Arterial or a Parkway Arterial. LOVR provides four-to-six lanes with Class II bike lanes and sidewalks on both sides for the majority of



wood.

Existing Traffic Conditions

FIGURE 3.13-1

the study area, although sidewalks are lacking along the Project site frontage. Since 2014, improvements associated with the LOVR/U.S. 101 Interchange Traffic Relief Project have been constructed. Completed improvements to the interchange include widening LOVR to four lanes from south of Calle Joaquin Road to approximately 500 feet west of South Higuera Street as well as constructing sidewalks and Class II bike lanes along both sides of LOVR.

Calle Joaquin is a two-lane east-west roadway that runs through the southern corner of the Project site to connect LOVR with the four hotels adjacent to the site and Mountainbrook Church uphill from the site to the west. Calle Joaquin has sidewalks on the westbound (WB) side between LOVR and the existing hotels, but sidewalks terminate west of the existing hotels.

Calle Joaquin presents a frontage to the proposed stormwater detention basin area, with potential secondary access alongside Froom Creek.

Madonna Road is an east-west roadway that extends from Devaul Ranch Road west of LOVR to across U.S. 101 to Higuera Street to the east. Madonna Road is functionally classified as a Local roadway west of LOVR, and as an Arterial street east of LOVR. Throughout its span, Madonna Road provides two, four or six travel lanes, and Class II bike lanes with sidewalks on one or both sides. This roadway also provides motor vehicle access to U.S. 101 approximately 1 mile east of LOVR and 0.5 mile west of Higuera Street.

Froom Ranch Way is an east-west roadway that connects LOVR to the Prefumo Creek Shopping Center to the east and the Irish Hills Plaza to the west. Froom Ranch Way is four lanes west of LOVR and two lanes east of LOVR with sidewalks on both sides and Class II bicycle lanes on the east side. Planned improvements to Froom Ranch Way as part of the San Luis Ranch Specific Plan include construction of a bridge across Prefumo Creek and extension of the roadway through the San Luis Ranch site as a two-lane collector street with Class II bike lanes and a Class I multi-use path on the north side from LOVR for approximately 0.5 mile east to

Dalidio Drive. Improvements to Froom Ranch Way are required as part of the pending San Luis Ranch Specific Plan.

South Higuera Street is a north-south arterial located south of U.S. 101 within the vicinity of the Project site. Higuera Street connects to downtown to the north and U.S. 101 to the south. South of Madonna Road, it provides a four-lane roadway with Class II bike lanes and continuous sidewalks immediately adjacent to LOVR.

Prado Road is an east-west two-lane road that extends eastward from the U.S. 101 NB Ramps to South Higuera Street. Prado Road is functionally classified as a Highway/Regional Route. Prado Road is a two-lane roadway with sidewalks on both sides and on-street parking at various locations. Planned improvements to Prado Road include:

- Replacement of the Prado Road Bridge over San Luis Obispo Creek just west of South Higuera Street;
- Traffic capacity and pedestrian/bicycle crossing improvements at the Prado Road/South Higuera Street intersection;
- Construction of a grade-separated interchange across U.S. 101;
- Extension of Prado Road as a four-lane roadway 700 feet west from U.S. 101 to Dalidio Drive through the pending San Luis Ranch Specific Plan development, and 3,000 feet east to Broad Street through undeveloped land as a four-lane roadway with Class II bike lanes, a center median/left-turn lane, and Class I multi-use paths on one or both sides.

Improvements to Prado Road west of U.S. 101 are required as part of the pending San Luis Ranch Specific Plan. The U.S. 101 overpass/interchange project is programmed and funded through a combination of direct developer contributions, Traffic Impact Fees and local funds. The Prado Road extension east to Broad Street is planned and funds are being collected incrementally through the City's Traffic Impact Fee program.

Tank Farm Road is an east-west roadway that connects South Higuera Street to Broad Street to the east, and continues as Orcutt Road east of the Orcutt Area. In the vicinity of the Project site, Tank Farm Road is a four-lane roadway with Class II bike lanes and sidewalks on both sides.

3.13.1.2 Existing Pedestrian Facilities

Pedestrian facilities include sidewalks, paths, crosswalks, and pedestrian signals at signalized intersections that are generally managed by the City, except at freeway interchanges such as LOVR/U.S. 101, which are managed by Caltrans. In the vicinity of the Project site, sidewalks are discontinuous on portions of both sides of LOVR. There are no sidewalks along the Project frontage on LOVR. Continuous sidewalks are provided on Auto Park Way, and Froom Ranch Way and Calle Joaquin from 2,000 feet south of LOVR to Motel 6, after which the road becomes a narrow two-lane rural road with no sidewalks. All of the signalized intersections along LOVR are equipped with marked crosswalks and pedestrian signals. Informal pedestrian access currently exists between the Project site and the Irish Hills Plaza shopping center through the center's parking lot.

The Irish Hills Natural Reserve supports an extensive off-road network of multi-use trails immediately west of the Project site, with the Neil Havlik Way and Froom Creek Connector trails bordering the Project site; the nearest formal trailhead is the Froom Creek trailhead located immediately adjacent to the northwestern corner of the Project site.

3.13.1.3 Existing Bicycle Facilities

Bicycle facilities in the Project vicinity include on- and off-road bicycle paths, lanes, and routes. Class I bicycle paths are paved pathways separated from roadways. Class II bicycle lanes are lanes adjacent to the road shoulder outside vehicle travel lanes, with lane markings, pavement legends, and signage. Class III bicycle routes are generally located on low-traffic-volume streets. These facilities are designed for bicycle use, but have no separated bicycle right-of-way or lane striping, but may in some instances be signed or have "sharrow "markings on the roadway. A Class IV separated bikeway, often referred to as a cycle track or protected bike lane, is for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature. Bicycle facilities provide routes for recreational, commuter, and in some cases school children cyclists.

Within the Project vicinity, Class I bicycle paths include the current southern terminus of the Bob Jones Trail, a regional bike path that currently connects to the north side of LOVR at the intersection with the U.S. 101 NB ramps. Within the City, the trail currently extends for approximately 1.1 miles from LOVR north to Prado Road, with another segment within the County of roughly 3 miles extending from Ontario Road near the Avila Beach Drive interchange with U.S. 101 to Avila Beach. Future plans call for extending the trail from downtown San Luis Obispo to this existing Avila Beach segment. Class II bicycle lanes

are provided in both directions on portions of LOVR and South Higuera Street within the Project vicinity, as well as the WB direction of Madonna Road from Oceanaire Drive to about 600 feet east of LOVR. The South Higuera Street bicycle lanes are provided between LOVR and Madonna Road, except for a gap in the NB direction near South Street. The LOVR bicycle lanes are provided from the western City limit to South Higuera Street. Class III bicycle routes are designated along portions of Oceanaire Drive, Atascadero Street, Elks Lane, Calle Joaquin, and Dalidio Drive within Laguna Lake Park.

In addition, as noted above, an extensive multi-use off-road recreational trail system is also located adjacent to the Project site within the Irish Hills Natural Reserve, including designated mountain biking trails, as well as within the Laguna Lake Open Space to the east.

3.13.1.4 Existing Transit Facilities

Public transit service to the Project vicinity is provided by the City of San Luis Obispo Transit Division (SLO Transit) via bus routes 2A and 2B, which provide service to and from the Downtown Transit Center located on Osos Street. Route 2A operates in a clockwise loop with 60-minute headways (frequency of service) from 6:15 AM to 10:00 PM and stops near the Project site on the east side of LOVR, north of the Auto Park Way intersection. This stop is within a roughly five- to eight-minute walk from the Project site. Currently, signalized pedestrian crossings on LOVR in the Project vicinity are limited to those at Froom Ranch Way and Calle Joaquin, a distance of over 0.5 mile; no marked or controlled pedestrian crossings on LOVR currently exist at the intersection of LOVR/Auto Park Way. Route 2B operates in a counterclockwise loop with 60-minute headways from 6:45 AM to 6:35 PM and stops near the Project site on the west side of LOVR, south of the Froom Ranch Way intersection. This stop is within a two- to five-minute walk from the Project entry at LOVR/Auto Park Way. Transit service is relatively infrequent to the Project vicinity with headways of roughly 60 minutes. This compares to industry standards of ideal peak hour headways of 10 to 15 minutes required to attract non-transit-dependent users and provide reasonable commute times.

3.13.1.5 Existing Collision History

Documented collisions along the selected study locations were obtained from the City for a period of three years from January 2014 to December 2016. Most recent statewide collision averages for 2015 were obtained from Caltrans. Quantitative review of collision

history for the selected roadway segments and the study intersections are summarized in Appendix J.

LOVR between Froom Ranch Way and Calle Joaquin

During the three-year study period, there were a total of 29 collisions reported for LOVR between Froom Ranch way and Calle Joaquin and a total of 17 injuries. During the study period, no crashes involving pedestrians were reported, and one collision involving a bicyclist was reported. Fatal-plus-Injury rate for this study segment is higher when compared to the statewide average rate for similar facilities. Further, this segment has been identified as being a high-collision-rate location compared to similar arterial streets in the City's most recent Annual Traffic Safety Report (2017).

South Higuera Street between LOVR and Clover Ridge Lane

During the study period, there were a total of ten collisions reported for the study segment of South Higuera Street between LOVR and Clover Ridge Lane and a total of six injuries were reported. During the study period no crashes involving pedestrians and bicyclists were reported. One fatal injury was reported at Higuera Street and Clover Ridge Lane due to improper turning. Fatal-plus-Injury rate for this study segment is higher when compared to the statewide average rate for similar facilities. This segment is located within the County and has not been studied as part of the City's Annual Traffic Safety Report (2017).

3.13.1.6 Multi-Modal Transportation System Operations

Multi-modal transportation system operations include vehicular traffic characteristics and congestion, adequacy of pedestrian and bicycle facilities to safety accommodate demand, and transit operations including headways and facilities such as bus stops. In order to evaluate existing operational characteristics of the transportation system, recent traffic volume data was obtained (automobiles, pedestrians, bicycles, transit ridership), and study area transportation facilities were observed, including intersections, roadway segments, sidewalks, bike paths, transit routes and stops. For vehicular traffic, intersection turning movement volumes for weekday AM and PM peak periods and roadway segment volumes collected during February 2016 and March 2016 were obtained from the City. For the intersection of Foothill Boulevard and LOVR, turning movement volumes collected in September 2014 were obtained from the County. Volumes at this intersection were adjusted to reflect growth through 2016. For freeway mainline and ramp traffic analysis, AM and PM peak period traffic volumes were obtained from 2017 PeMS data. All traffic data was collected during typical weekday conditions when schools were in session.

Detailed traffic flow analyses focus on operating conditions of critical intersections and segments during peak travel periods, which are typically the weekday AM and PM peak hours. The AM peak hour is defined as the highest one-hour of traffic flow counted between 7:00 AM and 9:00 AM on a typical weekday, the PM peak hour is defined as the highest one-hour of traffic flow counted between 4:00 PM and 6:00 PM on a typical weekday. .

Pedestrian and bicycle volume data was obtained from the City based on recent counts during this same time period. This was supplemented by field observations of these facilities. For transit operations, SLO Transit was contacted to obtain relevant transit line ridership data and for information on any planned improvements.

The study intersections and roadway segments were evaluated according to the methodology required by the City's Traffic Impact Analysis (TIA) Guidelines. The operation of intersections and roadway segments was evaluated based on methodologies established in the Transportation Research Board's 2016 Highway Capacity Manual 6th (HCM 6th) Edition Multi-modal Level of Service (LOS) criteria. LOS is a qualitative measure of traffic operating conditions ranging from LOS A to LOS F, with LOS A being the highest functioning and LOS F being the lowest functioning.

Automobile Intersection LOS Methodology

In terms of operations and deficiencies for automobiles, intersection LOS is based on the estimated control delay per vehicle, and can be affected by factors such as turn lane capacity, the number of vehicle lanes, and traffic control device characteristics, such as traffic signal phasing/timings. In rating intersection operations, LOS A indicates free-flow operations and LOS F indicates congested operations (see Table 3.13-1). Table 3.13-2 and Table 3.13-3 summarize the HCM 6th Edition automobile segment LOS and the freeway segment LOS methodologies, respectively.

Table 3.13-1. LOS Criteria for Signalized and Unsignalized Intersections

LOS	Description	Control Delay Per Vehicle (seconds)	
		Signalized	Unsignalized
A	Uncongested operations; all vehicles clear in a single cycle.	≤ 10	≤ 10
B	Uncongested operations; all vehicles clear in a single cycle.	10.1 – 20	10.1 – 15
C	Light congestion; occasional backups on critical approaches.	20.1 – 35	15.1 – 25
D	Congestion on critical approaches, but intersection functional. Vehicles wait through more than one cycle during short peaks. No long-standing lines formed.	35.1 – 55	25.1 – 35
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	55.1 – 80	35.1 – 50
F	Total breakdown with stop-and-go operations.	> 80	> 50

Source: TRB 2010.

Table 3.13-2. Automobile Segment LOS Methodology

LOS	Travel Speed Threshold by Base Free-Flow Speed (mph)							V/C Ratioa
	55	50	45	40	35	30	25	≤1.0
A	>44	>40	>36	>32	>28	>24	>20	
B	>37	>34	>30	>27	>23	>20	>17	
C	>28	>25	>23	>20	>18	>15	>13	
D	>22	>20	>18	>16	>14	>12	>10	
E	>17	>15	>14	>12	>11	>9	>8	
F	≤17	≤15	≤14	≤12	≤11	≤9	≤8	
F	Any							>1.0

Source: HCM 6th Edition 2016.
mph – miles per hour
Notes: [a] The critical volume-to-capacity (V/C) ratio is based on consideration of the through movement V/C ratio at each boundary intersection in the subject direction of travel. The critical V/C ratio is the largest ratio of those considered.

Table 3.13-3. Freeway Segments LOS Methodology

Segment Type	Freeway Facility Density (pc/mi/h)1
A	≤11
B	>11-18
C	>18-26
D	>26-35
E	>35-45
F	>45 or any component segment V/C >1.00

Source: HCM 6th Edition 2016.
[1]Density is a measurement of the passenger car flow rate, as pc/mi/h, or passenger cars per mile per hour.

Bicycle, Pedestrian, and Transit Operations

Bicycle, transit, and pedestrian LOS can be affected by a lack of or incomplete bicycle lanes, infrequent or inaccessible transit service, or poor continuity of sidewalks or crossing facilities. The City General Plan CE defines LOS for bicycle, pedestrian, and transit facilities and services using a LOS rating system similar to roadway LOS criteria but based on conditions described in Table 3.13-4. Bicycle, pedestrian, and transit facilities are evaluated using the HCM 6th Edition 2016 methodology and multi-modal thresholds established in the City's General Plan CE. Table 3.13-5 and Table 3.13-6 summarize HCM 6th Pedestrian and Bike/Transit LOS Standards.

Table 3.13-4. LOS Criteria for Bicycle, Pedestrian, and Transit Facilities/Services

Facility Description			
LOS*	**Bicycle Links**	**Pedestrian Links**	**Transit Segments**
A	- Bike lane with ample width - Excellent pavement condition - Separation from vehicle traffic - Low vehicle volumes/speeds - Low heavy truck mix - No on-street parking	- Wide walkways allowing side-by-side walking and easy passing - Buffer from vehicle traffic (landscaping, parking, bike lanes) - Low vehicle volumes/speeds	- 15-minute or less headways - Higher transit travel speeds - High quality walkways to transit stops - Numerous transit stops with benches, shelters, trash cans, transit maps - Easy availability of seats onboard
B	- Narrower bike lane width - On-street parking allowed	- One-way street allows higher vehicle volumes/ speeds - Less buffer between sidewalk and vehicle traffic	- Fewer transit stops or stop amenities - Narrower walkways close to vehicle traffic
C	- Higher vehicle volumes/ speeds adjacent to bike lane	- Less distance between sidewalk and vehicle traffic - Higher vehicle volumes/ speeds adjacent to sidewalk	- Less frequent or reliable transit service - Lower travel speeds
D	- Higher vehicle volumes/ speeds adjacent to bike lane - Higher heavy truck mix	- Higher vehicle volumes/ speeds adjacent to sidewalk	- Less frequent or reliable transit service - Lower travel speeds - Fewer transit stops or stop amenities
E	- No bike lane - Narrow roadway shoulder width	- No sidewalk - Bike lane serves as roadway shoulder - Higher vehicle volumes/ speeds adjacent to sidewalk	- Infrequent or unreliable transit service - Unattractive or inaccessible stops

Table 3.13-4. LOS Criteria for Bicycle, Pedestrian, and Transit Facilities/Services (Continued)

Facility Description			
LOS*	**Bicycle Links**	**Pedestrian Links**	**Transit Segments**
F	- No bike lane - Poor pavement condition - High vehicle volumes/speeds - Higher heavy truck mix - High on-street parking	- No walkway or roadway shoulder - No buffer between pedestrians and vehicle traffic - High vehicle volumes/ speeds adjacent to sidewalk	- No transit service

* Each LOS description is compared to the LOS immediately above (e.g., LOS B is described compared to LOS A).
Source: City of San Luis Obispo 2014a, General Plan CE, Appendix B.

Table 3.13-5. Pedestrian Segment LOS Methodology

Pedestrian LOS Score	LOS by Average Pedestrian Space (sf/p)					
	>60	**>40-60**	**>24-40**	**>15-24**	**>8.0-15[a]**	**≤8.0[a]**
≤2.00	A	B	C	D	E	F
>2.00-2.75	A	B	C	D	E	F
>2.75-3.50	A	B	C	D	E	F
>3.50-4.25	A	B	C	D	E	F
>4.25-5.00	A	B	C	D	E	F
>5.00	A	B	C	D	E	F

Source: HCM 6th Edition 2016.
[a] In cross-flow situations, the LOS E/F threshold is 13 sf/person (sf/p).

Table 3.13-6. Bicycle and Transit Segment LOS Methodology

LOS	LOS Score
A	≤2.00
B	>2.00-2.75
C	>2.75-3.50
D	>3.50-4.25
E	>4.25-5.00
F	>5.00

Source: HCM 6th Edition 2016.

Study Facilities

Study Intersections

Multi-modal operations were evaluated at the following 24 study intersections:

1. LOVR / Foothill Boulevard*
2. LOVR / Prefumo Canyon Road

3. LOVR / Laguna Lane
4. LOVR / Oceanaire Drive
5. LOVR / Royal Way
6. LOVR / Madonna Road
7. LOVR / Froom Ranch Way
8. LOVR / Auto Park Way (Project Driveway)
9. LOVR / Calle Joaquin
10. LOVR / U.S. 101 SB Ramps**
11. LOVR / U.S. 101 NB**
12. LOVR / South Higuera Street
13. South Higuera Street / Vachell Lane
14. South Higuera Street / Suburban Road
15. South Higuera Street / Tank Farm Road
16. Prado Road / South Higuera Street
17. Prado Road – Elks Lane / U.S. 101 NB Ramps**
18. Madonna Road / Oceanaire Drive
19. Madonna Road / Dalidio Drive
20. Madonna Road / U.S. 101 SB Ramps**
21. Madonna Road / U.S. 101 NB Ramps**
22. Dalidio Drive / Froom Ranch Way (future intersection)
23. Prado Road / U.S. 101 SB Ramps (future intersection)**
24. Collector "A" / Collector "B" (onsite) (future intersection)

**Under County jurisdiction*

***Under Caltrans jurisdiction*

Study Roadway Segments

Multi-modal operations were evaluated on the following 13 study roadway segments:

1. LOVR (Prefumo Canyon Road to Oceanaire Drive)
2. LOVR (Oceanaire Drive to Madonna Road)
3. LOVR (Madonna Road to Froom Ranch Way)
4. LOVR (Froom Ranch Way to Calle Joaquin)
5. LOVR (U.S. 101 SB Ramps to U.S. 101 NB Ramps)
6. LOVR (U.S. 101 NB Ramps to South Higuera Street)
7. South Higuera Street (City Limit south to U.S. 101/Clover Ridge Lane)
8. South Higuera Street (LOVR to Tank Farm Road)

9. South Higuera Street (Tank Farm Road to Prado Road)
10. Tank Farm (South Higuera Street to Broad Street)*
11. Madonna Road (LOVR to Dalidio Drive)
12. Froom Ranch Way (LOVR to Dalidio Drive) [future extension]
13. Commercial Collector "A" (LOVR to Commercial Collector "B") [onsite, future roadway]

**Portion of segment under County jurisdiction*

U.S. 101 Study Segments

Traffic operations were evaluated on the following six Caltrans facilities, consisting of three U.S. 101 mainline roadway segments and three U.S. 101 intersection on-ramps and off-ramps:

1. U.S. 101 Mainline (NB / SB) – from South Higuera Street to LOVR
2. U.S. 101 Mainline (NB / SB) – from LOVR to Dalidio Drive/Prado Road
3. U.S. 101 Mainline (NB / SB) – from Prado Road to Madonna Road
4. U.S. 101 On- / Off-Ramps (NB / SB) at LOVR
5. U.S. 101 On- / Off-Ramps (NB) at Prado Road (SB future)
6. U.S. 101 On- / Off-Ramps (NB / SB) at Madonna Road

Existing Conditions LOS

Automobile Intersection LOS

Provided in Section 3.13.3.1, *Thresholds of Significance,* is a summary of the City's LOS objectives and standards for operation of automobile, bicycle, pedestrian, and transit facilities (see Table 3.13-3). Under existing conditions, three intersections are currently exceeding the applicable City minimum acceptable automobile LOS threshold. The following three unsignalized intersections — all with side-street stop-control — were found to operate at unacceptable LOS (see Appendix J; Table 3.13-7):

- LOVR and Oceanaire Drive, which operates at LOS F (Delay 52.5) during AM and LOS E (Delay 42.2) during PM peak hours
- LOVR and Auto Park Way, which operates at LOS E (Delay 37.1) during PM peak hour
- South Higuera Street and Vachell Lane, which operates at LOS F (Delay 67.8) during AM and LOS E (Delay 43.8) during PM peak hours

Table 3.13-7. Existing Intersection LOS – Automobile

ID	Study Intersections	Control	LOS Target	Peak Hour	Existing Conditions Delay1	LOS2	V/C3
1	LOVR / Foothill Boulevard	Signal	D	AM	23.9	C	
				PM	37.0	D	
2	LOVR / Prefumo Canyon Road	TWSC[4]	D	AM	18.7	C	
				PM	20.9	C	
3	LOVR / Laguna Lane	Signal	D	AM	13.7	B	
				PM	8.2	A	
4	LOVR / Oceanaire Drive	TWSC[4]	D	AM	**52.5**	**F**	**0.57**
				PM	**42.2**	**E**	**0.42**
5	LOVR / Royal Way	Signal	D	AM	34.8	C	
				PM	17.6	B	
6	LOVR / Madonna Road	Signal	D	AM	37.4	D	
				PM	37.7	D	
7	LOVR / Froom Ranch Way	Signal	D	AM	19.5	B	
				PM	35.3	D	
8	LOVR / Auto Park Way	TWSC[4]	D	AM	14.6	B	
				PM	**37.1**	**E**	**0.52**
9	LOVR / Calle Joaquin	Signal	D	AM	5.3	A	
				PM	7.0	A	
10	LOVR /U.S. 101 SB Ramps	Signal	C	AM	12.2	B	
				PM	12.9	B	
11	LOVR /U.S. 101 NB Ramps	Signal	C	AM	23.4	C	
				PM	23.5	C	
12	LOVR / South Higuera Street	Signal	D	AM	13.5	B	
				PM	14.4	B	
13	South Higuera Street / Vachell Lane	TWSC	D	AM	**67.8**	**F**	**0.84**
				PM	**43.8**	**E**	**0.84**
14	South Higuera Street / Suburban Road	Signal	D	AM	5.9	A	
				PM	11.2	B	
15	South Higuera Street / Tank Farm Road	Signal	D	AM	22.2	C	
				PM	27.7	C	
16	South Higuera Street / Prado Road	Signal	D	AM	18.5	B	
				PM	28.9	C	
17	Prado Road/U.S. 101 NB Ramps / Elks Lane	AWSC[5]	C	AM	9.1	A	
				PM	13.5	B	
18	Madonna Road / Oceanaire Drive[6]	Signal	D	AM	39.3	D	
				PM	27.2	C	
19	Madonna Road / Dalidio Drive	Signal	D	AM	19.9	B	
				PM	53.2	D	
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	Signal	C	AM	30.7	C	
				PM	31.7	C	
21	Madonna Road / U.S. 101 NB Ramps	Signal	C	AM	14.7	B	
				PM	32.4	C	

[1]Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2]LOS – Level of Service
[3] V/C ratio reported for worst movement, for locations with unacceptable LOS only.
[4]TWSC – Two-way-stop controlled intersection.
[5]AWSC – All-way stop controlled intersection.
[6]HCM 6th Methodology does not support intersections with more than four approaches. Hence HCM 2000 methodology used for Intersection 18.

Table 3.13-7. Existing Intersection LOS – Automobile (Continued)

Bold indicates unacceptable operations.
Delay and LOS results for Intersections 22, 23 and 24 are excluded from existing conditions analysis as these intersections are evaluated in Near-Term and Cumulative Scenarios.
Source: TIS; see Appendix J.

Pedestrian Intersection LOS

Under existing conditions, the following intersections are currently exceeding the City's minimum pedestrian LOS threshold, all of which represent locations with uncontrolled crossings of multi-lane arterial streets (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-8):

- LOVR and Prefumo Canyon Road NB and SB directions, which operate at LOS F during AM and PM peak hours
- LOVR and Oceanaire Drive NB direction, which operates at LOS F during AM and during PM peak hours
- LOVR and Auto Park Way NB and SB directions, which operate at LOS F during AM and PM peak hours
- South Higuera Street and Vachell Lane NB and SB directions, which operate at LOS F during AM and PM peak hours

Table 3.13-8. Existing Intersection LOS – Pedestrian

ID	Study Intersections	Approach	Target LOS	AM Peak Hour Ped. Crosswalk Score	AM Peak Hour LOS	PM Peak Hour Ped. Crosswalk Score	PM Peak Hour LOS
1	LOVR / Foothill Boulevard	EB	C	1.75	B	1.75	B
		WB	C	2.45	B	2.39	B
		NB	C	2.70	C	2.75	C
		SB	C	2.74	C	2.87	C
2	LOVR / Prefumo Canyon Road[1]	EB	C	N/A			
		WB	C				
		NB	C	**>5**	**F**	**>5**	**F**
		SB	C	**>5**	**F**	**>5**	**F**
3	LOVR / Laguna Lane	EB	C	n/a			
		WB	C	2.39	B	2.22	B
		NB	C	2.82	C	2.79	C
		SB	C	2.87	C	2.98	C
4	LOVR / Oceanaire Drive[1]	EB	C	N/A			
		WB	C				
		NB	C	**>5**	**F**	**>5**	**F**
		SB	C	N/A			
5	LOVR / Royal Way	EB	C	2.01	B	2.01	B
		WB	C	2.00	B	1.98	B
		NB	C	3.09	C	3.11	C
		SB	C	3.09	C	3.11	C

Table 3.13-8. Existing Intersection LOS – Pedestrian (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour Ped. Crosswalk Score	AM Peak Hour LOS	PM Peak Hour Ped. Crosswalk Score	PM Peak Hour LOS
6	LOVR / Madonna Road	EB	C	2.13	B	2.13	B
		WB	C	2.97	C	3.05	C
		NB	C	2.98	C	3.16	C
		SB	C	3.36	C	3.40	C
7	LOVR / Froom Ranch Way	EB	C	2.50	C	2.64	C
		WB	C	2.39	B	2.44	B
		NB	C	3.08	C	3.22	C
		SB	C	3.07	C	3.21	C
8	LOVR / Auto Park Way[1]	EB	C	N/A			
		WB	C				
		NB	C	**>5**	**F**	**>5**	**F**
		SB	C	**>5**	**F**	**>5**	**F**
9	LOVR / Calle Joaquin	EB	C	2.48	B	2.48	B
		WB	C	2.09	B	2.09	B
		NB	C	3.09	C	3.34	C
		SB	C	2.96	C	3.21	C
10	LOVR / U.S. 101 SB Ramps	EB	C	1.90	B	2.21	B
		WB	C	2.25	B	2.21	B
		NB	C	2.89	C	3.02	C
		SB	C	2.94	C	3.26	C
11	LOVR / U.S. 101 NB Ramps	EB	C	2.45	B	2.54	C
		WB	C	1.43	A	1.43	A
		NB	C	2.78	C	2.80	C
		SB	C	2.89	C	3.00	C
12	LOVR / South Higuera Street	EB	C	2.70	C	2.73	C
		WB	C	n/a			
		NB	C	2.30	B	2.36	B
		SB	C	2.76	C	2.82	C
13	South Higuera Street / Vachell Lane[1]	EB	C	N/A			
		WB	C				
		NB	C	**>5**	**F**	**>5**	**F**
		SB	C	**>5**	**F**	**>5**	**F**
14	South Higuera Street / Suburban Road	EB	C	N/A			
		WB	C	2.18	B	2.25	B
		NB	C	2.92	C	3.05	C
		SB	C	2.71	C	2.83	C
15	South Higuera Street / Tank Farm Road	EB	C	2.03	B	2.04	B
		WB	C	2.94	C	3.03	C
		NB	C	3.29	C	3.47	C
		SB	C	2.67	C	2.96	C
16	South Higuera Street / Prado Road	EB	C	2.46	B	2.58	C
		WB	C	2.38	B	2.45	B
		NB	C	2.71	C	2.96	C
		SB	C	2.75	C	2.89	C
17	Prado Road/U.S. 101 NB Ramps / Elks Lane	EB	C	N/A			
		WB	C				
		NB	C				

Table 3.13-8. Existing Intersection LOS – Pedestrian (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour Ped. Crosswalk Score	LOS	PM Peak Hour Ped. Crosswalk Score	LOS
		SB	C				
18	Madonna Road / Oceanaire Drive	EB	C	2.75	C	2.90	C
		WB	C	3.21	C	3.30	C
		NB	C	2.01	B	2.02	B
		SB	C	2.04	B	1.97	B
		SE	C	1.75	B	1.75	B
		NE	C	1.77	B	1.75	B
19	Madonna Road / Dalidio Drive	EB	C	2.99	C	3.13	C
		WB	C	3.02	C	3.11	C
		NB	C	2.07	B	2.13	B
		SB	C	1.99	B	2.00	B
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	EB	C	2.96	C	3.11	C
		WB	C	3.00	C	3.03	C
		NB	C	2.81	C	2.84	C
		SB	C	2.17	B	2.19	B
21	Madonna Road / U.S. 101 NB Ramps	EB	C	2.96	C	2.98	C
		WB	C	2.79	C	2.79	C
		NB	C	2.00	B	2.02	B
		SB	C	2.09	B	2.13	B

Notes: N/A - Pedestrian intersection LOS methodology excludes crossings of stop-sign controlled approaches.
[1]For unsignalized AWSC intersections, pedestrian delay is reported as pedestrian LOS and methodology is not supported for crosswalks that intersect stop-sign controlled approaches. For unsignalized TWSC intersections, pedestrian LOS methodology is limited to the uncontrolled crossings.
NB – northbound
SB – southbound
WB – westbound
EB - eastbound
Source: TIS; see Appendix J.

Bicycle Intersection LOS

Under existing conditions, the following intersection is currently exceeding the City's minimum bicycle LOS threshold (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-9):

- South Higuera Street and Tank Farm Road, which operates at LOS E (Bicycle LOS Score 4.56) in the WB direction during PM peak hour, reflecting the lack of a WB bicycle lane at the intersection approach. An existing WB bicycle lane on Tank Farm Road terminates east of the intersection.

Table 3.13-9. Existing Intersection LOS – Bicycle

ID	Study Intersections	Approach	Target LOS	AM Peak Hour Bicycle LOS Score	AM Peak Hour Bicycle LOS	PM Peak Hour Bicycle LOS Score	PM Peak Hour Bicycle LOS
1	LOVR / Foothill Boulevard	EB	D	2.71	C	2.71	C
		WB	D	3.27	C	3.92	D
		NB	D	2.77	C	3.03	C
		SB	D	2.56	C	1.89	B
3	LOVR / Laguna Lane	EB	D	N/A			
		WB	D	3.26	C	2.80	C
		NB	D	1.90	B	2.22	B
		SB	D	1.44	A	1.28	A
5	LOVR / Royal Way	EB	D	3.13	C	2.96	C
		WB	D	3.30	C	2.94	C
		NB	D	2.67	C	3.01	C
		SB	D	2.20	B	1.87	B
6	LOVR / Madonna Road	EB	D	3.38	C	3.21	C
		WB	D	3.62	D	4.28	D
		NB	D	1.66	B	2.08	B
		SB	D	2.79	C	2.47	B
7	LOVR / Froom Ranch Way	EB	D	3.43	C	4.28	D
		WB	D	2.04	B	2.34	B
		NB	D	1.77	B	2.09	B
		SB	D	1.72	B	1.76	B
8	LOVR / Auto Park Way	EB	D	N/A			
		WB	D				
		NB	D				
		SB	D				
9	LOVR / Calle Joaquin	EB	D	3.07	C	3.01	C
		WB	D	3.13	C	3.21	C
		NB	D	1.57	B	1.96	B
		SB	D	1.77	B	0.71	A
10	LOVR /U.S. 101 SB Ramps	EB	D	N/A			
		WB	D	2.72	C	2.57	C
		NB	D	1.66	B	2.12	B
		SB	D	1.52	B	1.86	B
11	LOVR /U.S. 101 NB Ramps	EB	D	3.74	D	3.77	D
		WB	D	1.39	A	1.39	A
		NB	D	1.73	B	2.05	B
		SB	D	2.22	B	2.18	B
12	LOVR / South Higuera Street	EB	D	1.86	B	1.62	B
		WB	D	N/A			
		NB	D	1.97	B	1.75	B
		SB	D	2.21	B	3.22	C
14	South Higuera Street / Suburban Road	EB	D	N/A			
		WB	D	1.21	A	1.93	B
		NB	D	2.20	B	1.91	B
		SB	D	1.95	B	2.35	B

Table 3.13-9. Existing Intersection LOS – Bicycle (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour Bicycle LOS Score	AM Peak Hour Bicycle LOS	PM Peak Hour Bicycle LOS Score	PM Peak Hour Bicycle LOS
15	South Higuera Street / Tank Farm Road	EB	D	2.71	C	2.71	C
		WB	D	3.64	D	**4.56**	**E**
		NB	D	2.00	B	2.12	B
		SB	D	1.76	B	2.17	B
16	South Higuera Street / Prado Road	EB	D	2.48	B	2.34	B
		WB	D	2.84	C	3.50	D
		NB	D	1.65	B	2.32	B
		SB	D	1.94	B	1.89	B
18	Madonna Road / Oceanaire Drive	EB	D	2.77	C	2.82	C
		WB	D	1.26	A	1.76	B
		NB	D	2.82	C	2.79	C
		SB	D	2.70	C	2.22	B
		SE	D	2.62	C	2.62	C
		NE	D	2.20	B	2.20	B
19	Madonna Road / Dalidio Drive	EB	D	2.15	B	2.04	B
		WB	D	1.58	B	1.94	B
		NB	D	3.05	C	3.28	C
		SB	D	2.87	C	2.95	C
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	EB	D	1.94	B	2.00	B
		WB	D	1.62	B	1.91	B
		NB	D	3.70	D	3.66	D
		SB	D	2.94	C	2.99	C
21	Madonna Road / U.S. 101 NB Ramps	EB	D	2.71	C	2.30	B
		WB	D	1.58	B	2.05	B
		NB	D	2.25	B	2.33	B
		SB	D	N/A			

Notes: Bicycle LOS summary excludes unsignalized intersections and locations where no bicycle facilities are provided as HCM 6th Bike LOS Methodology do not model segments bounded by unsignalized intersections.
Source: TIS; see Appendix J.

Vehicle Queuing Analysis

Intersection LOS alone may not fully represent traffic operations at congested intersections, which can be affected by queuing vehicles backing up and blocking access to the intersection, increasing vehicular delay. For analysis of turn pocket operations, vehicle queues are typically evaluated based on the calculated 95th-percentile queue, which is defined as the queue length that has only a 5 percent probability of being exceeded during the analysis time period. Several intersections in the Project vicinity experience 95th-percentile queues that are estimated to exceed the available turn pocket storage. Under existing conditions, the following seven intersections have vehicle queues that exceed turn pocket capacity during AM or PM peak hours (see Appendix J; refer to Table 3.13-10):

Table 3.13-10. Existing Conditions – 95th-Percentile Queuing

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Existing Conditions
1	LOVR/Foothill Boulevard	WBR	180	AM	0
				PM	0
		NBL	120	AM	0
				PM	5
		NBR	370	AM	35
				PM	120
		SBL	490	AM	#485
				PM	#248
3	LOVR/Laguna Lane	WBL	Trap Lane	AM	90
				PM	40
		WBR	Trap Lane	AM	0
				PM	0
		NBR	80	AM	10
				PM	35
		SBL	120	AM	45
				PM	25
5	LOVR/Royal Way	EBR	70	AM	10
				PM	0
		WBR	70	AM	0
				PM	0
		NBL	110	AM	25
				PM	60
		SBL	160	AM	15
				PM	15
		SBR	50	AM	0
				PM	0
6	LOVR/Madonna Road	EBL	230	AM	**#255**
				PM	#145
		WBL	Trap Lane	AM	70
				PM	190
		WBR	170	AM	45
				PM	75
		NBL	200	AM	70
				PM	140
		NBR	175	AM	35
				PM	50
		SBL	350	AM	#330
				PM	185
7	LOVR/Froom Ranch Way	EBL	250	AM	60
				PM	#240
		WBL	295	AM	75
				PM	195
		WBR	50	AM	0
				PM	45
		NBL	300	AM	110
				PM	255
		SBL	160	AM	30
				PM	100

Table 3.13-10. Existing Conditions – 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Existing Conditions
8	LOVR/Auto Park Way (Project Driveway)	EBL	100	AM	-
				PM	-
		EBR	100	AM	-
				PM	-
		WBL	Trap Lane	AM	-
				PM	-
		WBR	175	AM	-
				PM	-
		NBL	200	AM	-
				PM	-
		SBL	100	AM	-
				PM	-
		SBR	100	AM	-
				PM	-
9	LOVR/Calle Joaquin	EBL	260	AM	25
				PM	35
		EBR	260	AM	10
				PM	10
		WBL	100	AM	50
				PM	**105**
		NBL	130	AM	10
				PM	m5
		NBR	130	AM	20
				PM	m5
		SBL	120	AM	20
				PM	10
		SBR	120	AM	0
				PM	5
10	LOVR/U.S. 101 SB Ramps	WBR	190	AM	110
				PM	**245**
		NBL	220	AM	m25
				PM	m60
		SBR	120	AM	50
				PM	**#220**
11	LOVR/U.S. 101 NB Ramps	EBL	610	AM	290
				PM	#330
		NBL	400	AM	75
				PM	120
		SBR	133	AM	m0
				PM	0
12	LOVR/South Higuera Street	EBL	Trap Lane	AM	#315
				PM	215
		EBR	100	AM	40
				PM	40
		NBL	200	AM	15
				PM	20
		SBR	Trap Lane	AM	65
				PM	200

Table 3.13-10. Existing Conditions – 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Existing Conditions
14	South Higuera Street/Suburban Road	WBL	170	AM	80
				PM	**270**
		WBR	Trap Lane	AM	30
				PM	70
		SBL	170	AM	25
				PM	25
15	South Higuera Street/Tank Farm Road	EBR	Trap Lane	AM	0
				PM	0
		WBL	Trap Lane	AM	165
				PM	340
		WBR	250	AM	55
				PM	180
		NBL	140	AM	40
				PM	55
		NBR	100	AM	85
				PM	30
		SBL	165	AM	**#410**
				PM	**#760**
16	South Higuera Street/ Prado Road	EBL	Trap Lane	AM	60
				PM	75
		EBR	100	AM	15
				PM	20
		WBL	105	AM	70
				PM	120
		WBR	200	AM	0
				PM	15
		NBL	100	AM	**195**
				PM	**#525**
		SBL	200	AM	**#210**
				PM	110
18	Madonna Road/Oceanaire Drive	EBL	115	AM	40
				PM	40
		WBL	115	AM	#55
				PM	**#155**
		WBR	100	AM	0
				PM	0
		NBR	50	AM	0
				PM	0
19	Madonna Road/Dalidio Drive	EBL	120	AM	40
				PM	55
		WBL	280	AM	70
				PM	150
		NBR	150	AM	10
				PM	45
		SBR	50	AM	0
				PM	0
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	EBL	100	AM	50
				PM	55

Table 3.13-10. Existing Conditions – 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Existing Conditions
		WBL	260	AM	145
				PM	m#215
		NBL	Trap Lane	AM	185
				PM	#425
		NBR	275	AM	125
				PM	25
		SBL	Trap Lane	AM	20
				PM	30
		SBR	100	AM	0
				PM	0
21	Madonna Road/U.S. 101 NB Ramps	EBL	435	AM	125
				PM	#295
		NBL	185	AM	90
				PM	180

Notes: Queue length rounded to nearest 5 feet. Queuing analysis is reported for signalized intersections only.
Bold: 95th-percentile volume exceeds capacity.
m queue is metered by upstream intersection.
95th-percentile queue exceeds capacity.
Trap - denotes design where the thru-lane terminates in a turn lane.
ft – feet
- = no data available
Westbound thru-lane (WBL); westbound right-turn lane (WBR); eastbound thru-lane (EBL); northbound thru-lane (NBL); northbound right-turn lane (NBR); northbound trap (NBT); southbound thru-lane (SBL); southbound trap (SBT); southbound right-turn lane (SBR); eastbound right-turn lane (EBR).
Source: TIS; see Appendix J.

- LOVR and Madonna Road (eastbound thru-lane [EBL] during AM peak hour)
- LOVR and Calle Joaquin (westbound thru-lane [WBL] during PM peak hour)
- LOVR and U.S. 101 SB Ramps (southbound right-turn lane [SBR] and westbound right-turn lane [WBR] during PM peak hour)
- South Higuera Street and Suburban Road (WBL during PM peak hours)
- South Higuera Street and Tank Farm Road (southbound thru-lane [SBL] during both the AM and PM peak hour)
- South Higuera Street and Prado Road (northbound thru-lane [NBL] during both the AM and PM peak hour and SBL during AM peak hour)
- Madonna Road and Oceanaire Drive (WBL during PM peak hour)

Automobile Roadway Segment LOS

Under existing conditions, the following roadway segments currently exceed the applicable minimum automobile LOS threshold (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-11):

- LOVR from Oceanaire Drive to Madonna Road operates at LOS F during AM and PM peak hour in the SB direction
- LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps operates at LOS E during PM peak hour in the SB direction
- South Higuera Street from LOVR to Tank Farm Road operates at LOS E during PM peak hour in the NB direction

Pedestrian Roadway Segments LOS

Under existing conditions, the following roadway segments exceed the City's minimum pedestrian LOS threshold, largely due to sidewalk gaps or minimal buffer between pedestrians and heavy vehicular traffic lanes (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-12):

- LOVR from Prefumo Canyon Road to Oceanaire Drive operates at LOS D during AM peak hour in the SB direction and LOS D during PM peak hour in the NB direction.
- LOVR from Oceanaire Drive to Madonna Road operates at LOS D during AM peak hour in the SB direction.
- LOVR from Madonna Road to Froom Ranch Way operates at LOS F during AM peak hour and at LOS D during PM peak hour in the NB direction.
- LOVR from Froom Ranch Way to Calle Joaquin operates at LOS D during AM and PM peak hours in the SB direction.
- LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps operates at LOS D during AM peak hour in the SB direction and operates at LOS D during PM peak hour in the NB direction.
- LOVR from U.S. 101 NB Ramps to South Higuera Street operates at LOS D during AM and PM peak hours in the SB direction and operates at LOS D during AM peak hour in the NB direction.
- South Higuera Street from LOVR to Tank Farm Road operates at LOS D during PM peak hour in the SB direction.
- South Higuera Street from Tank Farm Road to Prado Road operates at LOS F during AM and PM peak hours in the SB direction.
- Madonna Road from LOVR to Dalidio Drive operates at LOS F during AM peak hour in the eastbound (EB) direction and operates at LOS F during AM peak hour in the WB direction and at LOS D during PM peak hour in the WB direction.

Bicycle Roadway Segment LOS

Under existing conditions, none of the studied roadway segments exceed the City's minimum bicycle LOS thresholds (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-13).

Transit Roadway Segment LOS

Transit service headways or frequency of service to the Project vicinity is approximately 60 minutes. Under existing conditions, none of the studied roadway segments exceed the City's minimum transit LOS thresholds (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-14).

U.S. 101 Roadway Segments and On-/Off-Ramp Intersections

Under existing conditions, the following freeway segments currently exceed Caltrans minimum LOS thresholds (see Section 3.13.3.1 below and Appendix J; refer to Table 3.13-15):

- U.S. 101 SB, north of South Higuera Street operates at LOS D during PM peak hour
- U.S. 101 NB, south of Madonna Road operates at LOS D during PM peak hour
- U.S. 101 NB, Madonna Road Off-amp operates at LOS D during AM and PM peak hour
- U.S. 101 SB Madonna Road On-Ramp operates at LOS D during PM peak hour

Table 3.13-11. Existing Segment LOS – Automobile

ID	Roadway Segment	Direction	LOS Threshold	AM Peak				PM Peak			
				Travel Speed (mph)	BFFS (mph)	Travel Speed/ BFFS (%)	LOS	Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS (%)	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	D	31.91	45.67	69.87	B	23.56	45.73	51.5	C
		NB	D	34.47	45.97	74.98	B	30.82	45.77	67.3	B
2	LOVR from Oceanaire Drive to Madonna Road	SB	D	**11.22**	**42.64**	26.31	**F**	**11.61**	**42.64**	27.2	**F**
		NB	D	23.25	45.68	50.90	C	23.03	45.68	50.4	C
3	LOVR from Madonna Road to Froom Ranch Way	SB	D	27.17	44.82	60.62	C	19.51	44.83	43.5	D
		NB	D	20.84	44.82	46.50	D	20.85	44.82	46.5	D
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	D	39.24	44.80	87.59	A	35.99	44.80	80.3	A
		NB	D	33.43	45.22	73.93	B	28.47	45.22	63.0	C
5	LOVR from U.S. 101 SB Ramps toU.S. 101 NB Ramps	SB	D	22.43	46.41	48.33	D	**17.79**	**45.33**	39.2	**E**
		NB	D	21.41	46.42	46.12	D	23.07	45.36	50.9	C
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	D	22.51	40.64	55.39	C	24.06	40.78	59.0	C
		NB	D	27.58	41.19	66.96	C	32.02	45.77	70.0	B
7	South Higuera Street from City Limit south to U.S. 101/Clover Ridge Lane	SB	D	44.67	45.72	97.70	A	44.02	45.72	96.3	A
		NB	D	40.60	45.73	88.78	A	42.49	45.73	92.9	A
8	South Higuera Street from LOVR to Tank Farm Road	SB	D	24.76	45.33	54.62	C	23.36	45.34	51.5	C
		NB	D	20.23	45.68	44.29	D	**15.04**	**45.69**	**32.9**	**E**
9	South Higuera Street from Tank Farm Road to Prado Road	SB	D	32.70	45.21	72.33	B	25.66	45.23	56.7	C
		NB	D	29.99	45.21	66.33	C	28.19	45.24	62.3	C
10	Tank Farm Road from South Higuera Street to Broad Street	EB	D	34.11	43.15	79.05	B	34.37	43.15	79.7	B
		WB	D	33.95	42.40	80.07	A	34.66	42.38	81.8	A
11	Madonna Road from LOVR to Dalidio Drive	EB	D	25.85	38.92	66.42	C	26.36	39.14	67.3	B
		WB	D	21.51	38.84	55.38	C	21.21	39.15	54.2	C

Bold indicates unacceptable operations
mph – miles per hour
BFFS – base free-flow speed
Source: TIS; see Appendix J.

Table 3.13-12. Existing Segment LOS – Pedestrian

ID	Roadway Segment	Direction	LOS Threshold	AM Peak		PM Peak	
				Segment Score	LOS	Segment Score	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	C	**3.54**	**D**	3.13	C
		NB	C	3.22	C	**4.05**	**D**
2	LOVR from Oceanaire Drive to Madonna Road	SB	C	**3.65**	**D**	3.13	C
		NB	C	2.74	B	3.32	B
3	LOVR from Madonna Road to Froom Ranch Way	SB	C	3.29	C	3.34	C
		NB	C	**3.12**	**F**	**3.51**	**D**
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	C	**4.03**	**D**	**4.17**	**D**
		NB	C	3.30	C	3.36	C
5	LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps	SB	C	**3.61**	**D**	3.43	C
		NB	C	3.45	C	**3.65**	**D**
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	C	**4.18**	**D**	**3.62**	**D**
		NB	C	**3.51**	**D**	3.17	C
7	South Higuera Street from City Limit south to U.S. 101/Clover Ridge Lane	SB	C	-	-	-	-
		NB	C	-	-	-	-
8	South Higuera Street from LOVR to Tank Farm Road	SB	C	3.10	C	**3.66**	**D**
		NB	C	2.71	C	2.81	C
9	South Higuera Street from Tank Farm Road to Prado Road	SB	C	**3.32**	**F**	**4.41**	**F**
		NB	C	2.45	C	3.19	C
10	Tank Farm Road from South Higuera Street to Broad Street	EB	C	-	-	-	-
		WB	C	-	-	-	-
11	Madonna Road from LOVR to Dalidio Drive	EB	C	**4.17**	**F**	3.05	C
		WB	C	**3.58**	**F**	**3.93**	**D**

Bold indicates unacceptable operations.
Source: TIS; see Appendix J.

Table 3.13-13. Existing Segment LOS – Bicycle

ID	Roadway Segment	Direction	LOS Threshold	AM Peak		PM Peak	
				Segment Score	LOS	Segment Score	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	D	2.10	B	2.13	B
		NB	D	1.72	A	2.23	B
2	LOVR from Oceanaire Drive to Madonna Road	SB	D	2.37	C	2.20	B
		NB	D	1.57	A	1.76	A
3	LOVR from Madonna Road to Froom Ranch Way	SB	D	2.60	C	2.61	C
		NB	D	1.41	A	1.77	A
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	D	2.39	C	3.34	C
		NB	D	1.84	A	1.55	A
5	LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps	SB	D	2.80	C	2.69	C
		NB	D	2.58	C	2.87	C
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	D	2.36	C	2.29	C
		NB	D	1.80	A	1.84	A
7	South Higuera Street from City Limit south to U.S. 101/Clover Ridge Lane	SB	D	1.49	A	1.72	A
		NB	D	1.60	A	1.48	A
8	South Higuera Street from LOVR to Tank Farm Road	SB	D	2.49	C	2.85	C
		NB	D	2.82	C	2.84	C
9	South Higuera Street from Tank Farm Road to Prado Road	SB	D	2.38	C	2.65	C
		NB	D	1.98	A	2.36	C
10	Tank Farm Road from South Higuera Street to Broad Street	EB	D	2.67	C	2.64	C
		WB	D	2.90	C	2.94	C
11	Madonna Road from LOVR to Dalidio Drive	EB	D	3.04	C	2.97	C
		WB	D	2.16	B	2.45	C

Bold indicates unacceptable operations.
Source: TIS; see Appendix J.

Table 3.13-14. Existing Segment LOS – Transit

ID	Roadway Segment	Direction	LOS Threshold	AM Peak		PM Peak	
				Segment Score	LOS	Segment Score	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	D	4.12	D	3.06	C
		NB	D	3.07	C	3.09	C
2	LOVR from Oceanaire Drive to Madonna Road	SB	D	3.76	D	2.43	C
		NB	D	2.43	B	2.86	C
3	LOVR from Madonna Road to Froom Ranch Way	SB	D	3.53	D	3.74	C
		NB	D	2.34	B	2.12	B
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	D	2.95	C	3.05	C
		NB	D	3.21	C	3.37	C
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	D	3.86	D	3.34	C
		NB	D	3.59	D	3.29	C
8	South Higuera Street from LOVR to Tank Farm Road	SB	D	3.13	C	3.96	D
		NB	D	4.06	D	4.14	D
9	South Higuera Street from Tank Farm Road to Prado Road	SB	D	3.51	D	3.96	D
		NB	D	3.21	C	4.14	D
11	Madonna Road from LOVR to Dalidio Drive	EB	D	3.21	C	3.13	C
		WB	D	3.29	C	3.35	C

Segments with no transit stops are excluded from the analysis.
Source: TIS; see Appendix J.

Table 3.13-15. Existing Segment LOS – Freeway Mainline, Ramps and Weaving Sections

Interchange Location	Target LOS	Segment Type	Lanes	AM Peak Hour			PM Peak Hour		
				Volume	Density (pc/mi/h)	LOS	Volume	Density (pc/mi/h)	LOS
U.S. 101 NB									
U.S. 101 NB, south of South Higuera Street	C	Freeway	2	2,336	19.8	C	2,374	20.2	C
U.S. 101 NB, south of LOVR	C	Freeway	2	2,601	22.1	C	1,991	16.9	B
U.S. 101 NB LOVR Off-Ramp	C	Diverge	1	546	26.8	C	634	20.6	C
U.S. 101 NB LOVR On-Ramp	C	Merge	1	215	26.9	C	392	22.5	C
U.S. 101 NB, north of Prado Road	C	Freeway	2	2,311	19.6	C	2,224	18.9	C
U.S. 101 NB Prado Road Off-Ramp	C	Diverge	1	225	23.5	C	145	22.5	B
U.S. 101 NB Prado Road On-Ramp	C	Merge	1	250	24.4	C	495	26.1	C
U.S. 101 NB, south of Madonna Road	C	Freeway	2	2,843	24.3	C	3,097	**26.9**	**D**
U.S. 101 NB, Madonna Road Off-Ramp	C	Diverge	1	279	**28.9**	**D**	349	**31.6**	**D**
U.S. 101 SB									
U.S. 101 SB, north of Madonna Road	C	Freeway	2	1,968	20.4	C	2,926	25.1	C
U.S. 101 SB Madonna Road On-Ramp	C	Merge	1	179	22.0	C	348	**32.4**	**D**
U.S. 101 SB, north of Prado Road	C	Freeway	2	1,828	15.5	B	2,976	25.6	C
U.S. 101 SB, south of LOVR	C	Freeway	2	1,213	14.8	B	2,211	18.8	C
U.S. 101 SB LOVR Off-Ramp	C	Diverge	1	587	12.5	B	557	22.7	C
U.S. 101 SB LOVR On-Ramp	C	Merge	1	359	17.4	B	667	27.0	C
U.S. 101 SB, north of South Higuera Street	C	Freeway	2	2,177	18.5	C	3,519	**31.9**	**D**

Bold indicates unacceptable operations.
pc/mi/h - passenger cars per mile per hour
Source: TIS; see Appendix J.

Near-Term (2025) Conditions LOS

Near-Term conditions represent conditions with approved and pending developments and roadway improvement projects in place. For the purposes of the TIS, this is estimated at roughly Year 2025, the year when the Project would be fully operational. This includes approved/pending land development projects, such as buildout of the San Luis Ranch and Avila Ranch Specific Plan, transportation infrastructure, improvement projects, as well as pro-rated regional growth increments consistent with the City's model forecasts. Based on the list of approved, pending, and reasonably foreseeable projects, future transportation demands were estimated (see Table 3.0-1 and Appendix J). It should be noted that for the purposes of providing a comprehensive analysis, two potential scenarios are considered in the TIS for Near-Term Conditions: one with completion of the U.S. 101/Prado Interchange Project (Scenario 1), and one without (Scenario 2). For the purposes of evaluating potential project impacts, results from Scenario 2 are presented below to provide a conservative analysis of conditions in the case that the Prado Interchange project is not yet completed within the Near-Term planning horizon. Table 3.13-16 provides a summary of those Near-Term transportation projects assumed in the analysis.

Table 3.13-16. Near-Term Transportation Project List

#	Project	Description
1	Prado Road Bridge Replacement	Replace existing bridge over San Luis Obispo Creek; widen to four thru-lanes plus center turn lane. Includes width for bike lanes and sidewalk-level Class I Path on both sides of Prado Road.
2	Prado Road/South Higuera Street Improvements	Install second NB left-turn lane.
		EB approach to remain as exists now (one left, one through, one right).
		Extend WB right-turn storage.
		Additional bicycle/pedestrian safety improvements include protected intersection at northwest and southwest corners, bike box at WB approach and two-stage left-turn box for NB to WB movement.
3	Prado Road Interchange and Dalidio Drive/Prado Road Widening	Two Near-Term Scenarios considered for FRSP analysis: • Scenario 1: New interchange with overcrossing at U.S. 101/Prado Road with NB Ramps • Scenario 2: No overcrossing or modifications to Prado Road/U.S. 101 NB Ramps
		Interchange Improvements include: • Widen Dalidio Drive/Prado Road to four lanes with center turn lane/median from Madonna Road to South Higuera Street, including bike lanes and Class I Paths on both sides of Prado Road.
		For Near-Term, assume Class II bike lanes only between U.S. 101/NB Ramps and San Luis Obispo Creek Bridge.
		Elks Lane to be realigned approximately 700 feet to the southeast.
4	Froom Ranch Way Extension	Extend Froom Ranch Way from LOVR to Dalidio Drive as two-lane collector with bike lanes and Class I Bike Path from Perfumo Creek to Dalidio Drive.

Table 3.13-16. Near-Term Transportation Project List (Continued)

#	Project	Description
5	LOVR/Froom Ranch Way Improvements	Install dedicated EBR.
		Extend storage of WBR.
		Install second WB left-turn lane.
		Construct protected intersection for bicycle/pedestrian safety.
6	Froom Ranch Way/Dalidio Drive Roundabout	Construct two-lane roundabout at Froom Ranch Way/Dalidio Drive.
7	Madonna Road/Dalidio Drive Improvements	Extend WB left-turn storage
		Install second WB left-turn lane.
		Install EBR.
		Install split phasing for NB/SB and optimize timing.
		Install second NB left-turn lane.
8	LOVR/South Higuera Street	Extend EB right-turn storage.
9	South Higuera Street/Vachell Lane	Restrict Vachell Lane access to right-in/right-out only.
10	South Higuera Street/ Suburban Road	Restripe WB approach to provide left-turn lane and shared left/right-turn lane.
11	Buckley Road Extension	Extend Buckley Road west to new signalized intersection with South Higuera Street.

EBR – eastbound right-turn lane
WBR – westbound right-turn lane
Source: TIS; see Appendix J.

Automobile Intersection LOS

Under Near-Term conditions, 18 intersections meet the adopted intersection LOS threshold for automobiles (vehicle queuing or backup is discussed below), the following three intersections are projected to exceed the adopted minimum automobile LOS threshold (see Section 3.13.3.1 below and Appendix J; Table 3.13-17):

- LOVR and Oceanaire Drive, which is projected to operate at LOS F (Delay 129.6) during AM and LOS F (Delay 104.0) during PM peak hours
- Madonna Road and U.S. 101 SB Ramps, which is projected to operate at LOS D (Delay 43.6) during PM peak hour
- Madonna Road and U.S. 101 NB Ramps, which is projected to operate at LOS D (Delay 54.4) during PM peak hour

Table 3.13-17. Near-Term Scenario 2 Intersection LOS – Automobile

ID	Study Intersections	Control	LOS Target	Peak Hour	Delay[1]	LOS[2]	V/C[3]
1	LOVR / Foothill Boulevard	Signal	D	AM	32.7	C	
				PM	55.0	D	
2	LOVR / Prefumo Canyon Road	TWSC	D	AM	21.9	C	
				PM	29.6	D	

Table 3.13-17. Near-Term Scenario 2 Intersection LOS – Automobile (Continued)

ID	Study Intersections	Control	LOS Target	Peak Hour	Delay[1]	LOS[2]	V/C[3]
3	LOVR / Laguna Lane	Signal	D	AM	14.1	B	
				PM	8.9	A	
4	LOVR / Oceanaire Drive	TWSC	D	AM	**129.6**	**F**	**1.08**
				PM	**104.0**	**F**	**0.94**
5	LOVR / Royal Way	Signal	D	AM	41.6	D	
				PM	19.3	B	
6	LOVR / Madonna Road	Signal	D	AM	34.6	C	
				PM	46.6	D	
7	LOVR / Froom Ranch Way	Signal	D	AM	20.8	C	
				PM	37.3	D	
8	LOVR / Auto Park Way	Signal	D	AM	6.5	A	
				PM	9.4	A	
9	LOVR / Calle Joaquin	Signal	D	AM	5.9	A	
				PM	9.5	A	
10	LOVR /U.S. 101 SB Ramps	Signal	C	AM	16.3	B	
				PM	21.4	C	
11	LOVR /U.S. 101 NB Ramps	Signal	C	AM	23.8	C	
				PM	29.1	C	
12	LOVR / South Higuera Street	Signal	D	AM	19.4	B	
				PM	34.3	C	
13	South Higuera Street / Vachell Lane	TWSC	D	AM	22.6	C	
				PM	16.1	C	
14	South Higuera Street / Suburban Road[6]	Signal	D	AM	9.2	A	
				PM	14.4	B	
15	South Higuera Street / Tank Farm Road	Signal	D	AM	29.9	C	
				PM	47.9	D	
16	South Higuera Street / Prado Road	Signal	D	AM	27.5	C	
				PM	43.9	D	
17	Prado Road/U.S. 101 NB Ramps / Elks Lane	AWSC	C	AM	12.0	B	
				PM	22.9	C	
18	Madonna Road / Oceanaire Drive[6]	Signal	D	AM	45.8	D	
				PM	34.4	C	
19	Madonna Road / Dalidio Drive	Signal	D	AM	21.6	C	
				PM	28.8	C	
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	Signal	C	AM	33.2	C	
				PM	**43.6**	**D**	**1.21**
21	Madonna Road / U.S. 101 NB Ramps	Signal	C	AM	17.8	B	
				PM	**54.4**	**D**	**1.15**
22	Dalidio Drive / Froom Ranch Way	Roundabout	D	AM	3.3	A	
				PM	3.5	A	

[1]Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2]LOS – Level of Service
[3] V/C ratio reported for worst movement only.
[4]TWSC – Two-way-stop controlled intersection.
[5]AWSC – All-way stop controlled intersection.
[6]HCM 6th Methodology does not support intersections with more than four approaches. Hence HCM 2000 Methodology used for intersections 14 and 18.
Bold indicates unacceptable operations.
Source: TIS; see Appendix J.

Pedestrian Intersection LOS

Under Near-Term conditions, the following intersections are projected to exceed the City's minimum pedestrian LOS threshold (see Section 3.13.3.1 below and TIS Appendix J; Table 3.13-18):

- LOVR and Prefumo Canyon Road NB and SB directions, which is projected to operate at LOS F during AM and PM peak hours
- LOVR and Oceanaire Drive NB direction, which is projected to operate at LOS F during AM and during PM peak hours
- LOVR and Madonna Road in the SB direction, which is projected to operate at LOS D during the PM peak hour
- South Higuera Street and Tank Farm Road in the NB direction, which is projected to operate at LOS D during the PM peak hour

Table 3.13-18. Near-Term Scenario 2 Intersection LOS - Pedestrian

ID	Study Intersections	Approach	Target LOS	AM Peak Hour		PM Peak Hour	
				Ped. Crosswalk Score	LOS	Ped. Crosswalk Score	LOS
1	LOVR / Foothill Boulevard	EB	C	1.75	B	1.75	B
		WB	C	2.50	C	2.44	B
		NB	C	2.76	C	2.82	C
		SB	C	2.83	C	2.97	C
2	LOVR / Prefumo Canyon Road	EB	C	N/A			
		WB	C				
		NB	C	**>5.0**	**F**	**>5.0**	**F**
		SB	C	**>5.0**	**F**	**>5.0**	**F**
3	LOVR / Laguna Lane	EB	C	N/A			
		WB	C	2.40	B	2.22	B
		NB	C	2.87	C	2.86	C
		SB	C	2.93	C	3.08	C
4	LOVR / Oceanaire Drive	EB	C	N/A			
		WB	C				
		NB	C	**>5.0**	**F**	**>5.0**	**F**
		SB	C	**>5.0**	**F**	**>5.0**	**F**
5	LOVR / Royal Way	EB	C	2.02	B	2.02	B
		WB	C	2.00	B	1.99	B
		NB	C	3.16	C	3.22	C
		SB	C	3.14	C	3.19	C
6	LOVR / Madonna Road	EB	C	2.14	B	2.15	B
		WB	C	3.00	C	3.13	C
		NB	C	3.04	C	3.28	C
		SB	C	3.41	C	**3.53**	**D**
7	LOVR / Froom Ranch Way	EB	C	2.63	C	2.75	C
		WB	C	2.55	C	2.59	C
		NB	C	3.15	C	3.32	C
		SB	C	3.12	C	3.30	C

Table 3.13-18. Near-Term Scenario 2 Intersection LOS – Pedestrian (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour		PM Peak Hour	
				Ped. Crosswalk Score	LOS	Ped. Crosswalk Score	LOS
8	LOVR / Auto Park Way	EB	C	N/A			
		WB	C	2.02	B	2.04	B
		NB	C	3.03	C	3.47	C
		SB	C	2.99	C	3.38	C
9	LOVR / Calle Joaquin	EB	C	2.49	B	2.49	B
		WB	C	2.10	B	2.11	B
		NB	C	3.18	C	3.46	C
		SB	C	3.05	C	3.22	C
10	LOVR / U.S. 101 SB Ramps	EB	C	1.95	B	2.32	B
		WB	C	2.30	B	2.24	B
		NB	C	3.05	C	3.18	C
		SB	C	3.09	C	3.39	C
11	LOVR / U.S. 101 NB Ramps	EB	C	2.50	C	2.61	C
		WB	C	1.43	A	1.43	A
		NB	C	2.95	C	2.97	C
		SB	C	3.05	C	3.15	C
12	LOVR / South Higuera Street	EB	C	2.88	C	2.98	C
		WB	C	N/A			
		NB	C	2.40	B	2.45	B
		SB	C	2.91	C	3.06	C
13	South Higuera Street / Vachell Lane	EB	C	N/A			
		WB	C				
		NB	C				
		SB	C				
14	South Higuera Street / Suburban Road	EB	C	N/A			
		WB	C	2.20	B	2.30	B
		NB	C	3.05	C	3.28	C
		SB	C	2.81	C	3.02	C
15	South Higuera Street / Tank Farm Road	EB	C	2.04	B	2.05	B
		WB	C	3.01	C	3.16	C
		NB	C	3.39	C	**3.65**	**D**
		SB	C	2.73	C	3.08	C
16	South Higuera Street / Prado Road	EB	C	2.61	C	2.73	C
		WB	C	2.48	B	2.57	C
		NB	C	2.86	C	3.11	C
		SB	C	2.82	C	3.00	C
17	Prado Road/U.S. 101 NB Ramps	EB	C	N/A			
		WB	C				
		NB	C				
		SB	C				
18	Madonna Road / Oceanaire Drive	EB	C	2.78	C	2.95	C
		WB	C	3.29	C	3.44	C
		NB	C	2.01	B	2.02	B
		SB	C	2.04	B	1.98	B
		SE	C	1.82	B	1.86	B
		NE	C	1.78	B	1.79	B

Table 3.13-18. Near-Term Scenario 2 Intersection LOS – Pedestrian (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour		PM Peak Hour	
				Ped. Crosswalk Score	LOS	Ped. Crosswalk Score	LOS
19	Madonna Road / Dalidio Drive	EB	C	3.11	C	3.24	C
		WB	C	3.17	C	3.28	C
		NB	C	2.52	C	2.64	C
		SB	C	1.99	B	2.00	B
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	EB	C	3.01	C	3.16	C
		WB	C	3.06	C	3.10	C
		NB	C	2.85	C	2.87	C
		SB	C	2.17	B	2.19	B
21	Madonna Road / U.S. 101 NB Ramps	EB	C	3.02	C	3.06	C
		WB	C	2.86	C	2.91	C
		NB	C	2.00	B	2.01	B
		SB	C	2.09	B	2.17	B

[1]For unsignalized AWSC intersections, pedestrian delay is reported as pedestrian LOS methodology is not supported for crosswalks that intersect stop-sign controlled approaches. For unsignalized TWSC intersections, pedestrian LOS methodology is limited to the uncontrolled crossings.
Source: TIS; see Appendix J.

Bicycle Intersections LOS

Under Near-Term conditions, the following intersections are projected to exceed the City's minimum bicycle LOS threshold (see Section 3.13.3.1 below and Appendix J; Table 3.13-19):

- LOVR and Madonna Road in the WB direction, which is projected to operate at LOS E (Bicycle LOS Score 4.60) during PM peak hour
- South Higuera Street and Tank Farm Road in the WB direction, which is projected to operate at LOS E (Bicycle LOS Score 5.16) during PM peak hour

Table 3.13-19. Near-Term Scenario 2 Intersection LOS - Bicycle

ID	Study Intersections	Approach	Target LOS	AM Peak Hour		PM Peak Hour	
				Bicycle LOS Score	LOS	Bicycle LOS Score	LOS
1	LOVR / Foothill Boulevard	EB	D	2.71	C	2.71	C
		WB	D	3.34	C	4.05	D
		NB	D	2.92	C	3.22	C
		SB	D	2.73	C	2.00	B
3	LOVR / Laguna Lane	EB	D	N/A			
		WB	D	3.26	C	2.82	C
		NB	D	1.99	B	2.36	B
		SB	D	1.54	B	1.45	A
5	LOVR / Royal Way	EB	D	3.17	C	2.99	C
		WB	D	3.30	C	2.96	C
		NB	D	2.73	C	3.13	C
		SB	D	2.32	B	2.05	B

Table 3.13-19. Near-Term Scenario 2 Intersection LOS - Bicycle (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour		PM Peak Hour	
				Bicycle LOS Score	LOS	Bicycle LOS Score	LOS
6	LOVR / Madonna Road	EB	D	3.42	C	3.26	C
		WB	D	3.68	D	**4.60**	**E**
		NB	D	1.72	B	2.25	B
		SB	D	2.92	C	2.67	C
7	LOVR / Froom Ranch Way	EB	D	3.49	C	4.33	D
		WB	D	2.25	B	2.49	B
		NB	D	1.89	B	2.45	B
		SB	D	1.79	B	1.91	B
8	LOVR / Auto Park Way	EB	D	N/A			
		WB	D	2.61	C	2.76	C
		NB	D	3.12	C	3.73	D
		SB	D	3.45	C	3.80	D
9	LOVR / Calle Joaquin	EB	D	3.11	C	3.09	C
		WB	D	3.16	C	3.32	C
		NB	D	1.71	B	2.17	B
		SB	D	1.92	B	0.87	A
10	LOVR / U.S. 101 SB Ramps	EB	D	N/A			
		WB	D	2.90	C	2.69	C
		NB	D	1.89	B	2.38	B
		SB	D	1.71	B	2.02	B
11	LOVR / U.S. 101 NB Ramps	EB	D	3.94	D	3.93	D
		WB	D	1.39	A	1.39	A
		NB	D	1.94	B	2.31	B
		SB	D	2.43	B	2.38	B
12	LOVR / South Higuera Street	EB	D	2.07	B	1.88	B
		WB	D	N/A			
		NB	D	2.23	B	1.87	B
		SB	D	2.48	B	3.92	D
14	South Higuera Street / Suburban Road	EB	D	N/A			
		WB	D	1.17	A	1.57	B
		NB	D	2.44	B	2.19	B
		SB	D	2.09	B	2.69	C
15	South Higuera Street / Tank Farm Road	EB	D	2.73	C	2.74	C
		WB	D	3.88	D	**5.16**	**E**
		NB	D	2.25	B	2.43	B
		SB	D	1.81	B	2.37	B
16	South Higuera Street / Prado Road	EB	D	2.14	B	1.98	B
		WB	D	2.07	B	3.00	C
		NB	D	1.77	B	2.51	C
		SB	D	2.30	B	2.23	B
18	Madonna Road / Oceanaire Drive	EB	D	2.78	C	2.84	C
		WB	D	1.54	B	2.22	B
		NB	D	2.87	C	2.86	C
		SB	D	2.73	C	2.31	B
		SE	D	2.62	C	2.62	C
		NE	D	2.20	B	2.20	B

Table 3.13-19. Near-Term Scenario 2 Intersection LOS - Bicycle (Continued)

ID	Study Intersections	Approach	Target LOS	AM Peak Hour		PM Peak Hour	
				Bicycle LOS Score	LOS	Bicycle LOS Score	LOS
19	Madonna Road / Dalidio Drive	EB	D	2.18	B	2.24	B
		WB	D	1.73	B	2.14	B
		NB	D	2.02	B	2.63	C
		SB	D	1.59	B	1.94	B
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	EB	D	2.00	B	2.07	B
		WB	D	1.73	B	2.05	B
		NB	D	3.86	D	3.78	D
		SB	D	2.94	C	2.99	C
21	Madonna Road / U.S. 101 NB Ramps	EB	D	2.81	C	2.44	B
		WB	D	1.77	B	2.30	B
		NB	D	2.27	B	2.32	B
		SB	D	N/A			

Bicycle LOS summary excludes unsignalized intersections and locations where no bicycle facilities are provided as HCM 6th Bike LOS Methodology do not model segments bounded by unsignalized intersections.
Source: TIS; see Appendix J.

Vehicle Queueing Conditions

Under Near-Term conditions, the following seven intersections have vehicle queues that are projected to exceed lane capacity during AM or PM peak hours (see Appendix J; Table 3.13-20):

- LOVR and Foothill Boulevard (SBL during AM peak hour)
- LOVR and Froom Ranch Way (EBL and NBL during PM peak hour)
- LOVR and Calle Joaquin (WBL during PM peak hour)
- LOVR and U.S. 101 SB Ramps (SBR and WBR during PM peak hour)
- South Higuera Street and Tank Farm Road (WBR and northbound right-turn lane [NBR] during PM peak hour and SBL during both the AM and PM peak hours)
- South Higuera Street and Prado Road (WBL during both the AM and PM peak hours and SBL during the AM peak hour)
- Madonna Road and Oceanaire Drive (WBL and WBR during both the AM and the PM hours)

Table 3.13-20. Near-Term Scenario 2 Intersection LOS - 95th-Percentile Queuing

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Near-Term Conditions - Scenario 2
1	LOVR / Foothill Boulevard	WBR	180	AM	0
				PM	0
		NBL	120	AM	0
				PM	15
		NBR	370	AM	30
				PM	150
		SBL	490	AM	**#585**
				PM	#280
3	LOVR / Laguna Lane	WBL	Trap Lane	AM	90
				PM	40
		WBR	Trap Lane	AM	0
				PM	15
		NBR	80	AM	10
				PM	40
		SBL	120	AM	45
				PM	25
5	LOVR/Royal Way	EBR	70	AM	15
				PM	0
		WBR	70	AM	0
				PM	0
		NBL	110	AM	30
				PM	70
		SBL	160	AM	15
				PM	15
		SBR	50	AM	0
				PM	0
6	LOVR / Madonna Road	EBL	230	AM	135
				PM	80
		WBL	Trap Lane	AM	95
				PM	220
		WBR	170	AM	50
				PM	85
		NBL	200	AM	90
				PM	#190
		NBR	175	AM	50
				PM	80
		SBL	350	AM	280
				PM	#240

Table 3.13-20. Near-Term Scenario 2 Intersection LOS - 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Near-Term Conditions - Scenario 2
7	LOVR / Froom Ranch Way	EBL	250	AM	#70
				PM	**#260**
		EBR	250	AM	0
				PM	65
		WBL	295	AM	55
				PM	100
		WBR	50	AM	0
				PM	35
		NBL	300	AM	#125
				PM	**#310**
		SBL	160	AM	35
				PM	#120
8	LOVR/Auto Park Way (Project Driveway)	EBL	100	AM	-
				PM	-
		EBR	100	AM	-
				PM	-
		WBL	Trap Lane	AM	30
				PM	80
		WBR	175	AM	15
				PM	30
		NBL	200	AM	-
				PM	-
		SBL	100	AM	40
				PM	60
		SBR	100	AM	-
				PM	-
9	LOVR/Calle Joaquin	EBL	260	AM	30
				PM	45
		EBR	260	AM	15
				PM	25
		WBL	100	AM	55
				PM	**130**
		NBL	130	AM	m10
				PM	m10
		NBR	130	AM	m15
				PM	m50
		SBL	120	AM	25
				PM	20
		SBR	120	AM	5
				PM	10

Table 3.13-20. Near-Term Scenario 2 Intersection LOS - 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Near-Term Conditions - Scenario 2
10	LOVR / U.S. 101 SB Ramps	WBR	190	AM	125
				PM	**230**
		NBL	220	AM	m50
				PM	m100
		SBR	120	AM	100
				PM	**#375**
11	LOVR / U.S. 101 NB Ramps	EBL	610	AM	#395
				PM	#415
		NBL	400	AM	90
				PM	175
		SBR	133	AM	m0
				PM	0
12	LOVR / South Higuera Street	EBL	Trap Lane	AM	#460
				PM	#470
		EBR	100	AM	45
				PM	50
		NBL	200	AM	55
				PM	30
		SBR	Trap Lane	AM	120
				PM	#585
14	South Higuera Street / Suburban Road	WBL	Trap Lane	AM	50
				PM	185
		SBL	170	AM	#100
				PM	#140
15	South Higuera Street / Tank Farm Road	EBR	Trap Lane	AM	0
				PM	0
		WBL	Trap Lane	AM	230
				PM	540
		WBR	250	AM	55
				PM	**295**
		NBL	140	AM	55
				PM	60
		NBR	100	AM	90
				PM	**140**
		SBL	165	AM	**#570**
				PM	**#860**
16	South Higuera Street / Prado Road	EBL	300	AM	75
				PM	#90
		EBR	300	AM	0
				PM	0

Table 3.13-20. Near-Term Scenario 2 Intersection LOS - 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Near-Term Conditions - Scenario 2
		WBL	105	AM	**#165**
				PM	**#175**
		WBR	410	AM	0
				PM	10
		NBL	300	AM	120
				PM	#250
		SBL	200	AM	**#355**
				PM	#180
18	Madonna Road / Oceanaire Drive	EBL	115	AM	40
				PM	#50
		WBL	115	AM	**#125**
				PM	**#280**
		WBR	100	AM	**205**
				PM	**#505**
		NBR	50	AM	0
				PM	0
19	Madonna Road / Dalidio Drive	EBL	145	AM	40
				PM	#60
		EBR	100	AM	20
				PM	85
		WBL	350	AM	#125
				PM	#240
		NBL	150	AM	40
				PM	135
		NBR	150	AM	10
				PM	60
		SBR	50	AM	0
				PM	0
20	Madonna Road / U.S. 101 SB Ramps/Madonna Inn	EBL	100	AM	#55
				PM	#75
		WBL	260	AM	195
				PM	m185
		NBL	Trap Lane	AM	#210
				PM	#515
		NBR	275	AM	150
				PM	50
		SBL	Trap Lane	AM	20
				PM	30
		SBR	100	AM	0
				PM	0

Table 3.13-20. Near-Term Scenario 2 Intersection LOS - 95th-Percentile Queuing (Continued)

ID	Study Intersections	Lane Group	Storage Length Per Lane (ft)	Peak Hour	Near-Term Conditions - Scenario 2
21	Madonna Road / U.S. 101 NB Ramps	EBL	435	AM	m160
				PM	m#320
		NBL	185	AM	100
				PM	170

Queue length rounded to nearest 5 feet. Queuing analysis is reported for signalized intersections only.
Bold: 95th-percentile volume exceeds capacity.
m queue is metered by upstream intersection.
95th-percentile queue exceeds capacity
Trap - denotes design where the thru-lane terminates in a turn lane.
ft – feet
- data not available
Westbound thru-lane (WBL); westbound right-turn lane (WBR); eastbound thru-lane (EBL); northbound thru-lane (NBL); northbound right-turn lane (NBR); northbound trap (NBT); southbound thru-lane (SBL); southbound trap (SBT); southbound right-turn lane (SBR); eastbound right-turn lane (EBR).
Source: TIS; see Appendix J.

Automobile Roadway Segment LOS

Under Near-Term conditions, the following roadway segments are projected to exceed the City's minimum automobile LOS threshold (see Section 3.13.3.1 below and Appendix J; Table 3.13-21):

- LOVR from Oceanaire Drive to Madonna Road operates at LOS E during AM peak hour and LOS F during PM peak hour in the SB direction.
- LOVR from Madonna Road to Froom Ranch Way operates at LOS E in the NB direction during PM peak hour.
- LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps operates at LOS E in the SB direction during PM peak hour.
- South Higuera Street from LOVR to Tank Farm Road operates at LOS E during the PM peak hour in NB direction.

Pedestrian Roadway Segments LOS

Under Near-Term conditions, the following roadway segments are projected to exceed the City's minimum pedestrian LOS threshold, as under existing conditions in which the lack of sidewalks and minimal buffer between pedestrians and heavy vehicular traffic lanes contribute to the LOS exceedance (see Section 3.13.3.1 below and Appendix J; Table 3.13-22):

- LOVR from Prefumo Canyon Road to Oceanaire Drive operates at LOS D during AM and PM peak hour in the SB direction and operates at LOS D during PM peak hour in NB direction.
- LOVR from Madonna Road to Froom Ranch Way operates at LOS F during AM peak hour in the NB direction and operates at LOS D during PM peak hour in the NB and SB direction.
- LOVR from Froom Ranch Way to Calle Joaquin operates at LOS D during PM peak hour in the SB direction.
- LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps operates at LOS D in SB direction during AM and PM peak hours and operates at LOS D in NB direction during PM peak hour.
- LOVR from U.S. 101 NB Ramps to South Higuera Street operates at LOS E during AM peak hour and operates at LOS D during AM peak hour in the SB direction and NB direction, the segment is projected to operate at LOS D during the PM peak hour.
- South Higuera Street from LOVR to Tank Farm Road operates at LOS D during PM peak hour in the SB direction.
- South Higuera Street from Tank Farm Road to Prado Road operates at LOS F during AM and PM peak hours in the SB direction.
- Madonna Road from LOVR to Dalidio Drive operates at LOS F in EB direction during AM peak hour and in the WB direction, the segment is projected to operate at LOS F during AM peak hour and at LOS D during PM peak hour.

Bicycle Roadway Segment LOS

Under Near-Term conditions, none of the studied roadway segments exceed the City's minimum bicycle LOS thresholds (see Section 3.13.3.1 below and Appendix J; Table 3.13-23).

Transit Roadway Segment LOS

Under Near-Term conditions, none of the studied roadway segments exceed the City's minimum transit LOS thresholds (see Section 3.13.3.1 below and Appendix J; Table 3.13-24).

U.S. 101 Roadway Segments and On-/Off-Ramp Intersections

Under Near-Term Conditions, the following freeway segments are projected to exceed Caltrans minimum LOS thresholds (see Section 3.13.3.1 below and Appendix J; Table 3.13-25):

Table 3.13-21. Near-Term Scenario 2 Segment Level of Service – Automobile

ID	Roadway Segment	Direction	LOS Threshold	AM Peak				PM Peak			
				Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS (%)	LOS	Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS (%)	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	D	31.83	45.46	70.02	B	33.38	45.46	73.4	B
		NB	D	28.93	45.45	63.65	C	27.79	45.45	61.1	C
2	LOVR from Oceanaire Drive to Madonna Road	SB	D	**13.33**	**42.64**	**31.26**	**E**	**9.70**	**42.64**	**22.7**	**F**
		NB	D	24.01	45.68	52.56	C	22.08	45.68	48.3	D
3	LOVR from Madonna Road to Froom Ranch Way	SB	D	26.48	44.82	59.08	C	19.37	44.83	43.2	D
		NB	D	19.87	44.83	44.32	D	**16.93**	**44.82**	**37.8**	**E**
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	D	36.56	44.80	81.61	A	33.98	44.80	75.8	B
		NB	D	32.56	45.22	72.00	B	28.03	45.22	62.0	C
5	LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps	SB	D	19.66	45.33	43.37	D	**17.83**	**45.33**	**39.3**	**E**
		NB	D	19.54	40.66	48.06	D	24.03	45.36	53.0	C
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	D	21.59	4,064.00	0.53	C	22.32	40.78	54.7	C
		NB	D	27.45	41.19	66.64	C	31.07	45.77	67.9	B
7	South Higuera Street from City Limit south to U.S. 101/Clover Ridge Lane	SB	D	45.53	45.72	99.58	A	43.72	45.72	95.6	A
		NB	D	40.74	45.73	89.09	A	45.27	45.73	99.0	A
8	South Higuera Street from LOVR to Tank Farm Road	SB	D	23.63	45.33	52.13	C	20.47	45.34	45.1	D
		NB	D	19.83	45.68	43.40	D	**14.99**	**45.69**	**30.2**	**E**
9	South Higuera Street from Tank Farm Road to Prado Road	SB	D	31.44	45.21	69.54	B	24.58	45.23	54.3	C
		NB	D	27.80	45.21	61.49	C	25.87	45.24	57.2	C
10	Tank Farm Road from South Higuera Street to Broad Street	EB	D	34.08	43.15	78.98	B	34.15	43.15	79.1	B
		WB	D	33.87	42.40	79.88	B	33.74	42.38	79.6	B
11	Madonna Road from LOVR to Dalidio Drive	EB	D	22.96	38.92	58.99	C	21.33	39.14	54.5	C
		WB	D	21.02	38.84	54.12	C	20.21	39.15	51.6	C
12	Froom Ranch Way from LOVR to Dalidio Drive	EB	D	39.55	41.09	96.25	A	38.09	41.09	92.7	B
		WB	D	31.11	41.08	75.73	B	28.18	41.08	68.6	B

Bold indicates deficient LOS
BFFS - Base Free-Flow Speed
mph – miles per hour
Source: TIS; see Appendix J.

Table 3.13-22. Near-Term Scenario 2 Segment Level of Service – Pedestrian

ID	Roadway Segment	Direction	LOS Threshold	AM Peak		PM Peak	
				Segment Score	LOS	Segment Score	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	C	**3.67**	**D**	**3.54**	**D**
		NB	C	3.29	C	**4.11**	**D**
2	LOVR from Oceanaire Drive to Madonna Road	SB	C	3.36	C	3.25	C
		NB	C	2.84	C	3.25	C
3	LOVR from Madonna Road to Froom Ranch Way	SB	C	3.38	C	**3.50**	**D**
		NB	C	**3.23**	**F**	**3.70**	**D**
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	C	3.45	C	**3.67**	**D**
		NB	C	3.41	C	3.49	C
5	LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps	SB	C	**3.85**	**D**	**3.60**	**D**
		NB	C	3.48	C	**3.84**	**D**
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	C	**4.56**	**E**	**3.93**	**D**
		NB	C	**3.55**	**D**	3.39	C
8	South Higuera Street from LOVR to Tank Farm Road	SB	C	3.25	C	**3.89**	**D**
		NB	C	2.87	C	3.05	C
9	South Higuera Street from Tank Farm Road to Prado Road	SB	C	**3.45**	**F**	**4.31**	**F**
		NB	C	2.57	C	3.33	C
11	Madonna Road from LOVR to Dalidio Drive	EB	C	**4.26**	**F**	3.14	C
		WB	C	**3.78**	**F**	**4.14**	**D**
12	Froom Ranch Way from LOVR to Dalidio Drive	EB	C	2.48	C	2.50	C
		WB	C	2.84	C	2.77	C

Bold indicates deficient LOS.
Source: TIS; see Appendix J.

Table 3.13-23. Near-Term Scenario 2 Segment LOS – Bicycle

ID	Roadway Segment	Direction	LOS Threshold	AM Peak		PM Peak	
				Segment Score	LOS	Segment Score	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	D	2.04	B	1.99	A
		NB	D	1.61	A	1.89	A
2	LOVR from Oceanaire Drive to Madonna Road	SB	D	2.32	C	2.26	C
		NB	D	1.57	A	1.82	A
3	LOVR from Madonna Road to Froom Ranch Way	SB	D	2.67	C	2.66	C
		NB	D	1.49	A	1.84	A
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	D	2.52	C	2.64	C
		NB	D	1.87	A	2.05	B
5	LOVR from U.S. 101 SB Ramps toU.S. 101 NB Ramps	SB	D	2.86	C	2.82	C
		NB	D	2.59	C	2.96	C
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	D	2.44	C	2.45	C
		NB	D	1.83	A	1.99	A
7	South Higuera Street from City Limit south to U.S. 101/Clover Ridge Lane	SB	D	1.56	A	1.78	A
		NB	D	1.60	A	1.48	A
8	South Higuera Street from LOVR to Tank Farm Road	SB	D	2.55	C	2.95	C
		NB	D	2.90	C	2.95	C
9	South Higuera Street from Tank Farm Road to Prado Road	SB	D	2.46	C	2.72	C
		NB	D	2.06	B	2.41	C
10	Tank Farm Road from South Higuera Street to Broad Street	EB	D	2.74	C	2.71	C
		WB	D	2.90	C	2.99	C
11	Madonna Road from LOVR to Dalidio Drive	EB	D	3.07	C	3.01	C
		WB	D	2.23	C	2.52	C
12	Froom Ranch Way from LOVR to Dalidio Drive	EB	D	0.63	A	0.65	A
		WB	D	0.89	A	0.43	A

Bold indicates deficient LOS.
Source: TIS; see Appendix J.

Table 3.13-24. Near-Term Scenario 2 Segment LOS – Transit

ID	Roadway Segment	Direction	LOS Threshold	AM Peak		PM Peak	
				Segment Score	LOS	Segment Score	LOS
1	LOVR from Prefumo Canyon Road to Oceanaire Drive	SB	D	2.91	C	2.88	C
		NB	D	1.75	A	1.96	A
2	LOVR from Oceanaire Drive to Madonna Road	SB	D	2.49	C	2.61	C
		NB	D	2.78	C	2.92	C
3	LOVR from Madonna Road to Froom Ranch Way	SB	D	3.56	D	3.77	D
		NB	D	2.06	B	2.16	B
4	LOVR from Froom Ranch Way to Calle Joaquin	SB	D	3.04	C	3.14	C
		NB	D	3.24	C	3.41	C
6	LOVR from U.S. 101 NB Ramps to South Higuera Street	SB	D	3.98	D	3.51	D
		NB	D	3.61	D	3.36	C
8	South Higuera Street from LOVR to Tank Farm Road	SB	D	4.13	D	4.17	D
		NB	D	3.25	C	4.07	C
9	South Higuera Street from Tank Farm Road to Prado Road	SB	D	3.57	D	4.02	D
		NB	D	3.27	C	4.18	D
11	Madonna Road from LOVR to Dalidio Drive	EB	D	3.29	C	3.45	C
		WB	D	3.35	C	3.28	C
12	Froom Ranch Way from LOVR to Dalidio Drive	EB	D	0.33	A	0.28	A
		WB	D	0.82	A	0.96	A

Segments with no transit stops are excluded from the analysis.
Source: TIS; see Appendix J.

Table 3.13-25. Near-Term Scenario 2 Segment LOS – Freeway Mainline, Ramps and Weaving Sections

Interchange Location	Target LOS	Segment Type	Lanes	AM Peak Hour			PM Peak Hour		
				Volume	Density (pc/mi/h)	LOS	Volume	Density (pc/mi/h)	LOS
U.S. 101 NB									
U.S. 101 NB, south of South Higuera Street	C	Freeway	2	2,530	21.5	C	2,571	21.8	C
U.S. 101 NB, south of LOVR	C	Freeway	2	2,817	24.0	C	2,156	18.3	C
U.S. 101 NB LOVR Off-Ramp	C	Diverge	1	688	**29.0**	**D**	724	22.3	C
U.S. 101 NB LOVR On-Ramp	C	Merge	1	179	28.9	C	496	25.2	C
U.S. 101 NB, north of Prado Road	C	Freeway	2	2,491	21.1	C	2,564	21.8	C
U.S. 101 NB Prado Road Off-Ramp	C	Diverge	1	312	25.4	C	143	25.9	C
U.S. 101 NB Prado Road On-Ramp	C	Merge	1	323	27.1	C	552	**30.4**	**D**
U.S. 101 NB, south of Madonna Road	C	Freeway	2	3,062	**26.5**	**D**	3,427	**30.7**	**D**
U.S. 101 NB, Madonna Road Off-Ramp	C	Diverge	1	293	**31.2**	**D**	341	**34.9**	**E**
U.S. 101 SB									
U.S. 101 SB, north of Madonna Road	C	Freeway	2	2,131	18.1	C	3,168	**27.6**	**D**
U.S. 101 SB Madonna Road On-Ramp	C	Merge	1	259	22.9	C	386	**35.9**	**D**
U.S. 101 SB, north of Prado Road	C	Freeway	2	2,048	17.4	B	3,331	**29.5**	**D**
U.S. 101 SB, south of LOVR	C	Freeway	2	1,314	11.2	B	2,394	20.3	C
U.S. 101 SB LOVR Off-Ramp	C	Diverge	1	672	13.6	B	619	24.7	C
U.S. 101 SB LOVR On-Ramp	C	Merge	1	404	16.2	B	755	**30.8**	**D**
U.S. 101 SB, north of South Higuera Street	C	Freeway	2	2,369	20.1	C	3,858	**37.0**	**E**

Source: TIS; see Appendix J.
pc/mi/h - passenger cars per mile per hour

- U.S. 101 NB, LOVR Off-Ramp operates at LOS D during AM peak hour
- U.S. 101 NB, Prado Road On-Ramp operates at LOS D during PM peak hour
- U.S. 101 NB, south of Madonna Road operates at LOS D during AM peak hour and PM peak hour
- U.S. 101 NB, Madonna Road Off-Ramp operates at LOS D during AM peak hour and operates at LOS E during the PM peak hour
- U.S. 101 SB, north of Madonna Road operates at LOS D during PM peak hour
- U.S. 101 SB, Madonna Road On-Ramp operates at LOS D during PM peak hour
- U.S. 101 SB, north of Prado Road operates at LOS D during PM peak hour
- U.S. 101 SB, LOVR On-Ramp operates at LOS D during AM peak hour
- U.S. 101 SB, north of South Higuera Street operates at LOS E during PM peak hour

3.13.2 Regulatory Setting

Transportation is governed primarily by federal, state, and local laws that would apply to future development under the Project. Federal, state, and local regulations that are directly relevant to the Project are summarized below.

3.13.2.1 Federal

Americans with Disabilities Act (1990)

Title III of the Americans with Disabilities Act (ADA) (codified in Title 42 of the USC), prohibits discrimination on the basis of disability in places of public accommodation (i.e., businesses and non-profit agencies that serve the public) and commercial facilities (i.e., other businesses). This regulation includes Appendix A to Part 36, Standards for Accessible Design, which establishes minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warning for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

3.13.2.2 State

California Department of Transportation

Caltrans manages the operation of state highways, including the U.S. 101 and State Route 277 (Golden State Highway), which pass through the San Luis Obispo area and the Project vicinity.

Senate Bill 743

To further the State's commitment to the goals of SB 375, AB 32, and AB 1358, SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Division 13 (Section 21099) of the PRC. Key provisions of SB 743 include reforming aesthetics and parking impact analysis under CEQA for urban infill projects. SB 743 would also replace the measurement of automobile delay (LOS analysis) with VMT as a metric for measuring environmental impacts. Under SB 743, the focus of the environmental impacts of transportation shift from driver delay to VMT analysis, reduction of GHG emissions, creation of multi-modal networks, and promotion of a compact balanced mix of land uses to reduce vehicular travel and increase walking, biking, and use of transit. Local agencies would retain the option to employ LOS standards as local policy standards, but not for use as a CEQA threshold.

VMT analysis is not mandatory for CEQA until July 1st, 2020. Currently, official measures and local significance thresholds for VMT analysis are still being developed, but have not been adopted. Therefore, automobile LOS is still used as a significance threshold for CEQA review, consistent with the City TIA Guidelines and General Plan CE. The TIS prepared for the Project analyzes Project VMT for reference purposes; however, in the absence of official significance thresholds, no findings in regarding to VMT are made at this time. (see Appendix J, Table 3.1-102)

San Luis Obispo Council of Governments 2019 Draft Regional Transportation Plan

To prepare for future growth, SLOCOG has developed a draft Regional Transportation Plan (RTP), which outlines key principles guiding regional growth, including integrated land use, active transportation, and green regions. In general, SLOCOG has established policies that focus on promoting growth in existing and emerging centers and along major transportation corridors; creating significant areas of mixed-use development and walkable communities; targeting growth around existing and planned transit stations; and preserving existing open space and stable residential areas.

The RTP strives to provide a regional investment framework to address the region's transportation and related challenges, while preserving and enhancing the existing transportation system and integrating land use into transportation planning. The RTP employs a regional approach to accommodate future growth within existing high-quality transit areas to reduce VMT, congestion, and related GHG emissions. This approach to sustainably manage growth and transportation demand reduces the distance and barriers

between new housing, jobs, and services – helping to reduce the demand for single occupancy vehicle travel and to reduce GHG emissions through integrated transportation, land use, housing, and environmental planning.

The RTP/Sustainable Communities Strategy (SCS) outlines SCAG's plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth to attain and exceed the GHG emission-reduction targets set forth by CARB. For instance, Policy 14 of the SLOCOG RTP's policies for highways, streets, and roads is to, "Facilitate transportation projects that improve jobs/housing balance, support sustainable communities, achieve intermodal transportation improvements, and/or reduce regional VMT growth."

3.13.2.3 Local

City of San Luis Obispo General Plan

The City General Plan sets objectives and policies for all City resources. Those associated with the standards of streets and highways incorporated within the City are managed through the CE of the General Plan.

Circulation Element

The City adopted a General Plan CE in 1994, and it was updated and amended in 2014. The following policies are relevant to the Project.

Policy 2.1.1 Multi-level Programs. The City shall support County-wide and community-based efforts aimed at substantially reducing the number of vehicle trips and parking demand.

Policy 2.1.2 Flexible Work Schedules. The City shall support flex time programs and alternative work schedules to reduce peak hour traffic demand.

Policy 2.1.3 Work-based Trip Reduction. The City shall encourage employers within the City limits and work with the County to work with employers outside of the City limits to participate in trip reduction programs.

Policy 2.1.5 Long-term Measure. The City shall support programs that reduce traffic congestion and maintain air quality. If air quality degrades below legal standards or LOS standards are exceeded, the City will pursue more stringent measures to achieve its transportation goals.

Policy 4.1.4 New Development. The City shall require that new development provide bikeways, secure bicycle storage, parking facilities and showers consistent with City plans and development standards. When evaluating transportation impacts, the City shall use a Multi-Modal Level of Service (MMLOS) analysis.

Policy 6.1.1 Complete Streets. The City shall design and operate City streets to enable safe, comfortable, and convenient access and travel for users of all abilities including pedestrians, bicyclists, transit users, and motorists.

Policy 6.1.2 Multi-modal LOS Objectives, Service Standards, and Significance Criteria. The City shall strive to achieve LOS objectives and shall maintain LOS minimums for all four modes of travel; pedestrians, bicyclists, transit, and vehicles.

Policy 6.1.3 Multi-modal Priorities. In addition to maintaining minimum LOS, MMLOS should be prioritized in accordance with the established modal priorities, such that construction, expansion, or alteration for one mode should not degrade the service level of a higher priority mode.

Policy 6.1.4 Defining Significant Circulation Impact. Any degradation of the LOS shall be minimized to the extent feasible in accordance with the modal priorities established. If the LOS degrades below thresholds established in Policy 6.1.2, it shall be determined a significant impact for purposes of environmental review under the CEQA. For roadways already operating below the established MMLOS standards, any further degradation to the MMLOS score will be considered a significant impact under CEQA.

- Where a potential impact is identified, the City in accordance with the modal priorities established, can determine if the modal impact in question is adequately served through other means e.g., another parallel facility or like service. Based on this determination, a finding of no significant impact may be determined by the City.

Policy 6.1.5 Mitigation. For significant impacts, developments shall be responsible for their fair share of any improvements required. Potential improvements for alternative mode may include, but are not limited to:

- Pedestrian: Provision of sidewalk, providing or increasing a buffer from vehicular travel lanes, increased sidewalk clear width, providing a continuous barrier between pedestrians and vehicle traffic, improved crossings, reduced signal delay, traffic calming, no right-turn on red, reducing intersection crossing distance.

- Bicycle: Addition of a bicycle lane, traffic calming, provision of a buffer between bicycle and vehicle traffic, pavement resurfacing, reduced number of access points, or provision of an exclusive bicycle path, reducing intersection crossing distance.
- Transit: For transit-related impacts, developments shall be responsible for their fair share of any infrastructural improvements required. This may involve provision of street furniture at transit stops, transit shelters, and/or transit shelter amenities, pullouts for transit vehicles, transit signal prioritization, provision of additional transit vehicles, or exclusive transit lanes.

Policy 6.1.6 City Review. When new projects impact the existing circulation system, the City shall review the effectiveness and desirability of "direct fix" mitigation improvements to address MMLOS impacts. Where a significant impact is found, alternative system-wide project mitigations may be submitted for consideration to the City in accordance with the modal priorities established in Policy 6.1.2. Exceptions shall be based on the physical conditions of the right-of-way to support additional improvements. If the right-of-way in question cannot address onsite mitigation, appropriate offsite improvements that have direct nexus to and effectively address the specific impacts created by the project may be considered.

Policy 7.1.1 Peak Hour and Daily Traffic. The City shall cooperate with County and State government to institute programs that reduce the levels of peak-hour and daily vehicle traffic.

Policy 7.1.2 Street Network. The City shall manage to the extent feasible the street network so that the standards are not exceeded. This will require new development to mitigate the traffic impacts it causes or the City to limit development that affects streets where congestion levels may be exceeded. The standards may be met by strengthening alternative modes over the single occupant motor vehicle. Where feasible, roundabouts shall be the City's preferred intersection control alternative due to the vehicle speed reduction, safety, and operational benefits of roundabouts.

Policy 7.1.3 Growth Management and Roadway Expansion. The City shall manage the expansion of roadways to keep pace with only the level of increased vehicular traffic associated with development planned for in the General Plan LUE and under the City's growth management policies and regional transportation plans.

Policy 7.1.4: Transportation Funding. In order to increase support for non-automobile travel, the City shall strive to allocate transportation funding across various modes approximately proportional to the modal split objectives for 2035.

Policy 7.1.5 Vehicle Speeds. To the extent permitted under the California Vehicle Code (CVC), the City shall endeavor to maintain and reduce speeds where possible in residential neighborhoods.

Policy 7.2.7 Traffic Access Management. The City shall adopt an access management policy to control location, spacing, design and operation of driveways, median openings, crosswalks, interchanges and street connections to a particular roadway including navigation routes to direct traffic in a manner that preserves the safety and efficiency of the transportation system. Navigation routing and other smart access technologies should be considered as part of the update to the Access and Parking Management Plan.

Policy 8.1.1 Through Traffic. The City shall design its circulation network to encourage through traffic to use regional routes, highways, arterials, parkway arterials, and residential arterial streets and to discourage through traffic use of collectors and local streets.

Policy 8.1.2 Residential Streets. The City should not approve commercial development that encourages customers, employees or deliveries to use residential local or residential collector streets.

Policy 8.1.3 Neighborhood Traffic Speeds. To the extent permitted under the CVC, the City shall endeavor to reduce and maintain vehicular speeds in residential neighborhoods.

Policy 8.1.5 Neighborhood Traffic Management Guidelines. The City shall update its Neighborhood Traffic Management Guidelines to address voting, funding, and implementation procedures and develop an outreach program on the availability of the program.

Policy 8.1.6 Non-Infill Development. In new, non-infill developments, dwellings shall be set back from regional routes and highways, parkway arterials, arterials, residential arterials, and collector streets so that interior and exterior noise standards can be met without the use of noise walls.

Program 9.2.2. Prado Road Improvements. The City shall ensure that changes to Prado Road and other related system improvements are implemented in a sequence that satisfies circulation demands caused by area development.

- The sponsors of development projects that contribute to the need for the Prado Road interchange or overpass will be required to prepare or fund the preparation of a Project Study Report for the interchange project. The Project Study Report shall meet the requirements of the California Department of Transportation.

Program 9.2.5. San Luis Ranch/Dalidio Development. As part of any proposal to further develop the Dalidio-Madonna Area, the alignment and design of extensions of Froom Ranch Way connecting with Prado Road (west of U.S. 101) shall be evaluated and established if consistent with the Agricultural Master Plan for Calle Joaquin Reserve.

Policy 11.1.1 Interstate Air Service. The City shall support and encourage expansion of air transportation services, as forecasted in the Airport Master Plan and approved by the Federal Aviation Administration (FAA).

Policy 11.1.2 County Aircraft Operations. The City shall work with the County to continue to address aircraft operations so that noise and safety problems are not created in developed areas or areas targeted for future development by the City's Land Use Element.

Policy 11.1.3 Public Transit Service. The City shall encourage improved public transit service to the County airport soon as practical.

City of San Luis Obispo Bicycle Transportation Plan (2013)

The City Bicycle Transportation Plan (BTP; 2013) was originally prepared and adopted by the City in 1985, and most recently updated in 2013, to improve and encourage bicycle and pedestrian transportation within the City. This plan works to establish a comprehensive design and development of bikeway facilities in compliance with State, County, and City regulations and policies. The City currently in the process of preparing an update to this plan, which will include pedestrian considerations and create the City's first Active Transportation Plan.

3.13.3 Environmental Impact Analysis

3.13.3.1 Thresholds of Significance

The significance criteria for this analysis are based on Appendix G of the CEQA Guidelines and the City's adopted thresholds, as further described below. A transportation impact is considered significant if the project would:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment); or

d) Result in inadequate emergency access.

Vehicle Miles Traveled

Impact significance thresholds for VMT have not yet been established by the City or County. VMT is disclosed and assessed in comparison to citywide and countywide averages, but not used as a formal CEQA threshold. This analysis discloses VMT and its relationship to citywide and countywide average VMT, but does not utilize VMT as a formal CEQA threshold of significance for this EIR pending final adoption of appropriate local criteria and thresholds for VMT. This analysis relies on City multi-modal transportation LOS standards, as described below.

City of San Luis Obispo LOS Policies by Mode

The City's General Plan CE includes LOS policies for all transportation modes. The City's stated goal is to maintain the LOS objective. However, if trips generated by a project causes the LOS to exceed the minimum LOS standard, a project is considered to cause an impact. Table 3.13-26 presents the City's LOS objectives and standards, by mode.

Table 3.13-26. LOS Objective and Minimum Standard for Each Transportation Mode

Travel Mode	LOS Objective	Minimum LOS Standard	TIS Impact Threshold
Automobile	C	E (Downtown), D (Citywide)	D
Bicycle	B	D	D
Pedestrian	B	C	C
Transit	C	Baseline LOS or D	Baseline LOS or D

City of San Luis Obispo Multi-modal Impact Significance Thresholds

Consistent with the City's Multi-modal Transportation Impact Study Guidelines, the project impacts will be considered significant if, when comparing "Plus Project" conditions with the base Existing, Near-Term, and Cumulative conditions analyses, the project causes the following to occur:

Automobiles: Intersections

At intersections within City or County jurisdiction, project impacts are potentially significant if:

- Signalized Intersections: Project traffic causes minimum LOS standards to be exceeded or further degrades already exceeded LOS standards and the V/C ratio is increased by 0.01 or more.
- Unsignalized Intersections: Project traffic causes minimum LOS standards to be exceeded or further degrades already exceeded LOS standards, the V/C ratio is increased by 0.01 or more, and a traffic signal warrant analysis is satisfied.
- Project traffic causes or exacerbates 95th-percentile turning movement queues exceeding available turn pocket capacity.
- The project proposes roadway geometry changes that cause minimum LOS standards to be exceeded or further degrades already exceeded LOS standards for the overall intersection or individual lane groups.

Automobiles: Segments

Project impacts are potentially significant if:

- Project traffic causes minimum LOS standards for either direction to be exceeded or further degrades already exceeded LOS standards and the average segment speed decreases by 1 mph or more.
- The project proposes roadway geometry changes that cause minimum LOS standards to be exceeded or further degrades already exceeded LOS standards.

Pedestrian, Bike, and Transit: Intersections and Segments

Project impacts are potentially significant if:

- Project traffic causes minimum LOS standards to be exceeded or further degrades already exceeded LOS standards and there is contextual significance to the impact.
- The project proposes roadway geometry changes that cause minimum LOS standards to be exceeded or further degrades already exceeded LOS standards.

<u>City of San Luis Obispo Modal Priority Impact Criteria</u>

The City's General Plan CE has established priorities for various modes by context areas such that construction, expansion, or alteration of one mode should not degrade the LOS of a higher priority mode. If a project improves a lower priority mode's operation at the expense of a higher priority mode's operations, an impact is created. If a mitigation measure results in the degradation of higher priority mode, it would be considered a residual impact as well. The City's established Modal LOS Priorities by context area are presented in Table 3.13-27. The Project vicinity includes Regional Arterials, Highway Corridors, and Commercial Corridors, as described in Section 3.13.1.1, *Existing Roadway Network*.

Table 3.13-27. City LOS Modal Priority Ranking by Area

Complete Street Area	Minimum LOS Standard	
Downtown and Upper Monterey Street	1. Pedestrians	3. Transit
	2. Bicycles	4. Vehicles
Residential Corridors and Neighborhoods	1. Pedestrians	3. Vehicles
	2. Bicycles	4. Transit
Commercial Corridors and Areas	1. Vehicles	3. Transit
	2. Bicycles	4. Pedestrians
Regional Arterial and Highway Corridors	1. Vehicles	3. Bicycles
	2. Transit	4. Pedestrians

County LOS Standards

The County has established LOS standards to determine project impacts. The County's policy calls for LOS D or better service on roadways in urban areas and LOS C on rural roads. Consistent with County policies, LOS D will be considered the standard acceptable threshold for County facilities. The County does not have adopted standards for bicycle, pedestrian, and transit LOS; as such these modes will not be assessed for LOS at County facilities.

Caltrans Facilities

Caltrans established LOS standards to determine project impacts. Caltrans's policy endeavors to maintain a target LOS at the transition between LOS C and LOS D on state highway facilities. Consistent with Caltrans policies, LOS C is considered the minimum automobile threshold for Caltrans facilities. Caltrans has not adopted standards for bicycle, pedestrian, and transit LOS; as such, these modes will not be assessed for LOS at Caltrans facilities. Based on standard industry practice, the Project is considered to trigger a significant impact to Caltrans facilities if the Project would:

- Result in a facility that will operate at an acceptable LOS in the base (pre-project or no project) condition to deteriorate to an unacceptable LOS in the "Plus Project" condition; or,
- Freeway, Merge and Diverge Segments: Project traffic increases the density by 5 percent or more at a facility that will operate at an unacceptable LOS in a pre-project or no project condition.
- Intersections: Project traffic further degrades already exceeded LOS standards and the V/C ratio is increased by 0.01 or more.

City of San Luis Obispo Safety Impact Analysis Criteria

The Project TIS safety impact analysis includes both a quantitative and qualitative assessment. The safety analysis considers the Project's potential operational and geometric effects on existing infrastructure, including turn pocket queue spillback and a functional area analysis of proposed Project driveways. The safety analysis includes the following significant components, for which the Project impact will be evaluated in the "Plus Project" conditions analyses:

- Queuing evaluation at study intersections and Project driveways;
- Qualitative assessment of safety issues/concerns at the Project site access and within the internal Project circulation system. Review preliminary layout for site access and circulation and provide qualitative assessment of safety issues (i.e., driveway spacing, access control, etc.); and
- Quantitative review of collision history at selected locations:
    - County intersection at LOVR/Foothill Boulevard and County segment on South Higuera south of City limits; and
    - City intersection at LOVR/Auto Park Way and City segment on LOVR from Froom Ranch Way to Calle Joaquin will be included in the collision history analysis.

The collision history analysis compares collision rates for these facilities to rates for comparable facilities. The Project impact will be evaluated based on whether the anticipated Project-generated traffic would affect any identified safety concerns. The Project site access and functional area evaluation will be prepared consistent with the City's Access Management Policy, which is included in the recently adopted 2018 City Engineering Standards.

City of San Luis Obispo Neighborhood Traffic Analysis Criteria

The Project includes new local residential streets and commercial collector streets. The Project TIS includes an evaluation of neighborhood traffic conditions. Project impacts are considered significant if the maximum neighborhood Average Daily Trips (ADT) or speed thresholds established from the City's General Plan CE are exceeded.

The applicable ADT and speed thresholds established in the City's General Plan CE are as follows:

- Local Residential – maximum ADT is 1,500 vehicles per day (vpd) and maximum speed is 25 mph;
- Commercial Collector – maximum ADT is 10,000 vpd and maximum speed is 25 mph.

3.13.3.2 Impact Assessment Methodology

This analysis is based on the TIS prepared by TJKM Transportation Consultants for the Project (see Appendix J; TJKM Transportation Consulting 2019). The scope of the TIS was developed to be in conformance with the standards set forth in the City General Plan CE (2014) and the City's TIA Guidelines. Consideration was given to which intersections, roadway segments, bike paths and other transportation facilities could be substantially impacted by the Project and the likely outer boundary of such impacts.

The Project would develop a new network of on-site roads, bicycle paths, sidewalks, trails, and paths, and integration of this site into the transit network. Off-site road, bicycle, and pedestrian improvements are also included as part of the Project to serve Project transportation demands. In addition, the transportation network in the Project vicinity is planned to undergo major improvements and modifications associated with development of the San Luis Ranch Specific Plan project to the east across LOVR and Prefumo Creek, and the Avila Ranch Specific Plan project south across U.S. 101. For the San Luis Ranch Specific Plan, this would include the extension of Froom Ranch Way northeast to Dalidio Drive, the extension of Dalidio Drive south to U.S. 101 and its eventual connection to a new Prado Road overpass/interchange. The Avila Ranch Specific Plan project would complete or contribute to improvements along South Higuera Street, Suburban Road, and to LOVR south of U.S. 101 (refer to Figure 3.13-2). Multiple bike path and pedestrian facility improvements would also be installed. The timing of completion of these improvements, their coordination with Project phasing, and ability to accommodate increased traffic flows and demand for pedestrian and bike facilities and transit service are key to both successful Project completion and accurate impact analysis.

Based on the City's adopted thresholds and those of other agencies where appropriate, the TIS addressed and analyzed the following scenarios to describe the impacts associated with implementation of the Project (see Appendix J):

- **Existing Conditions** quantifies multi-modal transportation conditions based on current land use and transportation conditions, utilizing current traffic, pedestrian, and bicyle count and transit ridership data, as provided by the City, County, and Caltrans. The TIS includes the quantification of current automobile, bicycle, pedestrian, and transit service levels;

- **Near-Term Conditions (2025)** quantifies conditions in a roughly five-year forecast horizon, representing approximate conditions at the time the Project is anticipated to be fully built and occupied—for the purposes of the TIS, this is approximated as Year 2025. For vehicular traffic, two scenarios were examined as part of the TIS to address this condition, including "Scenario 1" which considers the Near-Term with partial completion of the U.S. 101/Prado Road Overpass/Interchange project (Overcrossing and NB Ramps only) and "Scenario 2" which considers the Near-Term *without* completion of the U.S. 101/Prado Road Overpass/Interchange project. For the purposes of conducting a conservative vehicular traffic impact analysis under the assumption that the U.S. 101/Prado Road Overpass/Interchange project is not yet completed by the time the Project is occupied, "Scenario 2" is used for the purposes of describing Near-Term Conditions and associated impact analysis. For the purposes of assessing pedestrian, bicycle and transit-related impact, the completion of currently funded improvements (as summarized in Table 3.1-19 of the TIS; Appendix J) is assumed. These include those described in Section 3.13.1.6, *Multi-modal Transportation System Operations*, above; and
- **Cumulative Conditions (2035)** quantifies conditions representing buildout of the City's adopted General Plan land uses and transportation infrastructure improvements. The forecast horizon is approximately Year 2035 and includes regional growth representing buildout of surrounding incorporated jurisdictions and unincorporated communities in the County.

The impacts of the Project related to transportation facilities were estimated in the TIS using vehicular trip generation, trip distribution, and trip assignment as well as demands for all modes of transportation. Trip generation estimates the amount of added traffic to the roadway network. Trip distribution estimates the direction of travel to and from the Project site. Trip assignment allocates trips to specific street segments and intersection turning movements. Similarly, as discussed further below, increased demand for pedestrian, bicycle, and transit facilities was calculated based upon standard factors and distributed to the transportation network.

- **Existing plus Project** adds Project-generated traffic to the Near-Term Conditions volumes;
- **Near-Term plus Project** adds Project-generated traffic to the Near-Term Conditions volumes;
- **Cumulative plus Project** represents future traffic conditions reflective of the buildout of land uses in the area, including the Project.

Project Vehicle Trip Generation

The amount of traffic added to the surrounding roadway system by the Project was estimated by preparing a detailed trip generation estimate for the development proposal.

Project trip generation estimates were calculated by TJKM in the TIS based predominantly on data and methods published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) and Trip Generation Handbook (3rd Edition). In addition to the ITE manual, the San Diego Association of Governments (SANDAG) Brief Guide to Vehicular Traffic Generation Rates manual was also referenced to provide an initial forecast of trip generation for the trailhead park, since the ITE manual lacks data for small parks (See Appendix J).

The trip generation forecasts consider many factors, including internal proximity between complimentary land uses, transportation mode splits, type of land uses proposed, and average vehicle occupancy of automobiles. Because this transportation analysis quantifies impacts for multiple travel modes, the person trip generation by mode was estimated in addition to vehicular trip generation. Based on ITE guidance, the following process was followed to ultimately determine estimated Project trips by mode:

1. Generate baseline vehicle trip estimates;
2. Convert new vehicle trips to person trips;
3. Apply adjustments for internal capture;
4. Generate new external person trip estimates;
5. Apply mode split distribution to estimate new external bike/pedestrian/transit and vehicular person trips;
6. Convert auto person trips to vehicle trips using average vehicle occupancy data; and
7. Apply pass-by/diverted trip adjustments to estimate net new external vehicle trips

Person trips anticipated to be generated by the Project (Step 5 above) are detailed in Table 3.13-28.

Table 3.13-28. Project Person Trips by Mode of Travel

Mode	Share (%)	AM Peak			PM Peak		
		Person Trips			Person Trips		
		In	Out	Total	In	Out	Total
Passenger Auto	88.20	137	167	304	225	195	420
Bicycle	4.60	7	9	16	12	10	22
Pedestrian	5.00	8	9	17	13	11	24
Transit	2.20	3	4	7	6	5	11
Total (All Modes)	**100**	155	189	**343**	256	221	**477**

The Project trip generation estimates include adjustments for internal capture, which represents trips between different uses within a larger mixed-use site that are never distributed to the street network external to the site. For example, trips between a hotel and adjacent retail store within the same site would be considered "internal" to the site, and should be excluded from project traffic generation estimates when analyzing potential impacts to offsite intersections and roadways. For this Project, all residential and commercial uses were considered in the internalization estimate, with the exception of uses within Villaggio such as the assisted living, memory care and skilled nursing components, which are anticipated to have little trip-making interaction with other Project components.

Ultimately, the Project is forecasted to generate 220 AM and 277 PM net new external peak hour vehicle trips on the surrounding road network (see Table 3.13-29). It should be noted that these final external automobile volumes are the basis for the Project's automobile LOS analyses.

Project trip generation was also determined for each of the four construction phases for conducting a sensitivity analysis to identify phasing impacts of the Project at the study intersections and the roadway segments (see also, Section 2.0, *Project Description*):

- **Phase 1** - Installation of Project Infrastructure and Stormwater Management System;
- **Phase 2** - Development of Villaggio Lower Area;
- **Phase 3** - Development of Villaggio Upper Terrace; and
- **Phase 4** - Development of Madonna Froom Ranch.

Table 3.13-29. Net External Vehicle Trip Generation Forecast

Land Use Category		AM Peak			PM Peak		
		Person Trips			Person Trips		
		In	Out	Total	In	Out	Total
External Residential Passenger Auto Person Trips		64	118	181	119	97	217
External Retail Passenger Auto Person Trips		20	12	32	61	51	112
External Hotel Passenger Auto Person Trips		43	27	70	36	37	73
External Park Passenger Auto Person Trips		10	10	20	9	9	18
Total External Passenger Auto Person Trips		*137*	*167*	***303***	*225*	*194*	***419***
Average Vehicle Occupancy (Persons per Car):							**1.38**
Mode	**Share**	**AM Peak**			**PM Peak**		
		Vehicle Trips			**Vehicle Trips**		
Residential Vehicle Trips Generated		45	85	131	86	71	157
Retail Vehicle Trips Generated		15	9	24	44	37	81
	Retail Pass-By Trips				*-15*	*-13*	*-28*
Hotel Vehicle Trips Generated		31	20	51	26	27	53
Park Vehicle Trips Generated		7	7	14	7	7	14
Total Vehicle Trips Generated		**99**	**121**	**220**	**148**	**129**	**277**

As Phase 1 includes only site preparation, grading and infrastructure improvements, the Project would generate only temporary construction-related AM or PM peak hour trips. With development and occupancy of Villaggio's Lower Area, the Project is estimated to generate 66 AM and 87 PM peak hour external vehicle trips. With completion of Villaggio's Upper Terrace, the Project is estimated to generate 74 AM and 99 PM peak hour external vehicle trips. With completion of the Madonna Froom Ranch area, the final phase, the Project is estimated to generate 220 AM and 277 PM total peak hour vehicle trips. Table 3.13-30 summarizes Project trip generation for the four construction phases.

Table 3.13-30. Project Operational Vehicle Trip Generation by Phase

Phase	Trips Applicable to Phase		Cumulative Total for Completed Phases	
	AM	PM	AM	PM
1. Installation of Project Infrastructure and Stormwater Management System (0%)	0	0	0	0
2. Development of Villaggio Lower Area (27%)	66	87	66	87
3. Development of Villaggio Upper Terrace (5%)	8	12	74	99
4. Development of Madonna Froom Ranch (69%)	146	178	220	277

A more detailed discussion of trip generation assumptions and methodology is provided in the Project TIS (see Appendix J).

Project Trip Distribution and Assignment

The Project trip distribution for automobile, pedestrian, bicycle, and transit trips was estimated based on conducting a select zone analysis of the traffic analysis zone (TAZ) representing the Project area in the City's travel demand model. The City's travel demand model land uses for the TAZ were modified to include the specific Project land uses. The Project trip distribution was developed for Existing, Near-Term, and Cumulative analysis scenarios based on transportation infrastructure anticipated to be in place in those scenarios (i.e., Prado Road Interchange, Prado Road Extension to Broad).

New transit trips were assigned to the adjacent transit stops at the LOVR/Auto Mall Drive intersection and at the Irish Hills Plaza shopping center. New bicycle trips were assigned to new and existing bike trails, and adjacent roadway facilities with bicycle lanes. New pedestrian trips were assigned to adjacent sidewalks, crosswalks, and shared-use paths. New vehicular trips were assigned to the street network using the single proposed access point on LOVR and were assigned to routes to reach their destinations based on the shortest logical path (Appendix J).

Intersection and Roadway Segment Automobile Operations

Using vehicle trip generation and distribution data, the TIS analyzed the Project's transportation effects on roadway segments and intersections by evaluating the automobile LOS of each roadway segment and intersection in the study area. Existing conditions were compared with Existing plus Project conditions to determine the degree of change projected for each of the intersections and roadway segments. The Existing plus Project LOS was also compared with City, County, and Caltrans thresholds to determine where and how significant impacts may occur as a result of Project implementation. The same analysis was conducted for Near-Term and Cumulative conditions. Refer to Table 3.13-2 and Table 3.13-3 for a summary of the HCM 6th Edition automobile segment and freeway LOS methodologies utilized for this analysis. The results of Existing plus Project and Near-Term plus Project analysis of intersection and roadway segment automobile operations are summarized in the TIS (Appendix J).

Bicycle, Pedestrian, and Transit Operations

For bicycle and pedestrian facilities, trip generation and distribution calculations were modeled to evaluate the operational conditions. LOS for these facilities was primarily evaluated based on operational conditions, gaps in circulation, safety, and City design criteria. Transit service was analyzed based on the service standards listed in the City's current Short Range Transit Plan, which states that in residential areas, 90 percent of the population should be within 0.25 mile of a bus stop. In accordance with the City's Multi-modal Transportation Guidelines, transit LOS was primarily predicated on the presence of shelters and benches at bus stops, as well as the frequency and on-time performance of each route.

Bicycle and Pedestrian LOS is a measure of comfort based on many different factors. The model used to calculate the LOS score, under certain conditions, can be very sensitive to minor changes that would otherwise not be noticed by pedestrians or cyclists. Professional engineering judgement is used to determine the significance threshold of a bicycle and pedestrian LOS impact based on the context and perceptibility of that impact. Therefore, while a LOS deficiency may be calculated for bicycle or pedestrian LOS, the Project's direct contribution to that deficiency may require qualitative discussions and conclusions.

Vehicle Miles Traveled

A key provision of SB 743, passed in September 2013, is the elimination of vehicle delay and LOS as CEQA significance criterion in urban areas. VMT analysis is not mandatory per CEQA until 7/1/2020. Currently, official measures and local significance thresholds for VMT analysis are being developed but have not been adopted. While the TIS analyzes both multi-modal LOS and VMT, in the absence of official significance thresholds, no CEQA findings of significance in regards to VMT are made at this time. Hence, VMT analysis conducted for the Project is provided for informational and full disclosure purposes only.

The City's Travel Demand Model was used for forecasting County-wide, City-wide and Project-generated VMT. As reported by the City's model, the forecasted 2035 Daily VMT is approximately 12 million miles for the County and 1.5 million for the City sphere of influence. The average VMT per household is 80 miles for the County and 54 miles for areas within the City's sphere of influence.

Project-generated VMT was forecast by adding the proposed land uses to the City's Travel Demand Model. The City's model forecast for the Project is 46,894 daily VMT, an increase

of approximately 3 percent within the City sphere of influence and 0.4 percent within the County. The VMT generated per household for the Project is forecasted at 69 daily VMT per household. Although the Project would have a VMT below the regional average, the VMT per household for the Project is forecasted to be approximately 28 percent higher than the average for the City's sphere of influence (Table 3.13-31).

Table 3.13-31. Average Estimated Year 2035 VMT for the City, County and Project

Descriptions	Daily VMT	VMT per HH[1]
San Luis Obispo County	12,000,000	80
City of San Luis Obispo	1,500,000	54
Project	46,894	69

[1]Reported VMT per household
Source: Project TIS, Appendix J.

School-based Trip Distribution

It is expected that a portion of trips from the Madonna Froom Ranch component would be associated with persons traveling to and from local schools. Due to the Project's proximity to public schools within the area and the availability of bus services to the Project site, for CEQA analysis it is anticipated that the preferred mode of travel for school-based trips would be made by pedestrian and bicycle travel, as well as personal vehicles (see also, Section 3.12, *Public Services and Recreation*). This represents a conservative approach and the Project TIS captured and incorporated these trips in the analysis of Project impacts to local road segments and intersections.

Cumulative Impacts

Cumulative conditions represent future buildout of the land uses and planned transportation infrastructure in the region. Based on the list of approved and reasonably foreseeable projects, future traffic demands were estimated. Cumulative analysis quantifies conditions representing buildout of the City's adopted General Plan land uses and transportation infrastructure improvements. The forecast horizon is Year 2035 and includes regional growth representing buildout of surrounding incorporated jurisdictions and unincorporated communities in the County. Vehicular, pedestrian, bicycle, and transit trip forecasts were prepared utilizing the City's Travel Demand Model and were also developed to be largely consistent with growth increments of the past San Luis Ranch Multi-modal TIS Cumulative plus Project scenario. As such, mitigation required by the San Luis Ranch Specific Plan project, Avila Ranch Specific Plan project, and similar projects may partially or wholly

overlap with mitigation required of this Project, and may be constructed in conjunction with these other projects in the area.

Besides the approved/pending projects identified for inclusion in the Near-Term scenario, the Cumulative scenario also considers a reasonable projection on the remaining vacant and undeveloped land in the City, consistent with the City's General Plan LUE. Regional growth was based on the model growth projections, and Caltrans historical and current counts on mainline facilities would be reviewed to ensure the model forecasts are adequately consistent with past historical growth rates.

Several transportation infrastructure improvement projects were identified by the City for inclusion in the Cumulative analysis scenario. These projects are all consistent with the City's General Plan CE, and are included in the City's impact fee program and capital improvement program. However, it is not anticipated that every project identified in the City's General Plan CE would be funded or constructed by the Year 2035 forecast horizon. Therefore, the Cumulative transportation projects list includes only those that are anticipated to be funded and constructed within that time frame. Cumulative transportation projects included in the analysis are listed below. Notable improvements include:

- Prado Overpass/Interchange (Overcrossing, NB and SB Ramps, NB Auxiliary Lane, and SB Collector-Distributor System)
- Dalidio Drive/Prado Road Widening
- Prado Road Extension to Broad Street
- Intersection improvements at Prado Road and South Higuera Street
- Intersection improvements at South Higuera Street/Tank Farm Road
- Sidewalk, bike lanes, and Class I multi-use path at Froom Ranch Extension east to Dalidio Drive (Near-Term Project)
- Bicycle protected intersection installations at Madonna Road/Dalidio Drive and LOVR/Dalidio Drive (Near-Term Project)
- Extension of Bob Jones Trail south of LOVR to South Higuera Street/Octagon Way (Cumulative Project)Extension of Bob Jones Trail West Spur from Calle Joaquin to Froom Ranch Way (Cumulative Project)

3.13.3.3 Project Impacts and Mitigation Measures

As noted above, this impact analysis is based upon the TIS prepared by TJKM (with the exception of Impacts TRANS-1, and TRANS-4, and TRANS-5). This section briefly summarizes the findings of the TIS; Appendix J contains the Project TIS, which provides

a complete analysis and discussion. The TIS compared Existing, Near-Term, and Cumulative (buildout) traffic conditions to those with the added effects of Project-generated traffic to determine Project-specific and contributing impacts on multi-modal infrastructure within the Project vicinity (Table 3.13-32). All identified impacts would be mitigable to a less than significant level, except for those associated with the construction of the Prado Road Overpass/Interchange project prior to 2025, which are included in the discussion as MM TRANS-2 and MM TRANS-14.

Table 3.13-32. Summary of Project Impacts

Transportation Impacts	Mitigation Measures	Residual Significance	TIS Impact (see Appendix J)
TRANS-1. Project construction activities would potentially create traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, equipment, etc.) as well as temporary traffic lane and sidewalk closures.	MM TRANS-1	Less than Significant with Mitigation	--
TRANS-2. Under Existing plus Project conditions, the addition of Project traffic would exacerbate existing queuing and peak hour traffic for automobiles, and poor levels of service for pedestrians and bicycle modes of transportation, causing transportation deficiencies in the Project vicinity.	MM TRANS-2 MM TRANS-3 MM TRANS-4 MM TRANS-5 MM TRANS-6 MM TRANS-7 MM TRANS-8 MM TRANS-9 MM TRANS-10 MM TRANS-11 MM AQ-6	Significant and Unavoidable	Existing plus Project Impacts
TRANS-3. Under Near-Term plus Project (Scenario 2) conditions, the addition of Project traffic would exacerbate existing queuing and peak hour traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing transportation deficiencies in the Project vicinity.	MM TRANS-2 MM TRANS-5 MM TRANS-6 MM TRANS-8 MM TRANS-9 MM TRANS-12 MM TRANS-13 MM TRANS-14 MM TRANS-15 MM TRANS-16 MM TRANS-17 MM TRANS-18	Significant and Unavoidable	Near-Term plus Project Impacts
TRANS-4. The Project would result in traffic safety impacts and inadequate emergency access and evacuation options, resulting in potential for structural damage, injuries, or loss of life due to wildland fires or other emergency situations.	MM HAZ-4 MM TRANS-19 MM TRANS-20 MM TRANS-21 MM TRANS-22 MM TRANS-23	Less than Significant with Mitigation	Emergency Vehicle Access Impacts

Table 3.13-32. Summary of Project Impacts (Continued)

Transportation Impacts	Mitigation Measures	Residual Significance	TIS Impact (see Appendix J)
TRANS-5. Onsite circulation would result in safety impacts to pedestrian and bicycle access.	MM TRANS-24	Less than Significant with Mitigation	Access Management Assessment
TRANS-6. Under long-term Cumulative plus Project conditions, Project-generated traffic would result in a cumulatively considerable contribution to traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing transportation deficiencies in the Project vicinity.	MM TRANS-8 MM TRANS-9 MM TRANS-13 MM TRANS-23 MM TRANS-25 MM TRANS-26 MM TRANS-27 MM TRANS-28 MM TRANS-29 MM TRANS-30	Less than Significant with Mitigation	Cumulative plus Project Impacts

Impact TRANS-1 Project construction activities would potentially create traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, equipment, etc.) as well as temporary traffic lane and sidewalk closures (Less than Significant with Mitigation).

The location and intensity of construction-related increases in traffic would vary by construction phase (refer to Section 2.6, *Project Construction* for a detailed description of construction activities occurring within each phase); however, each phase would incrementally contribute to road or intersection congestion over the planning horizon. Construction is divided into four phases that range between one to two years each, for a total construction period of approximately five years.

While construction-related traffic would be ongoing for approximately five years, construction traffic could create potentially significant impacts. Increased construction traffic, particularly large haul trucks and other heavy equipment, may disrupt local traffic flows, congest limited turn lane capacities, and generally slow traffic movement. Construction activity during site preparation would include use of heavy haul trucks for import of soil and rock, cement trucks, material and equipment delivery trucks, and worker vehicles.

All excavated soils would be leveled onsite and there would be approximately 222,300 cy of soil, rock, and aggregate import, resulting in roughly 11,100 to 22,200 haul truck trips to the Project site over five years. However, import activities would peak during Phase 1 when the Project site would be graded, and most imported soil and rock would occur to

shape the site and install the stormwater management system. Heavy trucks would add incrementally to congestion and queuing along LOVR and at the LOVR interchanges with U.S. 101. These vehicles would likely use U.S. 101 and LOVR to travel to and from the site. Trucking for the import of materials, from offsite, would be routed from LOVR entering the site at the Auto Park Way intersection. Materials would be distributed based on the proposed phasing of the construction and would utilize the main corridors, Commercial Collectors "A" and "B", to route and distribute to the areas requiring fill material.

The proposed internal road system (installed in Phase 1) would be used to distribute cut material within the Project site boundaries until occupation of Villaggio's Lower Area occurs. The Project proposes to complete Villaggio's Upper Terrace earthwork import prior to occupancy of Villaggio's Lower Area development. Cut material from the portion of Villaggio's Upper Terrace that is above the 150-foot elevation (approximately 30,000 cy) may be exported to Villaggio's Lower Area if Villaggio is not occupied by residents at the time of export. Once occupancy has begun, any remaining material exported from Villaggio's Upper Terrace would be trucked offsite through the Mountainbrook Church driveway to Calle Joaquin and LOVR for use in the Madonna Froom Ranch component of the Project. This transfer of 30,000 cy of fill within the Project site would require approximately 2,143 heavy haul truck trips on local roadways then routed through Auto Park Way and Commercial Collector "A" to Madonna Froom Ranch.

Other potential construction-related impacts include idling, parked, or queued heavy trucks that could potentially obstruct visibility, traffic flows, and interfere with pedestrian and bicycle flows. Construction may also require the temporary or extended closure of traffic lanes on LOVR or Calle Joaquin to accommodate parked vehicles, operation of construction equipment, installation of Project improvements, including trenching for utilities along LOVR and installation of intersection improvements at Auto Park Way. Depending on final construction plan details, such lane and sidewalk closures could extend from a single day to several weeks. The intensity of construction-related traffic issues would vary by phase and would possibly result in periodic road closures for construction of onsite and offsite development, such as during proposed road improvements on LOVR. This would cause vehicle delays and disrupt cyclist and pedestrian flows, requiring travelers to potentially utilize alternative routes. While temporary during construction, these types of delays and disruptions would be substantial and would occur regularly over the five-year implementation of the Project, which would be *potentially significant*.

Mitigation Measure

MM TRANS-1 *The Applicant shall prepare a Construction Transportation Management Plan for all phases of the Project for review and approval by the City prior to issuance of grading or building permits to address and manage traffic during construction. The Plan shall be designed to:*

- *Prevent traffic impacts on the surrounding roadway network;*
- *Restrict construction staging to within the Project site;*
- *Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;*
- *Ensure safety for both those construction vehicles and works and the surrounding community; and*
- *Prevent substantial truck traffic through residential neighborhoods.*

The Construction Transportation Management Plan shall be subject to review and approval by the Public Works Director to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction:

- *A detailed Construction Transportation Management Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Plan shall include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such Plan shall be reviewed and approved by the Community Development Department and implemented in accordance with this approval.*
- *Heavy haul construction vehicles and cement trucks shall not pass through Villaggio's Lower Area access roads once any of the Lower Area residences become occupied, and must utilize access from Calle Joaquin to access the Upper Terrace after that time.*
- *Work within the public right-of-way shall be reviewed and approved by the City on a case-by-case basis based on the magnitude and type of construction activity. Work shall generally be performed between 8:30 AM and 4:00 PM. This work includes dirt hauling and*

construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit administered by the Building and Safety Division. Additional restrictions may be put in place by Public Works Department depending on particular construction activities and conditions.

- *Streets and equipment shall be cleaned in accordance with established Public Works requirements.*
- *Trucks shall only travel on a City-approved construction route. Limited queuing may occur on the construction site itself.*
- *Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.*
- *Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.*

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction:

- *The traveling public shall be advised of impending construction activities that may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Impact Mitigation Plan).*
- *A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way shall be obtained.*
- *Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 0.25 mile.*
- *Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.*

- *Public Works Department approval of any haul routes for construction materials and equipment deliveries shall be obtained.*

Plan Requirements and Timing. The Applicant shall submit the Construction Transportation Management Plan to the City for review and approval prior to issuance of grading or building permits. The Construction Transportation Management Plan shall be updated as needed to reflect changing conditions over the Project's five-year construction schedule. The Applicant shall conduct necessary construction employee training prior to the commencement of construction. The City Public Works Department, Community Development Department, Police Department, and Fire Department, and nearby residences and businesses shall be notified of the construction schedule prior to initiation of construction. The Applicant shall submit individual traffic control plans and part of encroachment permits for work within the public right-of-way.

Monitoring. The City shall ensure compliance with the Construction Transportation Management Plan with periodic inspections of the Project site during construction. Complaints related to construction traffic at the site shall be directed to the City Public Works Department.

Residual Impact

Preparation of a Construction Transportation Management Plan as part of MM TRANS-1 would reduce construction-related traffic impacts to the maximum extent feasible by establishing truck routes and parking locations for construction workers. Residual impacts would be *less than significant with mitigation*.

Impact TRANS-2 Under Existing plus Project conditions, the addition of Project traffic would exacerbate existing queuing and peak hour traffic for automobiles, and poor levels of service for pedestrians and bicycle modes of transportation, causing transportation deficiencies in the Project vicinity (Significant and Unavoidable).

Using vehicle, pedestrian, bicycle trip generation and distribution data, the Project's TIS analyzed the potential transportation impacts of the Project on multi-modal facilities and operations, including intersections, roadway segments, bike paths, sidewalks, and transit routes under Existing plus Project conditions. Existing conditions and Existing plus Project conditions were compared to determine the degree of change projected for each of the

transportation facilities potentially impacted by Project trips. The TIS identifies multi-modal AM and PM peak hour LOS for intersection LOS and queuing, roadway segments, bike paths, sidewalks, and transit routes. The Existing plus Project LOS was compared with City thresholds of significance to determine where significant impacts may occur to intersections, roadway segments, pedestrian and bicycle facilities and transit operations as a result of Project implementation. Figures 3.1-12 through 3.1-15 found on pages 153 to 156 of the TIS illustrate the Existing plus Project lane geometries, traffic controls at the study intersections, and the Existing plus Project peak hour traffic volumes at the study intersections.

Potentially significant operational impacts to multi-modal transportation would occur at occupation of Villaggio's Lower Area and subsequently at occupation of Madonna Froom Ranch, including 10 separate intersections and roadway segments due to increased automobile, pedestrian, and bicycle traffic under Existing plus Project conditions. These include automobile impacts at five locations, bicycle and pedestrian related impacts at eight locations, and one impact due to neighborhood traffic management impact. These impacts under Existing plus Project conditions and associated mitigation are summarized below. For a complete description of all intersections, roadway segments, bike paths, sidewalks and transit facilities, see Tables 3.1-48 through 3.1-57 on pages 130 through 149 of the TIS (Appendix J).

wood.

Existing Plus Project Traffic Impacts (2035)

FIGURE 3.13-2

Existing Plus Project Impact Summary

Intersection #10: LOVR and U.S. 101 SB Ramps

Project-added automobile traffic would exacerbate the existing SB right-turn lane vehicular queue and WB right-turn lane queue in the PM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupation of Madonna Froom Ranch, though it would be reduced to less than significant by the implementation of MM TRANS-2 below.

Intersection #13: South Higuera Street / Vachell Lane

The Vachell Lane side-street stop sign-controlled intersection currently operates at an unacceptable Automobile LOS F during AM peak hours and E during PM peak hours (V/C ratios of 0.84 and 0.81, respectively). Project traffic would increase the V/C ratio by more than 0.01 to a V/C ratio of 0.96 for both peak hour periods, and side-street approach volumes would exceed signal warrant thresholds. This automobile LOS impact would be *potentially significant* and occur at occupancy of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-3.

Intersection #14: South Higuera Street / Suburban Road

Project-added automobile traffic would impact the existing WB left-turn queue at the Suburban Road side-street stop sign-controlled intersection in the PM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupation of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-4.

Intersection #15: South Higuera Street / Tank Farm Road

Project-added bicycle traffic would exacerbate existing unacceptable intersection LOS from LOS D to LOS E, with a LOS score of 4.59, for bicycles approaching the intersection WB due to the lack of bike lane on Tank Farm Road. This bicycle impact would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, though would be reduced to less than significant by the implementation of MM TRANS-5.

Project-added automobile traffic would impact the SB left queue that would exceed capacity in the PM peak hour, as it would exacerbate the 95th-percentile turning movement

queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupation of Madonna Froom Ranch, and would remain significant and unavoidable with the implementation of MM TRANS-6.

Intersection #16: South Higuera Street / Prado Road

Project-added automobile traffic would impact the NB left queue and SB left queue in the AM and PM peak hours, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupation of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-7.

Roadway Segments #1 and #2: LOVR from Prefumo Canyon Road to Oceanaire Drive and from Oceanaire Drive to Madonna Road

Roadway segments #1 and #2 on LOVR (the stretch between Prefumo Canyon Road and Madonna Road) currently operate at an unacceptable segment pedestrian LOS of D and F due to lack of adequate buffer between pedestrians and high-speed vehicular traffic. The Project would exacerbate these conditions with additional vehicle and person trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur at occupation of Villaggio's Lower Area, though would be reduced to less than significant by the implementation of MM TRANS-8.

Roadway Segments #3, #4, #5 and #6: LOVR from Madonna Road to South Higuera Street

Roadway segments #3, #4, #5, and #6 on LOVR (the stretch between Madonna Road and South Higuera Street) currently operate at an unacceptable segment pedestrian LOS of D and F due to lack of sidewalks or adequate buffer between pedestrians and high-speed vehicular traffic. The Project would exacerbate these conditions with additional vehicle and person trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur at occupation of Villaggio's Lower Area, though would be reduced to less than significant by the implementation of MM TRANS-9.

Roadway Segment #11: Madonna Road from LOVR to Dalidio Drive

Roadway segment #11 on Madonna Road (from LOVR to Dalidio Drive) currently operates at an unacceptable segment pedestrian LOS of D and F due to lack of limited pedestrian access and insufficient buffer between pedestrians and high-speed vehicular traffic. The Project would exacerbate these conditions with additional vehicle and person

trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur at occupation of Villaggio's Lower Area, though could be reduced to less than significant by the implementation of MM TRANS-10.

Local Road "A" – Neighborhood Traffic Analysis

Based on the trip generation and trip distribution analysis conducted for the internal Project trips, proposed Local Road "A" is estimated to have a daily traffic volume of 250 vpd, well within the City General Plan CE maximum ADT threshold of 1,500 vpd for local streets. While street designs are preliminary at this point, the geometric design (i.e., width and straight alignment) of Local Road "A" includes 12-foot wide travel lanes and lacks features such as street parking, bulb-outs/medians, horizontal curves or other features that are typically required to maintain automobile speeds within the City's established maximum target of 25 mph. This Neighborhood Traffic Management impact would be *potentially significant* and occur at occupation of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-11.

Public Transit Access

Regarding public transit, one new bus stop is proposed along SB LOVR, just south of the Project's primary access at the proposed intersection of Commercial Collector "A" with LOVR at Auto Park Way. The Applicant would coordinate with SLO Transit to integrate the new stop with existing SLO Transit routes 2A and 2B. Although transit service to Project vicinity is infrequent (i.e., 1-hour headways), the TIS projected that the Madonna Froom Ranch component of the Project would add very few trips to the existing transit services, which could be accommodated by the existing transit capacity. However, residents of Villaggio would also generate additional demand for transit services.

Elderly populations and senior living communities can generate a greater amount of demand for transit services compared to typical residential land uses due to lower percentages of licensed or capable drivers and hindered mobility. Villaggio's Life Community Plan is proposed as a senior living facility intended to accommodate both active and less-abled seniors over the age of 65, including seniors with health conditions and disabilities. Many of these residents may be unable to drive and/or are less likely to utilize more active modes of transportation (e.g., walking, bicycling). As such, the Villaggio component of the Project is anticipated to result in a high demand for transit services. Though the Project proposes a transit stop along an existing bus route at the proposed LOVR/Auto Park Way intersection, this transit stop is located nearly 0.5 mile

from some residential areas within Villaggio. Such a distance can prove inaccessible for many populations, particularly elderly populations with health conditions or disabilities. Due to the high demand for transit and the inaccessibility to the nearest transit facility by Villaggio residents, impacts are considered to be *potentially significant.*

Mitigation Measures

MM AQ-6 shall apply.

MM TRANS-2 *The Project Applicant shall design and construct the extension of the westbound left-turn pocket at the LOVR/U.S. 101 southbound ramps intersection to provide a storage length of 320 feet, and design and construct the extension of the southbound right-turn pocket at the LOVR/U.S. 101 southbound ramps intersection to provide a storage length of 140 feet. In coordination with the Applicant, the City and Caltrans shall also optimize traffic signal timings and coordination between LOVR/Calle Joaquin and LOVR/U.S. 101 southbound ramps. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs. This mitigation measure requires Caltrans approval and coordination.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for roadway improvements and a Traffic Engineering Study for signal timing recommendations for review and approval by the City. Implementation of improvements shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant shall make a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-3 *The Project Applicant shall design and install measures to restrict left turns at the South Higuera Street/Vachell Lane intersection, extend Buckley Road from Vachell Lane to South Higuera Street, and install a*

traffic signal at Buckley Road/South Higuera Street intersection. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs. This mitigation measure requires County approval and coordination.

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant shall make a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-4 *The Project Applicant shall design and install the restriping of the westbound approach of the South Higuera Street/Suburban Road intersection to extend the left- and right-turn pocket storage to 250 feet. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Madonna Froom Ranch development. If improvements are completed sooner by others, the Applicant may be responsible for making a fair share contribution prior to issuance of building permits for the Madonna Froom Ranch development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-5 *The Project Applicant shall extend the westbound bike lane on Tank Farm Road approaching the South Higuera Street/Tank Farm Road intersection to the intersection and install a bike box to facilitate bicycle left-turn movements. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. If improvements are completed sooner by others, the Applicant may be responsible for a fair share contribution prior to issuance of building permits for Villaggio's Lower Area development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-6 *The Project Applicant shall design and install a second southbound left-turn lane at the South Higuera Street/Tank Farm Road intersection. The Project Applicant shall also pay fair share costs for construction of the Prado Road Overpass/Interchange project. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs through participation in the Citywide Transportation Impact Fee program.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City for the South Higuera/Tank Farm intersection improvements. Implementation of intersection improvements shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. Intersection improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. Participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation

towards the Prado Road Overpass/Interchange project and the South Higuera/Tank Farm Road intersection improvements, if constructed sooner by others. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall verify that the Applicant pays fair share costs in accordance to the approved phase and design plans.

MM TRANS-7 *The Project Applicant shall design and install a second northbound left-turn lane at the South Higuera Street/Prado Road intersection, which requires the replacement of the Prado Road Bridge just west of South Higuera. Project is responsible for implementation prior to development of Madonna Froom Ranch, or fair share contribution through participation in the Citywide Transportation Impact Fee program if improvements are constructed sooner by others.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If improvements are completed sooner by others, the Applicant shall make a fair share contribution through participation in the Citywide Transportation Impact Fee program prior to issuance of building permits for the Madonna Froom Ranch development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-8 *The Project Applicant shall design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes. Improvement extents shall occur in the northbound direction between Laguna Lane and Diablo Drive, and in the southbound direction between Diablo Drive and Madonna Road.*

Project is responsible for fair share contribution towards improvement costs.

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-9 *The Project Applicant shall design and install ADA-compliant curb, gutter and sidewalk along the west side of LOVR to complete the sidewalk connection between the Irish Hills Plaza and Calle Joaquin. The Project Applicant shall also design and install Class IV bikeways (protected bike lanes) along LOVR to provide a physical buffer between the sidewalk and vehicular traffic lanes in the northbound and southbound directions between Madonna Road and South Higuera Street. The Project is responsible for all costs related to construction of sidewalks, curb and gutter, and a fair share contribution towards Class IV bikeway improvements. This mitigation measure requires Caltrans approval and coordination for improvements near LOVR/U.S. 101 interchange.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Bikeway improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-10 The Project Applicant shall design and install a Class I Multi-Use Path parallel to Madonna Road between Oceanaire Drive and the U.S. 101 southbound ramps intersection. The Project is responsible for a fair share contribution towards improvements through payment of City Traffic Impact Fees.

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If improvements are completed sooner by others, the Applicant shall make a fair share contribution through participation in the Citywide Transportation Impact Fee program prior to issuance of building permits for Villaggio's Lower Area development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-11 The Project is responsible for incorporating traffic calming measures (e.g., speed humps, bulb-outs, chicanes, etc.) into the design of Local Road "A" prior to development of Villaggio's Lower Area.

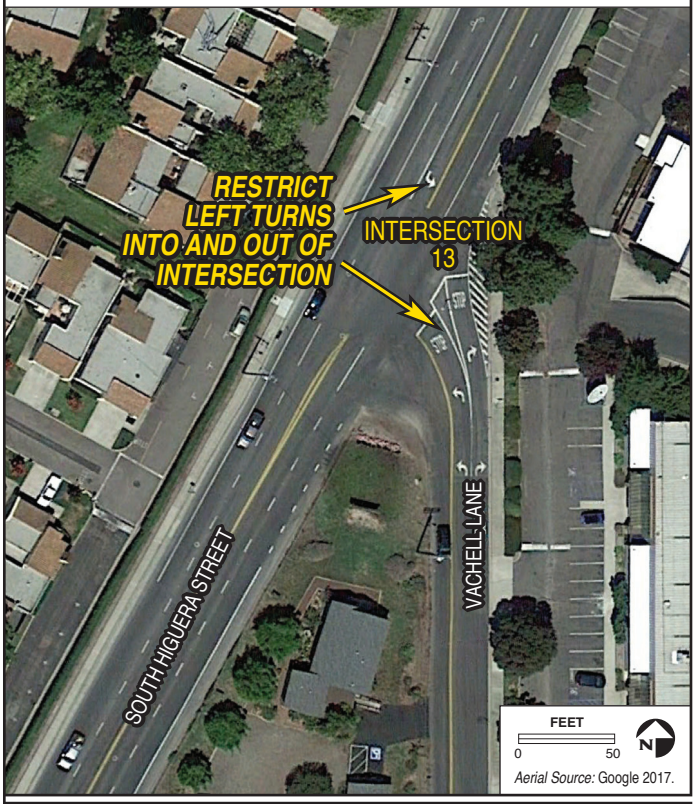
Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of a certificate of occupancy or building permits for development of Villaggio's Lower Area.

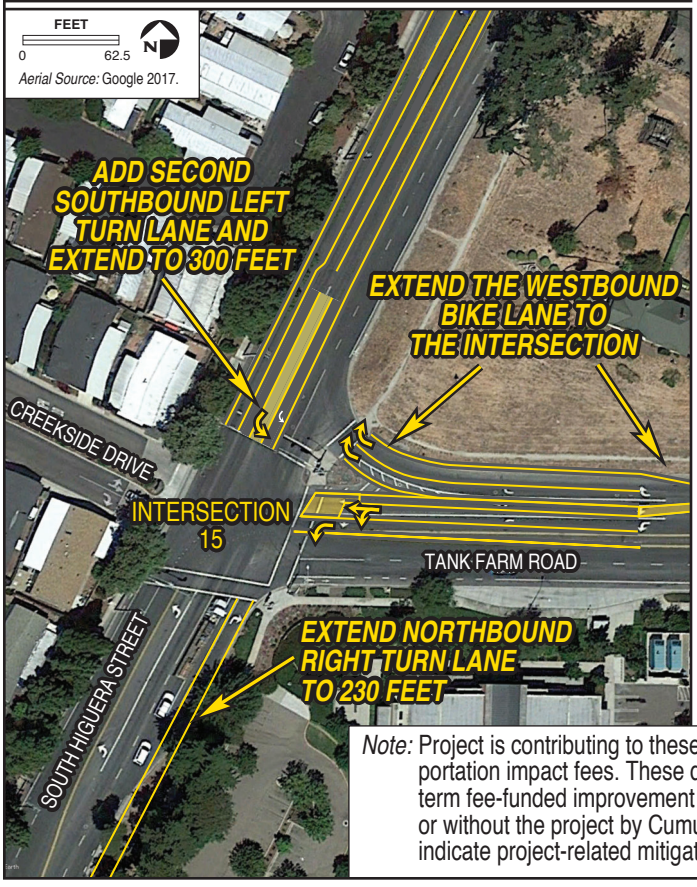
Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans.

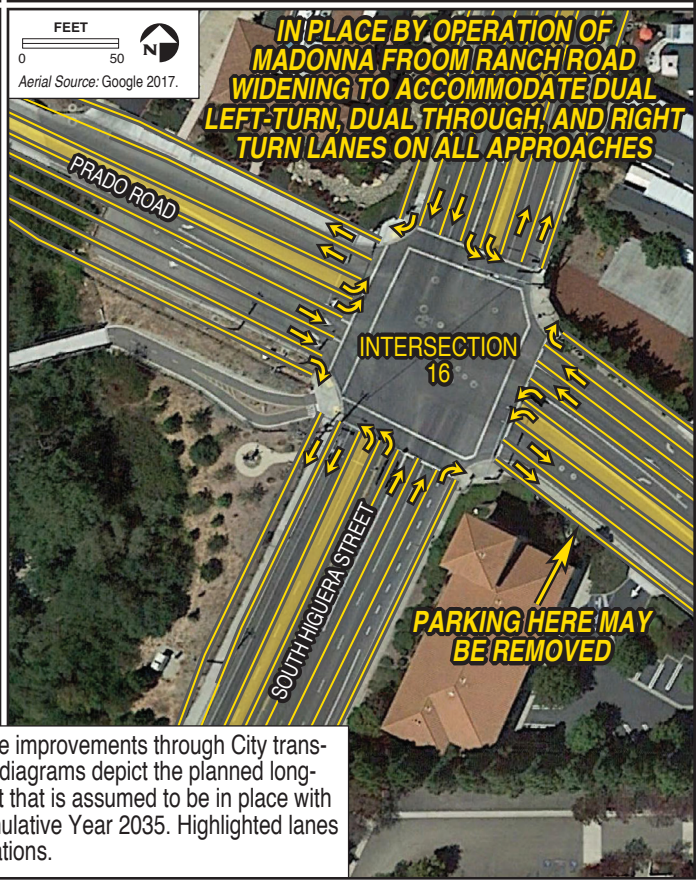
Residual Impacts

Ten of the identified Existing plus Project impacts would be less than significant with mitigation while one impact would be unavoidable and significant (see Table 3.13-33). With implementation of MM TRANS-2 through -5 and MM TRANS-7 through -11, impacts under Existing plus Project conditions would be reduced to a less than significant level with mitigation (Figure 3.13-3). Similarly, implementation of MM AQ-6, requiring the Applicant for the Villaggio Life Community Plan provide shuttle services for residents of Villaggio, would address the demands of the proposed senior resident population on transit facilities and reduce impacts to a less than significant level with mitigation. However, implementation of MM TRANS-6 requires the completion of the Prado Road Overpass/Interchange project, which cannot be ensured by this Project. Therefore, if Prado Road Overpass/Interchange project is not in place by Project occupancy, impacts would be *significant and unavoidable*.

Note: Extension of Buckley Road to South Higuera is part of the overall mitigations strategy for South Higuera/Vachell Lane.







Note: Project is contributing to these improvements through City transportation impact fees. These diagrams depict the planned long-term fee-funded improvement that is assumed to be in place with or without the project by Cumulative Year 2035. Highlighted lanes indicate project-related mitigations.

wood.

Partial List of Applicant Funded City Improvements to Transportation Network – Intersections 13, 14, 15, and 16
[depicted improvements are not representative of final design plans, and may be constructed in conjunction with other projects in the area]

FIGURE 3.13-3

Table 3.13-33. Existing Plus Project Transportation Impact Summary

Location	Trigger	Transportation Mode	Mitigation Measure	Impact
Intersection #10: LOVR / U.S. 101 SB Ramps	Development of Madonna Froom Ranch	Auto (Queue)	TRANS-2	Less than Significant with Mitigation
Intersection #13: South Higuera Street / Vachell Lane	Development of Madonna Froom Ranch	Auto	TRANS-3	Less than Significant with Mitigation
Intersection #14: South Higuera Street / Suburban Road	Development of Madonna Froom Ranch	Auto (Queue)	TRANS-4	Less than Significant with Mitigation
Intersection #15: South Higuera Street / Tank Farm Road	Development of Villaggio Lower Area **Development of Madonna Froom Ranch**	Bicycle **Auto (Queue)**	TRANS-5 **TRANS-6**	Less than Significant with Mitigation **Significant and Unavoidable**
Intersection #16: South Higuera Street / Prado Road	Development of Madonna Froom Ranch	Auto (Queue)	TRANS-7	Less than Significant with Mitigation
Roadway Segments #1 and #2: LOVR from Prefumo Canyon Road to Oceanaire Drive and from Oceanaire Drive to Madonna Road	Development of Villaggio Lower Area	Pedestrian	TRANS-8	Less than Significant with Mitigation
Roadway Segments #3, #4, #5 and #6: LOVR from Madonna Road to South Higuera Street	Development of Villaggio Lower Area	Pedestrian	TRANS-9	Less than Significant with Mitigation
Roadway Segment #11: Madonna Road from LOVR to Dalidio Drive	Development of Villaggio Lower Area	Pedestrian	TRANS-10	Less than Significant with Mitigation
Local Road "A"	Development of Villaggio Lower Area	Neighborhood Traffic Management	TRANS-11	Less than Significant with Mitigation

Source: TIS; see Appendix J. For a complete description of all intersections, roadway segments, bike paths, sidewalks, and transit facilities, see Tables 3.1-48 through 3.1-57 on pages 130 through 149 of the TIS.
Bolded items indicate significant an unavoidable impacts.
Note: MM AQ-6 applies to reduce VMT through trip reduction.

Impact TRANS-3 **Under Near-Term plus Project (Scenario 2) conditions, the addition of Project traffic would exacerbate existing queuing and peak hour traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing**

transportation deficiencies in the Project vicinity (Significant and Unavoidable).

Using vehicle, pedestrian, bicycle trip generation and distribution data, and increased transit demand, the TIS analyzed the potential transportation impacts of the Project on multi-modal facilities and operations, including intersections, roadway segments, bike paths, sidewalks, and transit routes under Near-Term plus Project conditions. As mentioned previously, analysis results for Near-Term Scenario 2, which does not assume completion of the Prado Interchange Project prior to occupancy of the Project, are presented herein as a conservative, worst-case basis for analysis of potential project impacts. Near-Term conditions and Near-Term plus Project conditions were compared to determine the degree of change projected for each of the transportation facilities potentially impacted by Project trips. The TIS identifies multi-modal AM and PM peak hour LOS for intersection LOS and queuing, roadway segments, bike paths, sidewalks, and transit routes. The Near-Term plus Project LOS was compared with City thresholds of significance to determine where significant impacts would occur to intersections, roadway segments, pedestrian and bicycle facilities and transit operations as a result of Project implementation. Figures 3.1-20 through 3.1-23 found on pages 210 to 213 of the TIS illustrate the Near-Term plus Project lane geometries, traffic controls at the study intersections, and the Near-Term plus Project peak hour traffic volumes at the study intersections (Appendix J).

Potentially significant operational impacts to multi-modal transportation would occur at occupation of Villaggio's Lower Area and subsequently at occupation of Madonna Froom Ranch, including 15 separate intersections and roadway segments due to increased automobile, pedestrian, and bicycle traffic under Near-Term plus Project conditions. These include automobile impacts at eight locations, bicycle and pedestrian related impacts at eight locations, and one impact due to neighborhood traffic management impact. These impacts under Near-Term plus Project conditions and associated mitigation are summarized below.

Near-Term Plus Project Impact Summary

Intersection #1: LOVR and Foothill Boulevard

Project-added automobile traffic would exacerbate the SB left-turn lane queue in the AM peak hour, as it would exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, though could feasibly be reduced by the implementation of MM TRANS-12. However,

given the LOVR/Foothill Boulevard intersection is County jurisdiction, improvement of this intersection to address Near-Term plus Project traffic would be outside of the City's control. Necessary improvements proposed by the City would need to be accepted by the County, but there is always a possibility that the improvements are not approved by the County, and therefore cannot be implemented. Therefore, impacts are conservatively considered significant and unavoidable due to this possibility.

Intersection #6: LOVR and Madonna Road

Project-added vehicular and pedestrian traffic would exacerbate unacceptable pedestrian intersection LOS for pedestrians crossing LOVR during the PM peak hour from LOS C to LOS D, with a LOS score of 3.53. Project-added vehicular and bicycle traffic would exacerbate Near-term unacceptable intersection LOS for bicycles approaching the intersection WB on Madonna Road from LOS D to LOS E, with a LOS score of 4.63. Project-added traffic would exacerbate existing SB right queue and WB right queue in the PM peak hour. These vehicle, pedestrian, and bicycle impacts would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, and would remain significant and unavoidable with the implementation of MM TRANS-13, MM TRANS-16, and MM TRANS-19.

Intersection #10: LOVR and U.S. 101 SB Ramps

Project-added automobile traffic would impact the SB right-turn lane queue in the PM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupancy of Madonna Froom Ranch, and would remain significant and unavoidable with the implementation of MM TRANS-2 and MM TRANS-6.

Intersection #15: South Higuera Street / Tank Farm Road

Project-added vehicular and pedestrian traffic would exacerbate unacceptable pedestrian intersection LOS that reflects crossing timing constraint across South Higuera Street during the PM peak hour from LOS C to LOS D, with a LOS score of 3.67. Project-added vehicular and bicycle traffic would exacerbate Near-term unacceptable intersection LOS for bicycles approaching the intersection WB from LOS D to LOS E due to the lack of bike lane on Tank Farm Road, with a LOS score of 5.19. These pedestrian and bicycle impacts would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, though

would be reduced to less than significant by the implementation of MM TRANS-15 and MM TRANS-5.

Project-added automobile traffic would impact the NB right queue during the AM and PM peak hours and the SB left-turn queue in the AM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupancy of Madonna Froom Ranch, and would remain significant and unavoidable with the implementation of MM TRANS-16 and TRANS-6.

Intersection #16: South Higuera Street / Prado Road

Project-added automobile traffic would impact the SB left-turn queue in the AM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupancy of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-17.

Intersection #18: Madonna Road / Oceanaire Drive

Project-added automobile traffic would impact the WB right-turn queue in the AM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupancy of Madonna Froom Ranch, and would remain significant and unavoidable with the implementation of MM TRANS-6.

Intersection #19: Madonna Road and Dalidio Drive

Project-added automobile traffic would exacerbate the EB right-turn queue during both the AM and PM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur at occupancy of Madonna Froom Ranch, and would remain significant and unavoidable with the implementation of MM TRANS-20.

Intersections #20 and #21: Madonna Road / U.S. 101 SB Ramps and Madonna Road / U.S. 101 NB Ramps

Project-added automobile traffic would exceed Caltrans standards for the U.S. 101 SB and NB Ramps in the PM peak hour from LOS D to LOS D and LOS D to LOS E respectively, with LOS scores of D (V/C ratio 1.21) and E (V/C ratio 1.17), respectively. This

automobile LOS impact would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, and would remain significant and unavoidable with the implementation of MM TRANS-14.

Roadway Segments #1 and #2: LOVR from Prefumo Canyon Road to Oceanaire Drive and from Oceanaire Drive to Madonna Road

Roadway segments #1 and #2 on LOVR (the stretch between Prefumo Canyon Road and Madonna Road) currently operate at an unacceptable segment pedestrian LOS of D and F due to lack of sufficient buffer area between pedestrians and high-speed vehicular traffic. The Project would exacerbate these conditions with additional vehicle and person trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, though would be reduced to less than significant by the implementation of MM TRANS-8.

Roadway Segments #3, #4, #5 and #6: LOVR from Madonna Road to South Higuera Street

Roadway segments #3, #4, #5, and #6 on LOVR (the stretch between Madonna Road and South Higuera Street) currently operate at an unacceptable segment pedestrian LOS of D and F due to lack of sidewalks or sufficient buffer area between pedestrians and vehicular traffic. The Project would exacerbate these conditions with additional vehicle and person trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur at occupancy of Villaggio's Lower Area, though would be reduced to less than significant by the implementation of MM TRANS-9.

Roadway Segment #5: LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps

Project-added automobile traffic would exceed the City's standard in the SB direction during the PM peak hour from LOS D to LOS E. This automobile LOS impact would be *potentially significant* and occur at occupation of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-18.

Mitigation Measures

MM TRANS-2 shall apply.

MM TRANS-5 shall apply.

MM TRANS-6 shall apply.

MM TRANS-8 shall apply.

MM TRANS-9 shall apply.

MM TRANS-12 *In coordination with the County, the Project Applicant shall coordinate and fund any costs required to optimize the traffic signal timing at the County intersection of LOVR/Foothill Boulevard to reduce queues for the southbound left-turn movement. This mitigation measure requires County approval and coordination.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the County. Signal optimization shall be completed to the satisfaction of the County prior to City issuance of a certificate of occupancy or building permits for development of Villaggio's Lower Area.

Monitoring. The City shall verify that the Applicant implements the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share to the satisfaction of the County.

MM TRANS-13 *In coordination with the City, the Project Applicant shall fund any costs required to implement Lead Pedestrian Intervals for each pedestrian crossing phase at the LOVR/Madonna Road intersection.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the City. The proposed Lead Pedestrian Intervals shall be installed prior to the issuance of a certificate of occupancy or building permits for Villaggio's Lower Area development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-14 *The Project Applicant shall pay fair share costs for construction of the Prado Road Overpass/Interchange project and northbound U.S. 101*

ramps through participation in the Citywide Transportation Impact Fee program.

Plan Requirements and Timing. Participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation towards the Prado Road Overpass/Interchange project. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall verify that the Applicant contributes an appropriate fair share as approved by the City.

MM TRANS-15 *In coordination with the City, the Project Applicant shall fund any costs required to implement Lead Pedestrian Intervals for each pedestrian crossing phase at the South Higuera Street/Tank Farm Road intersection.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Villaggio's Lower Area, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the City. The proposed Lead Pedestrian Intervals shall be installed prior to the issuance of an occupancy or building permit for Villaggio's Lower Area development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-16 *The Project Applicant shall design and install improvements to extend the northbound right-turn pocket storage at the South Higuera Street/Tank Farm Road intersection to 230 feet. If improvements are constructed sooner by others, the Applicant may be responsible for a fair share contribution towards improvement costs.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. The proposed improvements shall be completed

prior to the issuance of an occupancy or building permit for Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-17 *The Project Applicant shall design and install restriping modifications at the South Higuera Street/Prado Road intersection to accommodate a second southbound left-turn lane and second eastbound through lane. This requires striping modifications, potential street parking removal on the eastern leg of the intersection, and potential traffic signal modifications to accommodate the modified intersection configuration. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of an occupancy or building permit for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-18 *In coordination with the City and Caltrans, the Project Applicant shall fund any costs required to optimize traffic signal timings at three intersections along LOVR between Calle Joaquin and the U.S. 101 northbound ramps to improve traffic coordination and operations along this roadway segment. These intersections include LOVR/Calle Joaquin, LOVR/U.S. 101 southbound ramps, and LOVR/U.S. 101 northbound ramps. This requires coordination with Caltrans.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Traffic Engineering Study identifying recommended signal timing modifications for review and approval by the City and Caltrans. Signal optimization shall be completed to the satisfaction of the City and Caltrans prior to City issuance of a certificate of occupancy or building permits for Madonna Froom Ranch development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-19 *The Project Applicant shall design and install restriping modifications at the LOVR/Madonna Road intersection to increase turn pocket storage to 365 feet and optimize signal timings to improve operations and reduce queuing at the SB left-turn lane. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of an occupancy or building permit for the Madonna Froom Ranch development. Improvement costs exceeding the Project's

proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

MM TRANS-20 *The Project Applicant shall modify the traffic signal at the Madonna Road/Dalidio Drive intersection to provide EB right-turn overlap phase concurrent with NB left-turn phase. If intersection improvements are constructed sooner by others, the Applicant will be responsible for a fair share contribution towards improvement costs.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. Implementation shall be completed prior to the issuance of an occupancy or building permit for the Madonna Froom Ranch development. Improvement costs exceeding the Project's proportional share may be eligible for fee credits or reimbursements. If constructed sooner by others, participation in the Citywide Transportation Impact Fee program will fulfill the Project's fair share financial obligation. Payment of City Transportation Impact Fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

Residual Impacts

Six of the identified impacts would be less than significant with mitigation while six impacts would be unavoidable and significant (see Table 3.13-34). With implementation of MM TRANS-2, -5, -8, -9, -13, and -15 through -20, impacts under Near-Term plus

Project conditions would be reduced to a less than significant level with mitigation. However, MM TRANS-12 involves improvement of an intersection that is within County jurisdiction and MM TRANS-18 requires approval by Caltrans for improvements to U.S. 101 facilities. Implementation of these improvements would be outside of the City's control and cannot be ensured. If these improvements could not be agreed to with the County or Caltrans or could not be implemented, impacts would be *significant and unavoidable*.

Similarly, implementation of MM TRANS-6, -14, -19, and -20 require the completion of the Prado Road Overpass/Interchange project, which cannot be ensured by this Project. While MM TRANS-6 and -20 require completion of the Prado Road Overpass/Interchange project by development of Madonna Froom Ranch (Phase 4), MM TRANS-14 and -19 requires completion of the Prado Road Overpass/Interchange project by development of Villaggio's Lower Area (Phase 2) due to additional contributions towards operational deficiencies at several intersections and roadway segments by traffic generated by other development projects already planned and approved, but not yet occupied. Therefore, if the Prado Road Overpass/Interchange is not in place by Project occupancy under Near-Term plus Project conditions, impacts would be *significant and unavoidable*.

Table 3.13-34. Near-Term Plus Project Transportation Impact Summary

Location	Trigger	Transportation Mode	Mitigation Measure	Impact
Intersection #1: LOVR / Foothill Boulevard	**Development of Villaggio Lower Area**	**Auto (Queue)**	**TRANS-12**	**Significant and Unavoidable.**
Intersection #6: LOVR / Madonna Road	**Development of Villaggio Lower Area**	**Pedestrian**	**TRANS-14**	**Significant and Unavoidable**
	Development of Villaggio Lower Area	**Bicycle**	**TRANS-15**	**Significant and Unavoidable**
	Development of Villaggio Lower Area	**Vehicle**	**TRANS-19**	**Significant and Unavoidable**
Intersection #10: LOVR / U.S. 101 SB Ramps	**Development of Madonna Froom Ranch**	**Auto (Queue)**	**TRANS-2 TRANS-6**	**Significant and Unavoidable**

Table 3.13-34. Near-Term Plus Project Transportation Impact Summary (Continued)

Location	Trigger	Transportation Mode	Mitigation Measure	Impact
Intersection #15: South Higuera Street / Tank Farm Road	Development of Villaggio Lower Area	Pedestrian	TRANS-15	Less than Significant with Mitigation
	Development of Villaggio Lower Area	Bicycle	TRANS-5	Less than Significant with Mitigation
	Development of Madonna Froom Ranch	**Auto (Queue)**	**TRANS-16 TRANS-6**	**Significant and Unavoidable**
Intersection #16: South Higuera Street / Prado Road	Development of Madonna Froom Ranch	Auto (Queue)	TRANS-17	Less than Significant with Mitigation
Intersection #18: South Higuera Street / Prado Road	**Development of Madonna Froom Ranch**	**Auto (Queue)**	**TRANS-6**	**Significant and Unavoidable**
Intersection #19: Madonna Road / Dalidio Drive	**Development of Madonna Froom Ranch**	**Auto (Queue)**	**TRANS-20**	**Significant and Unavoidable**
Intersection #20 and #21: South Higuera Street / Prado Road	**Development of Madonna Froom Ranch**	**Auto (Queue)**	**TRANS-14**	**Significant and Unavoidable**
Roadway Segments #1 and #2: LOVR from Prefumo Canyon Road to Oceanaire Drive and from Oceanaire Drive to Madonna Road	Development of Villaggio Lower Area	Pedestrian	TRANS-8	Less than Significant with Mitigation
Roadway Segments #3, #4, #5 and #6: LOVR from Madonna Road to South Higuera Street	Development of Villaggio Lower Area	Pedestrian	TRANS-9	Less than Significant with Mitigation
Roadway Segment #5: LOVR from U.S. 101 SB Ramps to U.S. 101 NB Ramps	Development of Madonna Froom Ranch	Auto	TRANS-18	Less than Significant with Mitigation

Source: TIS; see Appendix J. For a complete description of all intersections, roadway segments, bike paths, sidewalks and transit facilities, see Tables 3.1-48 through 3.1-57 on pages 130 through 149 of the TIS.
Bolded items indicate significant an unavoidable impacts.
Note: MM AQ-6 also applies to reduce VMT and trips.

Impact TRANS-4. The Project would result in traffic safety impacts and inadequate emergency access and evacuation options, resulting in potential for structural damage, injuries, or loss of life due to wildland fires or other emergency situations (Less than Significant with Mitigation).

Traffic Safety

The segment of LOVR between Froom Ranch Way and Calle Joaquin has been identified as being a high-collision rate location and the design of this segment is not consistent with City access management or design standards for a Parkway Arterial Street. Implementation of the Project would add traffic to this segment, exacerbating these existing deficiencies. Impacts of the Project on this segment are therefore considered *potentially significant,* though could be reduced to less than significant by implementation of MM TRANS-21.

The County segment of South Higuera Street between LOVR and Clover Ridge Lane was also identified as having a higher Fatal-plus-Injury rate compared to statewide averages for similar facilities. However, as detailed in the TIS, implementation of the Project would add a nominal amount of traffic to this roadway segment, and is not considered to exacerbate these existing trends. Impacts of the Project on traffic safety at this roadway segment is considered *less than significant.*

Emergency Evacuation

The Project would substantially increase the total number of people in the area that may be subject to evacuation during a wildland fire or other natural hazard event. During periods of maximum occupancy, 1,231 residents and employees could be onsite within the proposed residential and commercial areas. In addition, residents of the health care unit, which includes skilled nursing and memory care, may require special evacuation, as well as family members visiting residents of Villaggio who may also be onsite. The Project includes a new road at the intersection of LOVR and Auto Park Way as the primary ingress and egress route to the site for private vehicles and first responders. The Project also includes a gated emergency access from the Upper Terrace of Villaggio to the parking lot of Mountainbrook Church uphill from the Project site, which would connect to Calle Joaquin. Emergency access would also be possible from the Irish Hills Plaza parking lot.

During major wildfire events, residents, employees, hotel guests, and visitors may attempt or be required to evacuate the site, which would potentially lead to hundreds of vehicles attempting to leave the Project site in a short period under emergency conditions. As

currently proposed, evacuation routes would either funnel evacuees from Villaggio's Lower Area and Madonna Froom Ranch through a proposed roundabout to the proposed intersection with LOVR, or lead evacuees uphill toward the western boundary of the Project site near the Irish Hills Natural Reserve. Such congested emergency evacuation conditions could be exacerbated by vans or ambulances carrying assisted living and/or memory care patients requiring additional care, as well as the need for emergency vehicles and firefighting personnel and equipment to access the site concurrently with the evacuees.

While the Project includes an emergency access route via the Mountainbrook Church, this access extends uphill toward the Irish Hills and the potential path of any wildfire, thereby decreasing its utility as a safe emergency evacuation route. Residents, workers, and guests of the Project may also evacuate through the Home Depot parking lot. Because the emergency access route via Mountainbrook Church could potentially take evacuees closer to a potential hazard or wildfire, it is assumed that the majority of Project site occupants will evacuate through the site's main entrance. Therefore, evacuating vehicles would be funneled towards and contribute to congestion on the Project site's main access route (Commercial Collector "A") to LOVR. This could result in a potentially significant impact given probable evacuation-related congestion, potential road closures, and exposure of evacuees to smoke, flames, ash and embers, downed power lines and trees or traffic-related hazards during evacuation.

Further, Villaggio contains only one road that connects the Upper Terrace and Lower Area of Villaggio, so the Upper Terrace would lose access to lower portions of the site and only have access through Mountainbrook Church in the event Local Road "C" becomes blocked. During emergency conditions when a wildland fire is imminent, it may prove difficult for the healthcare center to marshal panicked individuals, particularly patients in assisted living such as those on hospice or with dementia, to fire meeting points and shelter-in-place locations, especially if site conditions quickly change. Some residents and visitors may resist or flee, creating chaotic, unmanageable conditions.

This hazardous impact would be *potentially significant*.

Emergency Access to the Vicinity

The Project includes four emergency access points that would be available for emergency vehicles and fire suppression crews to access the site. These include the primary access roadway at LOVR/Auto Park Way; the emergency access gate at Mountainbrook Church, which would provide access through the Upper Terrace; the Irish Hills Plaza parking lot

emergency access, which would provide access to Madonna Froom Ranch; and an internal emergency access road through the proposed public park, which travels through the proposed public park in the Madonna Froom Ranch portion of the Project site adjacent to the Irish Hills (see Figure 2-9).

The Project proposes internal fire access roads around the developed areas that would include spurs to facilitate access to interior structures, as well as turn-around points to accommodate the needs of fire engines or other emergency vehicles. The SLOFD is required to review the Draft FRSP for compliance with SLOFD requirements which include access, roads, and turn-around locations within the Project site.

With regard to emergency vehicle access associated with wildfire emergencies, access to the adjacent slopes of the Irish Hills Natural Reserve under the Project would be limited. Villaggio's Lower Area includes 13 detached units along the boundary directly adjacent to the Reserve that wildland fires coming from the hillsides could affect, and there is no through vehicular access proposed behind these residences to the Irish Hills to allow protection of these structures. Firefighters would have to secure access between buildings and would be inhibited by retaining walls and perimeter fencing. In addition, Madonna Froom Ranch provides the only access road to the Irish Hills, so firefighting vehicles attempting to access the site perimeter through this proposed medium-density multi-family neighborhood may conflict with evacuating private vehicles. Access to the wildland perimeter in this neighborhood would also be impeded by retaining walls and perimeter fencing (see Figure 2-8).

Proposed fencing and retaining walls along the western edge of the Project site would reduce access to wildfire areas and the existing unpaved utility access roads (e.g., Neil Havlik Way) for the purposes of fire suppression and protection of proposed development within the site. Impacts to emergency access would therefore be *potentially significant*.

Mitigation Measures

MM HAZ-4 shall apply.

MM TRANS-21 *The Project shall include a landscaped median along LOVR from the terminus of the existing median at northern Project frontage to Calle Joaquin. Project is responsible for construction of median improvements prior to occupancy of the Lower Area of Villaggio, or fair-share contribution if constructed by others sooner.*

Plan Requirements and Timing. The final FRSP shall be amended to incorporate the above median improvement prior to adoption and submitted to the City for review and approval. The median shall be integrated to the final VTM prior to approval of development plans.

Monitoring. The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.

MM TRANS-22 *The Project shall include an emergency access point from Villaggio's Lower Area to the Irish Hills Natural Reserve to provide access to the existing dirt road network to fight fires in Irish Hills, specifically to Neil Havlik Way which connects to the four utility power line structures at the top of the ridgeline. This access point may be gated to ensure site security in consultation with SLOFD.*

Plan Requirements and Timing. The final FRSP shall be amended to incorporate the above emergency access connection prior to adoption and submitted to the City and SLOFD for review and approval. The above access road shall be integrated to the final VTM prior to approval of development plans.

Monitoring. The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.

MM TRANS-23 *The Project shall integrate access to the Project site perimeters for defending the Project site development. Specifically, these measures should address access to the wildland area immediately abutting the western boundary of Villaggio's Lower Area. This measure shall include access from the proposed Local Road "C" to the Irish Hills, which may include use of space between proposed buildings for firefighting vehicle access, ramps up proposed retaining walls, and similar vehicle infrastructure to maintain access to the base of the Irish Hills.*

Plan Requirements and Timing. The final FRSP shall be amended to incorporate the above emergency access connection along the Irish Hills prior to adoption, and submitted to the City and SLOFD for review and approval. The above access road shall be integrated to the final VTM prior to approval of development plans.

Monitoring. The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.

Residual Impact

Implementation of MM TRANS-21, requiring installation of a landscaped median along LOVR, would reduce traffic safety impacts of the Project by reducing potential for vehicle collision along this existing identified high-collision segment. Installation of emergency access improvements as part of MM TRANS-22 and MM TRANS-23 would reduce emergency access and evacuation-related transportation impacts by establishing access routes for firefighting capabilities along the urban-rural interface at the western boundary of the Project site and for evacuation in the case of an emergency. The potential installation of access to the Irish Hills and associated annual route maintenance for the implementation of MM TRANS-22 and MM TRANS-23 could cause additional secondary biological resource impacts within the Irish Hills, including native serpentine bunchgrass grassland habitat which corresponds to the *Nassella pulchra* Herbaceous Alliance sensitive natural community, as well as state protected rare plant species such as Eastwood's larkspur and San Luis Obispo owl's-clover (see Section 4.4, *Biological Resources*). Implementation of MM HAZ-4 would further reduce impacts via the creation and implementation of a site-specific Evacuation Plan. With implementation of MM TRANS-21 through -23 and MM HAZ-4, residual impacts would be *less than significant with mitigation*.

Impact TRANS-5 Onsite circulation would result in safety impacts to pedestrian and bicycle access (Less than Significant with Mitigation).

While the specific locations and design of onsite access driveways have not been developed at a level necessary to conduct detailed review as part of the TIS, future connections to proposed private and public roadways would be designed per City Engineering Standards and Access Management Policies. Overall, the Project is anticipated to generate approximately 2,700 vpd. The volume of traffic on internal commercial collector streets would be less than the City's adopted 10,000 vpd threshold, while traffic dispersed on to internal local streets would be less than 1,000 vpd. Therefore, based on review of preliminary plans, the proposed onsite vehicle circulation was determined to be adequate by the Project TIS and the Project would not result in any significant automobile impacts on Project site streets.

Regarding onsite pedestrian access, the proposed pathways would need to meet the unique needs of elderly people, some children that would occupy the Project site, and other persons

with mobility challenges. Sidewalks are proposed along LOVR from the new transit stop location north to Irish Hills Plaza, and along Commercial Collectors "A" and "B" and Local Roads "A" and "B". These proposed sidewalks would include lighting, paving, bulb-outs at intersections, and landscaping. While Local Road "C" within Villaggio would not include sidewalks, a network of private walking trails separated from vehicle roadways would be provided for Villaggio residents to provide internal access. However, the following items comprise *potentially significant* safety issues associated with onsite pedestrian circulation:

- At the Project's LOVR/Auto Park Way entry intersection, children and the elderly may not be able to safely cross the intersection due to the crosswalk's length and timing between light cycles;
- Within the site, signage and limited lines of sight from driveways may cause pedestrian safety impacts to the Project's potential population; and
- The Project currently does not adhere with the existing City standards for sidewalks or ADA requirements for a comfortable walking environment.

Regarding onsite bicycle access, the Project includes a proposed bicycle network that would connect with existing bicycle lanes along LOVR, designed with Class II bike lanes along Commercial Collector A, and Class III bike routes with shared lane markings ("sharrows") along Local Road A and Commercial Collector B. Bicycle parking would be provided for commercial, recreational, and residential uses within Madonna Froom Ranch consistent with City Zoning Regulations. However, with regard to bicycle circulation deficiencies, the following items comprise *potentially significant* safety issues associated with onsite bicycle circulation:

- Within the Project site, signage and limited lines of sight from driveways may cause bicycle safety impacts to the Project's potential population; and
- The Project does not provide consistency with City-adopted best practices for high-quality bicycle facility design.

Mitigation Measures

MM TRANS-24 *To address pedestrian and bicycle circulation safety issues, the following modifications to the preliminary Project concept designs throughout the Project site are recommended based on design guidance*

published by National Association of City Transportation Officials and the Federal Highway Administration:

- *Install pedestrian refuges within center medians at north and south legs of the LOVR/Auto Park Way intersection;*
- *Install a single northbound left-turn lane at the LOVR/Auto Park Way intersection in lieu of dual left-turn lanes, as currently proposed, to shorten pedestrian crossing distance at the south leg of the intersection.*
- *Install a bulb-out at the southwest corner of the intersection to shorten pedestrian crossing distance at the south leg of the LOVR/Auto Park Way intersection;*
- *Install Lead Pedestrian Intervals at all pedestrian crossings at the LOVR/Auto Park Way intersection;*
- *Install protected bicycle intersection features as part of signalization and intersection improvements at the LOVR/Auto Park Way intersection, consistent with planned improvements at the nearby LOVR/Froom Ranch Way and Madonna Road/Dalidio Drive intersections;*
- *Provide physically protected bicycle lanes (Class IV bikeway) along LOVR approaching/departing the Auto Park Way intersection and along Commercial Collector "A". The Class IV bikeways shall be installed on-street with a physical barrier between cyclists and vehicular traffic or by constructing raised bicycle facilities at the sidewalk level adjacent to pedestrian sidewalks;*
- *Sidewalks shall be provided within the Madonna Froom Ranch development area of the Project site as per City standards; and*
- *Sidewalk design shall meet ADA requirements for a comfortable walking environment.*

Plan Requirements and Timing. The final FRSP shall be amended to incorporate the above improvements prior to adoption and submitted to the City and SLOFD for review and approval. The above improvements shall be integrated to the final VTM prior to approval of development plans.

Monitoring. The City shall ensure the above measure is incorporated into the final FRSP prior to Project approval.

Residual Impact

With the implementation of MM TRANS-24, Project site circulation and access would safely accommodate all users of the street system and provide a complete and connected pedestrian facility between the Project site circulation system and nearby land uses. Widening or adjustments to pedestrian or bicycle circulation infrastructure may result in secondary impacts on biological resources (see Section 3.4, *Biological Resources*). Ultimately, residual impacts to onsite circulation for automobiles, pedestrians, and bicyclists would be *less than significant with mitigation*.

Cumulative Impacts

Impact TRANS-6 Under long-term Cumulative plus Project conditions, Project-generated traffic would result in a cumulatively considerable contribution to traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing transportation deficiencies in the Project vicinity (Less than Significant with Mitigation).

Using vehicle, pedestrian, bicycle trip generation and distribution data, and increased transit demand, the TIS analyzed the potential transportation impacts of the Project on multi-modal facilities and operations, including intersections, roadway segments, bike paths, sidewalks, and transit routes under Cumulative plus Project conditions. Cumulative conditions and Cumulative plus Project conditions were compared to determine the degree of change projected for each of the transportation facilities potentially impacted by Project trips. The TIS identifies multi-modal AM and PM peak hour LOS for intersection LOS and queuing, roadway segments, bike paths, sidewalks, and transit routes. The Cumulative plus Project LOS was compared with City thresholds of significance to determine where significant impacts would occur to intersections, roadway segments, pedestrian and bicycle facilities and transit operations as a result of Project implementation. Figures 3.1-24 through 3.1-29 found on pages 259 to 264 of the TIS illustrate the Cumulative plus Project lane geometries, traffic controls at the study intersections, and the Cumulative plus Project peak hour traffic volumes at the study intersections (Appendix J).

Potentially significant operational impacts to multi-modal transportation would occur at occupation of Madonna Froom Ranch, including 14 separate intersections and roadway

segments due to increased automobile, pedestrian, and bicycle traffic under Cumulative plus Project conditions. These include automobile impacts at six locations, bicycle and pedestrian related impacts at nine locations. No cumulative impacts to transit facilities or services were identified. These impacts under Cumulative plus Project conditions and associated mitigation are summarized below.

Cumulative Plus Project Impact Summary

Intersection #1: LOVR and Foothill Boulevard

Project-added automobile traffic would exacerbate the unacceptable intersection LOS for automobiles by increasing the V/C ratio by 0.01 during the PM peak hour. This automobile LOS impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-25.

Intersection #5: LOVR / Royal Way

Project-added automobile traffic would exacerbate the NB left-turn queue in the PM peak hour, as it would exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-26.

Intersection #6: LOVR and Madonna Road

Project-added vehicular and pedestrian traffic would exacerbate unacceptable pedestrian intersection LOS for pedestrians crossing LOVR during the PM peak hour with LOS D, with a LOS score increasing from 3.53 to 3.54. This pedestrian impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-13.

Intersection #9: LOVR and Calle Joaquin

Project-added pedestrian traffic would exacerbate unacceptable pedestrian intersection LOS for pedestrians crossing LOVR during the PM peak hour with LOS D, with a LOS score increasing from 3.50 to 3.54, which reflects the lengthy crossing distance across LOVR and the 45 mph travel speeds by vehicles traveling on LOVR. This pedestrian impact would be *potentially significant* and occur after development of Madonna Froom

Ranch, though would be reduced to less than significant by the implementation of MM TRANS-27.

Intersection #10: LOVR and U.S. 101 SB Ramps

Project-added automobile traffic would impact the SB right-turn lane queue in the PM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-26.

Intersection #15: South Higuera Street / Tank Farm Road

Project-added vehicular and pedestrian traffic would exacerbate unacceptable pedestrian intersection LOS crossing South Higuera Street during the PM peak hour with LOS D, with a LOS score increasing from 3.52 to 3.53. This pedestrian impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-13.

Project-added automobile traffic would exacerbate the SB left-turn queue in the AM peak hour, as it would exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-28.

Intersection #18: Madonna Road / Oceanaire Drive

Project-added automobile traffic would impact the WB left-turn queue in the AM peak hour and the WB right-turn queue in the PM peak hour, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-29.

Intersection #19: Madonna Road / Dalidio Drive

Project-added automobile traffic would impact the EB right-turn queue during the AM and PM peak hours, as it would exacerbate the 95th-percentile turning movement queues and exceed the available turn pocket capacity. This automobile queuing impact would be

potentially significant and occur after development of Madonna Froom Ranch, though would be reduced to less than significant by the implementation of MM TRANS-30.

Roadway Segments #1 and #2: LOVR from Prefumo Canyon Road to Oceanaire Drive and from Oceanaire Drive to Madonna Road

Roadway segments #1 and #2 on LOVR (the stretch between Prefumo Canyon Road and Madonna Road) currently operate at an unacceptable segment pedestrian LOS of D and F due to lack of an adequate buffer area between pedestrians and vehicular traffic. The Project would exacerbate these conditions with additional vehicle and person trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though could be reduced to less than significant by the implementation of MM TRANS-8.

Roadway Segments #3, #4, #5 and #6: LOVR from Madonna Road to South Higuera Street

Roadway segments #3, #4, #5, and #6 on LOVR (the stretch between Madonna Road and South Higuera Street) currently operate at an unacceptable segment pedestrian LOS of D and F due to lack of sidewalks or adequate buffer area between pedestrians and vehicular traffic. The Project would exacerbate these conditions with additional vehicular and person trips and would further degrade already exceeded LOS standards. This pedestrian impact would be *potentially significant* and occur after development of Madonna Froom Ranch, though could be reduced to less than significant by the implementation of MM TRANS-9.

U.S. 101 Mainline

Several segments of the NB and SB U.S. 101 mainline currently operate at an unacceptable LOS of D. Under cumulative conditions, the Project-related traffic would exacerbate unacceptable LOS conditions for SB U.S. 101 mainline segments with additional vehicular traffic and person trips. Implementation of the Project would contribute towards further degradation of already exceeded LOS standards, and would contribute towards exceedance of LOS standards for additional mainline segments. This impact would be reduced to less than significant through payment of Project fair share contributions towards planned U.S. 101 mainline operational improvements, which include:

- Installation of ramp metering at U.S. 101 SB on-ramp at LOVR;
- Installation of ramp metering at U.S. 101 SB at on-ramp at South Higuera Street;
- Installation of U.S. 101 NB auxiliary lane planned as part of the Prado Interchange Phase 1; and

- Installation of U.S. 101 SB improvements planned with Prado Interchange SB ramps, which include proposed SB collector-distributor system.

The Project's fair share contribution towards LOVR SB ramp metering improvements and NB/SB mainline improvements are satisfied through payment of City Traffic Impact Fees. The Project's cumulative contribution to impacts on U.S. 101 mainline facilities would be *less than significant.*

Mitigation Measures

MM TRANS-8 shall apply.

MM TRANS-9 shall apply.

MM TRANS-13 shall apply.

MM TRANS-25 *In coordination with the County, the Project Applicant shall pay its fair share fees to fund modifications to the northbound approach at the LOVR/Foothill Boulevard intersection to provide one left-turn, two through, and one right-turn lane, or similar operational improvements to the satisfaction of the County Public Works Director. Additional minor traffic signal, striping, and signage modifications may be required for implementation of these improvements. This mitigation measure requires County approval and coordination.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan and Engineer's Estimate of Probable Cost for review and approval by the County. The Applicant shall pay its fair share fees to the County prior to the issuance of an occupancy or building permit for Madonna Froom Ranch development to fund implementation of the future intersection improvements.

Monitoring. The City shall verify that the Applicant provides the required design plans and contributes an appropriate fair share as approved by the County in accordance to the approved development phase.

MM TRANS-26 *The Project Applicant shall pay its fair share fees to fund striping modifications to extend the northbound left-turn pocket at the LOVR/Royal Way intersection to 150 feet, and to optimize the traffic signal timings along the LOVR corridor between Descanso Street and South Higuera Street. This mitigation measure requires Caltrans approval and coordination.*

Plan Requirements and Timing. Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City.

Monitoring. The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements.

MM TRANS-27 *In coordination with the City, the Project Applicant shall pay its fair share fees to fund the implementation of Lead Pedestrian Intervals for each pedestrian crossing phase at the LOVR/Calle Joaquin intersection.*

Plan Requirements and Timing. Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City.

Monitoring. The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements.

MM TRANS-28 *The Project Applicant shall pay its fair share fees to fund the extension of the southbound left-turn pocket storage at the South Higuera Street/Tank Farm Road intersection to 300 feet.*

Plan Requirements and Timing. Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City.

Monitoring. The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements.

MM TRANS-29 *The Project Applicant shall pay its fair share fee to the City to fund the extension of the westbound right-turn pocket storage at the Madonna Road/Oceanaire Drive intersection to 200 feet. This may require replacement of the existing culvert on Madonna Road east of Oceanaire Drive.*

Plan Requirements and Timing. Prior to issuance of an occupancy or building permit for Madonna Froom Ranch, the Applicant shall pay its fair share fees to the City.

Monitoring. The City shall verify that the Applicant contributes an appropriate fair share as approved by the City and that adequate funding is collected to implement these improvements.

MM TRANS-30 *The Project Applicant shall coordinate and fund the City to modify the traffic signal phasing and timing plans at the Madonna Road/Dalidio Drive intersection to provide an eastbound right-turn overlap phase concurrent with the northbound left-turn phase. The Applicant shall be responsible for implementation prior to development of Madonna Froom Ranch or fair share contribution if constructed sooner by others.*

Plan Requirements and Timing. Prior to grading and recordation of the final VTM for development of Madonna Froom Ranch, the Applicant shall submit a Public Street Improvement Plan for review and approval by the City. The proposed improvements shall be completed prior to the issuance of an occupancy permit for Madonna Froom Ranch development.

Monitoring. The City shall verify that the Applicant installs the improvements in accordance to the approved phase and design plans or contributes an appropriate fair share as approved by the City.

Residual Impacts

All of the identified impacts under cumulative conditions would be *less than significant with mitigation* (see Table 3.13-35). Implementation of mitigation measures that require payment of fair share contributions to fund offsite improvements would generally not result in significant residual impacts, as these improvements would occur within existing roadway rights-of-way, or within urbanized paved/landscaped areas immediately adjacent

to existing roadway rights-of-way. The Project's fair share contribution has been identified for all intersections and improvements in the TIS (Appendix J). The Project's equitable share is calculated using the method for calculating equitable mitigation measures outlined in the Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans 2002).

Table 3.13-35. Cumulative Plus Project Transportation Impact Summary

Location	Trigger	Transportation Mode	Mitigation Measure	Impact
Intersection #1: LOVR / Foothill Boulevard	Post Development of Madonna Froom Ranch	Auto	TRANS-25	Less than Significant with Mitigation
Intersection #5: LOVR / Royal Way	Post Development of Madonna Froom Ranch	Auto (Queue)	TRANS-26	Less than Significant with Mitigation
Intersection #6: LOVR / Madonna Road	Post Development of Madonna Froom Ranch	Pedestrian	TRANS-13	Less than Significant with Mitigation
Intersection #9: LOVR / Calle Joaquin	Post Development of Madonna Froom Ranch	Pedestrian	TRANS-27	Less than Significant with Mitigation
Intersection #10: LOVR / U.S. 101 SB Ramps	Post Development of Madonna Froom Ranch	Auto (Queue)	TRANS-26	Less than Significant with Mitigation
Intersection #15: South Higuera Street / Tank Farm Road	Post Development of Madonna Froom Ranch	Pedestrian Auto (Queue)	TRANS-13 TRANS-28	Less than Significant with Mitigation Less than Significant with Mitigation
Intersection #18: Madonna Road / Oceanaire	Post Development of Madonna Froom Ranch	Auto (Queue)	TRANS-29	Less than Significant with Mitigation
Intersection #18: Madonna Road / Dalidio Drive	Post Development of Madonna Froom Ranch	Auto (Queue)	TRANS-30	Less than Significant with Mitigation
Roadway Segments #1 and #2: LOVR from Prefumo Canyon Road to Oceanaire Drive and from Oceanaire Drive to Madonna Road	Post Development of Madonna Froom Ranch	Pedestrian	TRANS-8	Less than Significant with Mitigation

Table 3.13-35. Cumulative Plus Project Transportation Impact Summary (Continued)

Location	Trigger	Transportation Mode	Mitigation Measure	Impact
Roadway Segments #3, #4, #5 and #6: LOVR from Madonna Road to South Higuera Street	Post Development of Madonna Froom Ranch	Pedestrian	TRANS-9	Less than Significant with Mitigation
U.S. 101 Mainline	Post Development of Villaggio Lower Area	Auto	--	Less than Significant

Source: TIS; see Appendix J. For a complete description of all intersections, roadway segments, bike paths, sidewalks and transit facilities, see Tables 3.1-91 through 3.1-100 on pages 235 through 255 of the TIS.
-- Not applicable
Bolded items indicate significant an unavoidable impacts.

3.14 UTILITIES AND ENERGY CONSERVATION

This section describes existing and planned utilities and evaluates the operation and capacity of these utilities to serve the Project. Utilities addressed in this section include potable and recycled water, wastewater facilities, solid waste disposal, and energy services. This section identifies the existing capacity of these utilities and services provided by the City and utility companies and evaluates whether capacity exists to accommodate the Project demands. Stormwater management system facilities, capacity, and impacts are addressed in Section 3.8, *Hydrology and Water Quality*. The Project's anticipated energy demand and energy conserving features are also evaluated to determine whether the Project would result in unnecessary or wasteful energy consumption. The discussion of the Project's anticipated energy demands include natural gas, electricity, and fuel consumption during construction and operation of the Project.

3.14.1 Environmental Setting

Utility services in the City and Project vicinity are provided by the City and three private companies. Water, wastewater, and stormwater management services are provided by the City's Utilities Department. Solid waste management is provided by the City through a contract with San Luis Garbage Company. Electricity is provided by Pacific Gas & Electric Company (PG&E), and beginning in 2020 will also be provided by Monterey Bay Community Power (MBCP). Natural gas is provided by Southern California Gas Company (SoCal Gas) (Table 3.14-1).

Table 3.14-1. Utilities Serving the Project Site

Category	Utility Provider
Wastewater Collection and Treatment	City of San Luis Obispo, Utilities Department, Wastewater Division
Water Supply, Treatment, and Distribution	City of San Luis Obispo, Utilities Department, Water Division
Solid Waste	San Luis Garbage Company
Electricity	PG&E and MBCP
Natural Gas	(SoCal Gas

Note: Water and sewer service are not currently provided at the Project site.

3.14.1.1 Wastewater Treatment

The City provides municipal wastewater treatment within City limits and, through agreement, also provides service to Cal Poly and the San Luis Obispo County Regional Airport (Airport). The City owns and operates the Water Resource Recovery Facility (WRRF) located on Prado Road approximately 0.6-mile northeast of the Project site. The WRRF manages and treats wastewater in accordance with standards established by the SWRCB to remove solids, reduce the amount of nutrients, and eliminate bacteria in treated wastewater. A portion of the treated water is recycled for irrigation use within the City and the remaining flow is discharged to San Luis Obispo Creek.

San Luis Obispo Creek has been identified as having many beneficial uses that require protection by the Central Coast RWQCB. Treated wastewater from the City's WRRF meets the criteria for all of these uses except Municipal and Domestic Water Supply (MUN). The MUN designation is the main driver for treatment upgrades at the WRRF further described below. These new requirements have been placed in the WRRF's recently revised National Pollutant Discharge Elimination System (NPDES) permit to meet nutrient and disinfection by-products limits. Compliance with the new limits is detailed through a Time Schedule Order (TSO) which requires the City to submit a schedule outlining the planned actions for achieving compliance. A TSO was adopted with the WRRF's permit and requires compliance by November 30, 2019 (City of San Luis Obispo 2019a).

WRRF Treatment Capacity

The WRRF has a treatment capacity for dry-weather flow (e.g., typical non-storm urban runoff and wastewater flows) of 5.1 million gallons per day (MGD) (City of San Luis Obispo 2014c). As of 2018, the WRRF receives an average of 3.3 MGD of dry-weather flows (City of San Luis Obispo 2015a). Therefore, the estimated remaining capacity of the WRRF is 1.8 MGD or 32 percent of the total dry-weather wastewater treatment capacity.

The WRRF removes solids, reduces the amount of nutrients, and eliminates bacteria in the treated wastewater before it is discharged to San Luis Obispo Creek.

As estimated by the General Plan LUE, future dry-weather flows to the WRRF are anticipated to reach 5.4 MGD, of which 0.47 MGD would be generated from Cal Poly and

4.93 MGD would be generated from the City (City of San Luis Obispo 2015c). Due to current inability for the facility to meet MUN criteria, the City is undertaking upgrades to the WRRF. The WRRF Project includes increasing treatment capacity and meeting the terms of the City's new NPDES permit to treat future flows and loading. Additional upgrades include replacing aging equipment, maximizing the production of recycled water, incorporating interpretive features and public amenities, and including a new joint operations interpretive center and facility. Upon completion, the WRRF modifications would increase treatment capacity at the facility to 5.4 MGD, which would accommodate the dry-weather wastewater flows in the City under full buildout of the General Plan (City of San Luis Obispo 2015b; 2019d).

The City's sewer system has long experienced problems associated with wet-weather infiltration and inflow where saturated soils result in rainwater overloading the wastewater collection systems.[1] Under heavy rain conditions, instantaneous peak flows to the WRRF can reach up to 25 MGD (City of San Luis Obispo 2014b). These events can result in the release of partially treated wastewater into San Luis Obispo Creek, which can flow downstream to the creek's estuary and the Pacific Ocean at Avila Beach. Planned improvements described above to the WRRF to increase treatment capacity to 5.4 MGD would help address existing WRRF constraints during wet-weather conditions (e.g., rainfall events that result in stormwater runoff in addition to typical urban runoff and wastewater generation) (City of San Luis Obispo 2014c).

Wastewater Infrastructure (Public)

The City's wastewater collection system serves a variety of uses in the City, including residential, commercial, and industrial customers. Sewer service is provided only to properties within the City limits, with the exception of a few limited areas located just outside of the City limits, including the campus of Cal Poly and the Airport (City of San Luis Obispo 2015c). As of 2019, there are approximately 14,400 sewer service connections to the City's system. The collection system is divided into 18 flow basins supported by nine sewage lift stations, 138 miles of gravity sewer lines, and 2.4 miles of force mains. The gravity sewer lines range in size from 6 to 48 inches in diameter, and the force main lines range in size from 4 to 16 inches in diameter (City of San Luis Obispo 2019b). The 2015 Draft Wastewater Collection System Infrastructure Renewal Strategy prepared for

[1] Inflow and infiltration occur when groundwater or rainwater flow into the sewer system, either through a direct connection or seepage through cracked laterals, leaky joints, and/or deteriorated manholes (City of San Luis Obispo 2019c).

the City identifies sewer line segments with substandard infrastructure and prioritizes replacement and maintenance projects within the wastewater collection system to meet future demand. Parts of the collection system are over 100 years old and are anticipated to exceed their design life. Portions of the collection system require frequent preventive maintenance because of root intrusion, poor grade, and/or degraded pipe conditions. The City has also identified portions of the system that have reached their design capacity and will require modifications to accommodate future development (City of San Luis Obispo 2014c). The Wastewater Collection System Infrastructure Renewal Strategy determined that in order to maintain the collection system in its current state, a minimum of two miles of wastewater collection pipelines should be rehabilitated per year (Water Systems Consulting, Inc. 2015).

Currently, the Project site does not contain wastewater infrastructure that connects to the City's wastewater system. The closest sewer main tie-ins are located at two points along LOVR approximately 0.1-mile northeast of the site. The LOVR sewer main wastewater flows currently do not exceed capacity. Further, the Calle Joaquin lift station, which helps convey LOVR sewer main flows to the Laguna lift station and then to the WRRF, has a capacity of 570 gallons per minute (GPM), while the Laguna lift station has a capacity of 1,500 GPM. The Calle Joaquin lift station currently does not experience capacity issues; however, the Calle Joaquin lift station is scheduled for replacement in the near future due to the age of the facility (City of San Luis Obispo 2019b).

Wastewater Infrastructure (Private)

A small parking kiosk structure was repurposed and relocated as an outhouse for the John Madonna Construction Company staff. The small outhouse disposes wastewater via an existing septic tank near the old barn building within the Froom Ranch Dairy complex and is addressed within Section 3.8, *Hydrology and Water Quality*.

3.14.1.2 Water Supply

The City is the sole purveyor of water within City limits, allowing the City to maintain uniformity in its water service, distribution standards, and infrastructure, and to ensure consistency in developing and implementing water policy.

Water Sources

The City obtains its potable water from five sources: the Salinas Reservoir (Santa Margarita Lake), Whale Rock Reservoir, Nacimiento Reservoir, and a limited amount of

groundwater. City water supplies from these sources are conveyed to the City Water Treatment Plant located on Stenner Road approximately four miles north of the Project before distribution throughout the City.

Reservoirs

The City obtains nearly all of its potable water supply from its share of the yield of three regional reservoirs.

Salinas Reservoir - The Salinas Reservoir is located on the upper Salinas River, approximately 12 miles northeast of the Project site near the community of Santa Margarita. The reservoir captures water from a 112-square-mile watershed and is owned by the U.S. Army Corps of Engineers (USACE), and operated by the County of San Luis Obispo. The City has an agreement with USACE to receive up to 45,000 acre-feet per year (AFY) of the water from the reservoir; however, the reservoir has a maximum storage capacity of 23,842.9 acre-feet (AF), which limits the availability of water to the City annually. Water from the reservoir is pumped through the Cuesta Tunnel (a 1.0-mile-long tunnel through the mountains of the Cuesta Ridge) and then flows by gravity to the City Water Treatment Plant. As of October 2019, the total amount of water stored in the reservoir was 21,208.6 AF, which is 88.95 percent of total reservoir capacity. The City receives a varying amount of water from the Salinas Reservoir each year, historically ranging from as low as 200 AF to as high as 5,000 AF. In 2018, the City received 723 AF (City of San Luis Obispo 2018d; 2018a; 2016a).

Whale Rock Reservoir - Whale Rock Reservoir is located on Old Creek approximately 18 miles northwest of the Project site in Cayucos and captures water from a 20.3-square-mile watershed. The storage capacity of the reservoir is shared by the City, Cal Poly, and California Men's Colony, which collectively comprise the Whale Rock Commission. Whale Rock Reservoir is formed by an earthen dam and was historically able to store an estimated 40,662 AF of water at the time of construction in 1961; since that time the total capacity has declined to38,967 AF. Water is delivered to the City via 17.6 miles of 30-inch pipeline and two pumping stations. In October 2019, the total amount of water stored in the reservoir was 33,877 AF, which is 86.94 percent of total reservoir capacity. The City has rights to 55.05 percent of the reservoir's total storage capacity (approximately 21,451 AF); however, the City receives a varying amount of water from the Whale Rock Reservoir each year, historically ranging from as low as 500 AF to as high as nearly 5,000 AF. The City received 410 AFY from this reservoir in 2018 (not including water delivered to Cal Poly) (City of San Luis Obispo 2018d; 2016a; 2018a).

Based on the 2018 update to the General Plan Water and Wastewater Management Element (WWME), the City has identified the safe annual yield from coordinated operation of the Salinas and Whale Rock reservoirs at 4,910 AF (City of San Luis Obispo 2018c).

Nacimiento Reservoir - Nacimiento Reservoir is owned by the Monterey County Water Resources Agency and is located approximately 35 miles north of the Project site near San Miguel in the County. The reservoir has a storage capacity of 377,900 AF. Since 1959, the San Luis Obispo County Flood Control and Water Conservation District has had entitlements to 17,500 AFY from the reservoir for use in the County. Of that, the City has a contractual entitlement to 5,482 AFY, which also reflects the City's dependable yield from this reservoir. The total amount of water stored in the reservoir was 180,288 AF in October 2019, which is 47.71 percent of capacity. The City began receiving water from the Nacimiento Reservoir in 2011 and in 2018, the City received its full contractual entitlement of 5,482 AF from Nacimiento Reservoir (City of San Luis Obispo 2010; 2017a; 2018d).

Recycled Water

Recycled water is highly-treated wastewater approved for reuse by the California Department of Public Health for a variety of applications, including landscape irrigation and dust control. In 1994, the City completed a major capital improvement project at the WRRF that included addition of tertiary treatment and other unit processes required to meet stringent effluent quality limits intended to protect and enhance the receiving waters of San Luis Obispo Creek. The City received regulatory approvals for diversion of treated effluent for offsite landscape irrigation and other approved uses in 2002. In 2006, the City's Water Reuse Project created the first new source of water for the City since the construction of Whale Rock Dam in 1961. The project included improvements at the City's WRRF and an initial eight miles of distribution pipeline.

The City is required to release 1,807 AFY of flow to San Luis Obispo Creek for improving the health of the San Luis Creek ecosystem downstream. In 2018, the City provided 238 AF of recycled water (City of San Luis Obispo 2018a). Based on the City's 2017 Recycled Water Master Plan, the City estimates a surplus of 1,500 to 1,900 AF of recycled water supplies are available for additional beneficial use beyond that required to meet current demand, including for release to San Luis Creek and use by existing customers. Currently, there is no recycled water infrastructure on the Project site; however, tie-in mains are located on LOVR immediately adjacent to the Project site boundary that would accommodate utility extensions into the Project site (City of San Luis Obispo 2017c).

Groundwater

The City overlies the San Luis Obispo Valley Groundwater Basin, which covers approximately 12,700 acres in the San Luis Obispo and Edna Valleys. Storage capacities are estimated at between 46,700 to 55,800 AF, with a sustainable yield of approximately 6,000 to 7,000 AFY. The groundwater basin is relatively small and recharges quickly following normal rainfall periods, but also lowers relatively quickly following the end of the rainy season. Extensive use of groundwater sustained the City through the drought of 1986-1991, a period during which groundwater supplied 50 percent of the City's water demand. However, the City's two historically largest producing wells, the Auto Parkway and Denny's wells, were shut down when elevated nitrate levels were detected. This loss of groundwater resources and infrastructure means the City could not rely on groundwater for future drought protection. According to the 2015 Urban Water Management Plan, the City will continue to use groundwater for domestic purposes when available (City of San Luis Obispo 2016c). The City stopped supplying groundwater to its drinking water system in 2015 due to new regulatory requirements, but the City's groundwater wells remain operable and are on standby should the use of groundwater be required and determined feasibly sustainable in the future (City of San Luis Obispo 2016b). In 2018, the City did not utilize groundwater for potable water use, though the City continued work with a hydrogeologist to identify a site that could potentially support expansion of its groundwater program through future development of a new well (City of San Luis Obispo 2018a).

City Water Demand and Annual Availability

The General Plan WWME (amended in 2018) addresses the availability and distribution of water to new and existing development. Surface water reservoirs serve nearly all of the City's water demand with Nacimiento Reservoir providing the City's largest water source (45 percent of the annual water supply) followed by the Whale Rock and Salinas Reservoirs. Recycled water currently serves as a minor water source (Table 3.14-2). As noted above, although groundwater provides limited water to the City, it has acted as a major supply source during past severe droughts and the City continues to consider potential future use of groundwater.

Table 3.14-2. City of San Luis Obispo's Water Resource Annual Availability (2018)

Water Resources	Annual Availability	
Salinas Reservoir (Santa Margarita Lake) and Whale Rock Reservoir	4,910 AF	Safe Annual Yield[1]
Nacimiento Reservoir	5,482 AF	Dependable Yield[2]
Recycled Water	238 AF	2017 Annual Usage[3]
Siltation (from 2010 to 2060)	(500) AF	WWME Policy A 4.2.2[4]
Total	**10,130 AF**	

[1] Safe Annual Yield determined from computer model, which accounts for siltation loss through 2010 (per WWME Policy A 4.2.1).
[2] Dependable Yield is the contractual amount of water the City has rights to from Nacimiento Reservoir.
[3] The quantity of recycled water included is the actual prior year's recycled water usage (calendar year 2017) per WWME Policy A 7.2.2.
[4] Reservoir siltation is a natural occurrence that reduces storage capacity over long periods, resulting in the reduction of safe annual yield.
Source: City of San Luis Obispo 2018a.

The total water available for the City in 2018 was 10,130 AFY, which included 238 AFY of recycled water (Table 3.14-2; City of San Luis Obispo 2018a). As this availability was adjusted following years of drought and updates to the City's safe annual yield model, the availability is considered a reasonable long-term safe yield value for the purposes of this EIR analysis.

During 2018, 62 percent of total water consumption in the City was for single- and multi-family residential uses, 24 percent was to support commercial and other non-residential development, and 14 percent was to support separately metered landscape irrigation. The 2018 per capita potable water use was 100 gallons per capita per day (gpcd) for approximately 46,548 people, and the City's water demand for 2018 was 5,225 AF (City of San Luis Obispo 2018a). Compared against the City's 2018 annual availability, the City has approximately 4,905 AF of water surplus available to allocate to new beneficial uses within the City (see Table 3.14-3).

Per General Plan WWME Policy A 5.2.2, the City's primary water supply needed to serve buildout under the General Plan is calculated based on a per capita water demand of 117 gpcd. Based on the buildout population identified in the General Plan LUE, the City has an estimated population capacity of 57,200 people within the City's urban reserve, and estimates the City's annual primary water supply to be 7,496 AF, which is 2,634 AFY less than the 2018 annual availability of 10,130 AF (City of San Luis Obispo 2018a).

Table 3.14-3. Water Demand and Water Availability in the City of San Luis Obispo Based on WWME Policies

Water Availability and Estimated Future Demand	AFY
Current Annual Availability (2018)	10,130
Primary Water Supply (Estimated Future Demand)	7,496

[1] Calculated using the City's per capita water demand factor of 117 gpcd and the City General Plan LUCE urban reserve capacity.
Source: City of San Luis Obispo 2018a.

Multi-Year Water Reliability

As required by Section 5 of the General Plan WWME, the City accounts for water supplies necessary to meet three specific community needs: primary water supply, reliability reserve, and secondary water supply (Table 3.14-4). The primary water supply is defined as the amount of water needed to serve the buildout population of the City as identified in the General Plan LUE. The proposed General Plan LUE buildout population within the urban reserve boundary is estimated to be 57,200; the primary water supply is estimated to be 7,496 AF in the 2018 Water Resources Status Report (City of San Luis Obispo 2018a).

The reliability reserve provides a buffer for future unforeseen or unpredicted long-term impacts to the City's available water supply. The quantity of water for the reliability reserve is established using 20 percent of the current water use and the City's population (46,548 in 2018). The reliability reserve provides a reserve above and beyond the existing needs of the community and may not be used for future development. In 2018, the reliability reserve was 1,220 AF.

The secondary water supply is the amount of water remaining from the City's available water resources above those needed to meet the primary water supply and reliability reserve. The secondary supply is intended to meet peak water demand periods or short-term loss of City water supply sources. The update to the City's safe annual yield model led the to the reduction in the City's available secondary water supply.

Table 3.14-4. 2018 City Potable Water Supply Accounting

2018 Annual Availability	2017 Actual Usage (AF)	Primary Water Supply (AF)	Reliability Reserve (AF)	Secondary Water Supply (AF)
10,130	5,225	7,496	1,220	1,414

[1] Calculated using the City's per capita water demand factor of 117 gpcd and the City 2017 population.
Source: City of San Luis Obispo 2018a.

Drought and Climate Change

Like most communities in the Central Coast of California, periodic drought conditions are inevitable. Historic droughts have affected the Central Coast and required several actions by the City to reduce water demand and manage water supplies. For example, from 1986 to 1992, a six-year drought required water rationing and limited supplemental groundwater sources to meet demands. More recently, the unprecedented drought that ended in 2016 brought the driest conditions in recorded history to the state. During this drought, the City reduced water consumption in response to state regulations established to address ongoing drought conditions.

Looking ahead, climate change is expected to affect weather patterns and may result in increased frequency or duration of drought conditions, which could have a substantial effect on future water availability. In 2018, the City updated the safe annual yield model and the General Plan WWME to include data from the most recent drought period that ended in 2016, consistent with WWME Program A 3.3.3, and analyzed three climate change scenarios (City of San Luis Obispo 2018c). The annual water supply availability reflected in Table 3.14-2 above (4,910 AFY) reflects the most current safe annual yield values for the City when accounting for future climate change.

Water Distribution Infrastructure

In 2019, the City had approximately 15,500 metered water customers. The City's water distribution system delivers potable water from the Water Treatment Plant at Stenner Creek Road to municipal customers and fire hydrants via two storage reservoirs, five hydropneumatic tanks, eight pump stations, 10 water tanks, and approximately 185 miles of water mains. The distribution system must provide an uninterrupted water supply at adequate pressures to meet all fire and domestic flow requirements while minimizing water loss due to leakage. Concurrent with the General Plan LUE Update, the City prepared a hydraulic model and Potable Water Distribution System Operations Master Plan to identify and prioritize replacement of aged and undersized water distribution facilities (City of San Luis Obispo 2016c).

Existing City water distribution system infrastructure near the Project site includes tie-ins to the public water system located along an existing 18-inch main along LOVR, as well as with potable and recycled water mains along LOVR. The Project site is located within the Edna Saddle pressure zone and would be served by the existing 3.8-million-gallon Edna Saddle Tank. The Edna Saddle Tank, which is located north of the Margarita and Airport,

provides operational, emergency, and fire flow storage for a nearly 2,300-acre area in the southern portions of the City (City of San Luis Obispo 2015d).

3.14.1.3 Solid Waste Disposal

Municipal solid waste collection and disposal services within the City and Project vicinity are provided by San Luis Garbage, a municipal waste hauling company owned by Waste Connections, Inc. (City of San Luis Obispo 2018b). San Luis Garbage collects solid waste, recyclables, and organic waste, which is subsequently transported primarily to Cold Canyon Landfill. Organic waste is hauled to the Kompogas Organic Recycling Plant, a state-of-the-art, high heat, dry anaerobic facility which converts organic waste into carbon-neutral biogas and high-grade natural compost which is owned and operated by Hitachi Zosen Inova. At Cold Canyon Landfill, municipal waste is processed at the Resource Recovery Park (RRP) and Materials Recovery Facility (MRF). . Currently, solid waste collection services are not provided at the Project site. Commercial operations that use roll-off services and/or construction and demolition waste removal services may choose any permitted hauler.

The RRP includes a public drop-off facility, a construction and demolition (C&D) recycling operation, a household hazardous waste drop-off facility, a universal and electronic waste recycling center, and an equipment maintenance facility. Materials collected, sorted, and recovered in the facility include cardboard, metal and appliances, concrete/asphalt/brick, trash, tires, drywall, and paper and plastic materials.

The MRF accepts recyclable waste from curbside pickup services and industrial and commercial consumers. In addition, it receives recyclable material sorted at the RRP. The MRF currently processes up to 18 tons per hour of glass, plastic, paper, cardboard, aluminum, tin, and other metals. The MRF has a maximum permitted throughput of 400 tons per day (CalRecycle 2018).

The maximum permitted throughput to the landfill is 1,650 tons per day (CalRecycle 2018). The Cold Canyon Landfill received approvals from the County and the state in 2013 to allow continued waste disposal operations through 2040, with anticipated expansion of allowable disposal tonnage of up to 2,050 tons per day. The landfill has a design capacity of 23,900,000 cubic yards (cy) and a remaining capacity of 14,500,000 cy, or 60.7 percent, as of 2015, with a cease operation date of December 2040 (CalRecycle 2018). Utilizing the MRF and RRP, Cold Canyon Landfill diverts approximately 65 percent of waste from the landfill. Additional potential solid waste disposal sites that could serve the City include the

Chicago Grade and/or Paso Robles Landfills, or out-of-county waste disposal facilities. The Chicago Grade and Paso Robles Landfills have remaining infill capacities of approximately 832,699 cy (93 percent) and 5,327,500 cy (82 percent), respectively (CalRecycle 2019b).

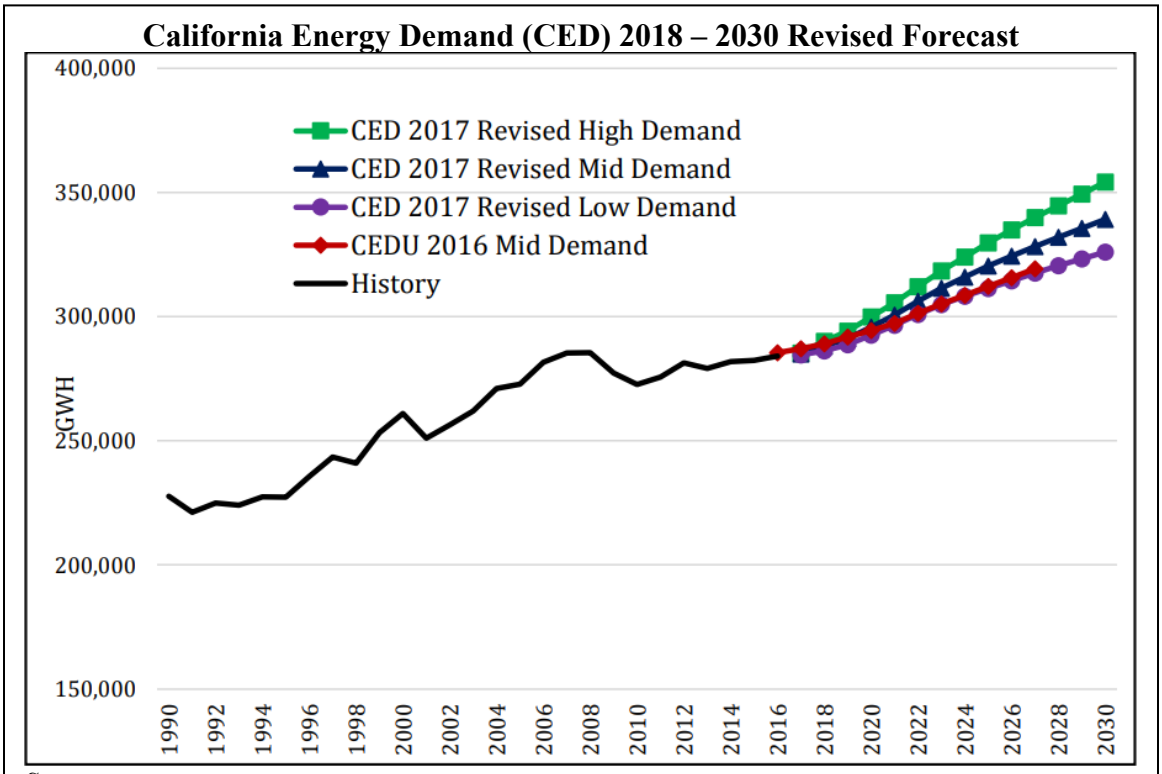
The state's target disposal rate for the San Luis Obispo region is 7.4 pounds per person per day for residents and 18.7 pounds per person per day for employees (CalRecycle 2019a). The target rates were set in 2016 at 50 percent of 2006 waste disposal levels. Between 2007 and 2010, the population-related solid waste disposal rate ranged between 4.4 and 5.4 pounds per person, and the employment solid waste disposal rate ranged between 11.7 and 13.8 pounds per person (City of San Luis Obispo 2017b). In addition to existing solid waste diversion, the City's Climate Action Plan includes the goal to reduce the community waste stream to as close to zero waste as possible, with a 75 percent diversion rate by the year 2020 (City of San Luis Obispo 2012).

3.14.1.4 Energy Services

Electricity

The production of electricity requires the consumption or conversion of energy resources including natural gas, coal, water, nuclear, and renewable resources such as wind, solar, and geothermal. Energy, natural gas, and renewable energy production, consumption, research, and conservation within the state of California are managed by the California Energy Commission (CEC) and are regulated by the California Public Utilities Commission (CPUC). In 2018, Californians consumed 281,120.2 gigawatt hours (GWh) of electricity; future annual electricity consumption is projected to increase to approximately 320,000 GWh by 2027.

Of the electricity generated in-state in 2018, 46.5 percent was generated by natural gas-fired power plants, 0.1 percent was generated by coal-fired power plants, 11.3 percent came from large hydroelectric dams, 0.2 percent was generated by oil and other petroleum or waste heat, and 9.4 percent came from nuclear power plants. The remaining 32.35 percent of electricity production in California was supplied by renewable sources including biomass, geothermal, small hydro, solar, and wind power. California's total power mix, including in-state generation and imports, included 3.3 percent from coal, 10.6 percent from large hydroelectric dams, 34.9 percent from natural gas, 9.05 percent from nuclear power plants, 0.15 percent from oil and other petroleum or waste heat, 31.36 percent from renewable sources, and 10.5 percent from "unspecified sources of power" (CEC 2019c).



Source: CEC 2018b.

Natural Gas

Natural gas is a fossil fuel formed when layers of buried organic matter are exposed to intense heat and pressure over thousands of years. The energy is stored in the form of hydrocarbons and can be extracted in the form of natural gas, which can be combusted to generate electricity, enabling this stored energy to be transformed into usable power or to be used directly for heating, cooking, and other use. Natural gas consumed in California is largely extracted from onshore and offshore sites elsewhere in the Southwestern U.S. (42 percent), Rocky Mountain States (23 percent), Canada (22 percent), and within California (12 percent) (CEC 2015). Californians consumed 12,739.1 million therms of natural gas in 2016 (see Table 3.14-5; CEC 2018b).

Natural gas in the City is provided by SoCal Gas, which provides natural gas to 21.4 million consumers through 5.9 million meters in more than 500 communities. The company's service territory includes communities throughout central and southern California, from Visalia to the Mexican border (SoCal Gas 2018). Existing gas infrastructure near the Project site includes a high-pressure gas main that extends northwest to southeast along LOVR.

Local Energy Services

Electrical and natural gas services for the City and Project site are provided by PG&E and SoCal Gas, respectively. In 2017, PG&E provided 82,224.3 GWh of electricity to nearly 16 million customers across a service area of 70,000 square miles (CEC 2019b; PG&E 2018b). In the same year, SoCalGas provided a total of 5,141.8 million therms of natural gas to nearly 21.6 million customers across its 20,000 square mile service area (CEC 2019b; SoCalGas 2019). Within the County in 2017, total demand for electricity was 1,778.5 GWh, and total demand for natural gas was 83,787,570 therms. The Project site receives electricity from existing PG&E infrastructure. Existing gas infrastructure near the Project site includes a high-pressure gas main that extends northwest to southeast along LOVR.

Total state and countywide energy demands in 2017, including per capita calculations of energy demands based on 2018 populations, are provided in Table 3.14-5.

Table 3.14-5. 2018 County and State Energy Demands

	Population	Total 2017 Energy Demand		2017 Energy Demand Per Capita	
		Natural Gas Demand (therms)	Electricity Demand (GWh)	Natural Gas Demand (therms)	Electricity Demand (MWh)
County	284,010	81,678,060	1,766.0	287.6	6.2
State	39,557,045	12,638,157,740	281,120.2	319.5	7.1

Source: CEC 2019b; U.S. Census Bureau 2019b..

Transportation Energy

The transportation sector accounts for nearly 40 percent of statewide total energy demand (CEC 2018). Caltrans reports that approximately 25.1 million automobiles, 5.7 million trucks, and 889,024 motorcycles were registered in the state in 2016, resulting in a total estimated 339.8 billion vehicle miles traveled (VMT) (Caltrans 2017) and 15.1 billion gallons of gasoline consumed (CEC 2019a). Within the County, an estimated 3.2 million vehicle miles were traveled in 2017 (Caltrans 2016).

Renewable Energy

The State of California strongly supports production and use of renewable energy sources, including solar photovoltaic (PV), wind, hydrologic, and biomass. For example, in-state operating capacity of renewable resources was 63,028 GWh in 2018. The state's renewable

energy portfolio includes solar PV (27,267 GWh), wind (14,078 GWh), geothermal (11,526 GWh), small hydroelectric (4,248 GWh), and biomass (5,909 GWh) (CEC 2019c).

PG&E, which currently serves the City, and the MBCP, which will start providing services to City in 2020, also strongly support the production and use of renewable energy. In 2017, PG&E's energy portfolio consisted of 33 percent renewable, 27 percent nuclear, 18 percent large hydroelectric, 20 percent natural gas and other fuels, and 2 percent market purchased energy sources (PG&E 2018a). MBCP offers two programs with varying power contents for customers within its service area. MBCP offers customers a power mix made up from approximately 34 percent renewable and 66 percent large hydroelectric sources. MBCP's prime program offers customers entirely 100 percent renewably sourced energy generated from solar and wind (MBCP 2019).

3.14.2 Regulatory Setting

Utilities and energy conservation are governed primarily by state and local laws that would apply to future development under the Project. State and local regulations that are directly relevant to the Project are summarized below. There are no federal regulations pertaining to utility and energy conservation that directly relate to local planning projects.

3.14.2.1 State

Assembly Bill 341

Assembly Bill (AB) 341 established a state policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requires CalRecycle to provide a report to the legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 builds on the AB 939 requirement that every jurisdiction divert at least 50 percent of its waste. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012. AB 341 requires any business (including schools and government facilities) that generates 4 cy or more of waste per week, and multi-family buildings with five or more units to arrange for recycling services.

Assembly Bill 939

AB 939, the California Integrated Waste Management Act, mandates management of non-hazardous solid waste throughout the State of California. The purpose of AB 939 is to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible; improve regulation of existing solid waste landfills; ensure that new solid waste landfills are environmentally sound; streamline permitting procedures for solid waste

management facilities; and specify the responsibilities of local governments to develop and implement integrated waste management programs. AB 939 sets forth policies and requirements for the state and local governments. Among them is a hierarchy of preferred waste management practices. The highest priority is to reduce the amount of waste generated at its source (source reduction). Second in the hierarchy is to reuse, by extending the life of existing products and recycling those wastes that can be reused as components or feed stock for the manufacture of new products, and by composting organic materials. Source reduction, reuse, recycling and composting are jointly referred to as waste diversion methods because they divert waste from disposal. Third and lowest in the hierarchy is disposal by environmentally safe transformation in a landfill. AB 939 and Public Resources Code section 41780 enforce this prioritization by requiring that all local jurisdictions, cities, and counties divert 50 percent of the total waste stream from landfill disposal by the year 2000 and each year thereafter (using 1990 as the base year). Each local jurisdiction must demonstrate compliance by instituting source reduction programs.

Senate Bill 1383

Signed into law by Governor Brown in September 2016, SB 1383establishes targets for reducing methane emissions in various sectors of California's economy in a statewide effort to reduce emissions from short-lived climate pollutants. SB 1383 codifies CARB's Short-Lived Climate Pollutant Reduction Strategy established pursuant to SB 605. One of the targets established under SB 1383 is achievement of a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025.

The State of California Water Resources Control Board (SWRCB)

The SWRCB has adopted a statewide construction general permit that applies to storm water and non-storm water discharges from construction activities. This general permit, which is implemented and enforced in the Five Cities region by the Central Coast Regional Water Quality Control Board (RWQCB), requires all owners of land where construction activity occurs to:

- Eliminate or reduce non-storm water discharges to storm water systems and other waters of the U.S.;
- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) emphasizing storm water Best Management Practices (BMPs); and
- Perform inspections of storm water pollution prevention measures to assess their effectiveness.

Title 24, Part 6 of the California Code of Regulations - California's Energy Efficiency Standards for Residential and Non-Residential Buildings

This law is the primary legislation governing energy use in new buildings in the state. Relevant prescriptive and mandatory requirements of this law include, but are not limited to:

- Incorporation of cool-roofs on non-residential buildings;
- Skylights for daylighting buildings; and
- Installation of certified insulation materials.

3.14.2.2 Local

City of San Luis Obispo General Plan

The City is the provider of water and wastewater services to residents of the City. Applicable regulations that would affect the provision of City utilities are based on local policies that place requirements on the level of service that must be maintained. Additionally, the City's General Plan contains policies which encourage energy efficiency and sustainable practices to reduce the consumption of energy resources. Established policies and regulations that would apply to the Project are provided below.

Land Use Element (LUE)

Policy LU 1.1.1 Growth Management. The City shall manage its growth so that:

A. The natural environment and air quality will be protected.
B. The relatively high level of services enjoyed by City residents is maintained or enhanced.
C. The demand for municipal services does not outpace their availability.
D. New residents can be assimilated without disrupting the community's social fabric, safety, or established neighborhoods.
E. Residents' opportunities for direct participation in City government and their sense of community can continue.

Policy LU 1.1.2 Development Capacity & Services. The City shall not designate more land for urban uses than its resources can be expected to support.

Policy LU 1.5 Jobs/Housing Relationship. The gap between housing demand (due to more jobs and college enrollment) and supply should not increase.

Policy LU 1.13.1 Water and Sewer Service. Although the City will serve those parties having valid previous connections or contracts, the City shall neither provide nor permit new delivery of City potable water or sewer services to the following areas:

A. Outside the City limits;
B. Outside the urban reserve line;
C. Above elevations reliably served by gravity-flow in the City water system;
D. Below elevations reliably served by gravity-flow or pumps in the City sewer system.

Policy LU 1.13.10 Solid Waste Capacity. In addition to other requirements for adequate resources and services prior to development, the City shall require that adequate solid waste disposal capacity exists before granting any discretionary land use approval which would increase solid waste generation.

Policy LU 1.14.7 Development Fee Programs. The City shall maintain a development fee program that covers costs associated with serving projects with City services and facilities. This maintenance will include periodic review of fees collected to ensure they are adequate to cover City costs.

Policy LU 2.3.1 Mixed Uses and Convenience. The City shall promote a mix of compatible uses in neighborhoods to serve the daily needs of nearby residents, including schools, parks, churches, and retail stores. Neighborhood shopping and services should be available within about 1 mile of all dwellings. When nonresidential, neighborhood-serving uses are developed, existing housing shall be preserved, and new housing added where possible. If existing dwellings are removed for such uses, the development shall include replacement dwellings (no net loss of residential units).

Policy 3.3.1 New or Expanded Areas of Neighborhood Commercial Use. The City shall provide for new or expanded areas of neighborhood commercial uses that: (A) Are created within, or extended into, nonresidential areas adjacent to residential neighborhoods; (B) Provide uses to serve nearby residents, not the whole City; (C) Have access from arterial streets, and not increase traffic on residential streets; (D) Have safe and pleasant pedestrian access from the surrounding service area, as well as good internal circulation; (E) Are designed to be pedestrian-oriented, and architecturally compatible with the adjacent neighborhoods being served. Pedestrian-oriented features of project design should include: (i) Off-street parking areas located to the side or rear of buildings rather than between

buildings and the street; (ii) Landscaped areas with public seating; and (iii) Indoor or outdoor space for public use, designed to provide a focus for some neighborhood activities.

Policy LU 9.7 Sustainable Design. The City shall promote, and where appropriate, require sustainable building practices that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable. Projects shall include, unless deemed infeasible by the City, the following sustainable design features.

A. Energy Efficient Structure. Utilize building standards and materials that achieve or surpass best practices for energy efficiency.

B. Energy-Efficient Appliances. Utilize appliances, including air conditioning and heating systems that achieve high energy efficiency. Incorporation of alternative energy systems (e.g. passive and/or active solar, heat pumps) is encouraged.

C. Naturalized Ventilation. Optimized potential for cooling through natural ventilation.

D. Plumbing. Utilize plumbing fixtures that conserve or reuse water such as low flow faucets or grey water systems and implement a builder incentive program that will encourage new homes to be built with onsite water/heat recycling systems to help achieve the goal of net zero water and energy use.

E. Efficient Landscaping. Include landscaping that reduces water use through use of drought-tolerant/native plant species, high-efficiency irrigation (drip irrigation), and reduction or elimination of the use of turf. Collection and use of site runoff and rainwater harvesting in landscape irrigation is encouraged.

F. Solar Orientation. Optimize solar orientation of structures to the extent possible.

G. Privacy and Solar Access. New buildings outside of the downtown will respect the privacy and solar access of neighboring buildings and outdoor areas, particularly where multistory buildings or additions may overlook backyards of adjacent dwellings.

H. Solar Ready. The City shall encourage new development to be build “solar ready” so that owners may easily install solar infrastructure, as appropriate.

I. Solar Canopies. The City shall encourage the inclusion of solar canopies that include solar panels (such as structures over parking lots) on new construction, as appropriate.

Policy LU 9.13 Incentive Program. The City shall consider the feasibility of providing incentives for new and renovate projects that incorporate sustainable design features such as constructing new buildings that are solar ready, or off-setting significant operational energy use through use of solar water heating, photovoltaic systems, geothermal or wind energy systems.

Water & Wastewater Management Element (WWME)

Policy WWME A 2.2.1 Multiple Water Sources. The City shall utilize multiple water resources to meet its water supply needs.

Policy WWME B 2.2.2 Service Capacity. The City's wastewater collection system and Water Resource Recovery Facility shall support population and related service demands consistent with the General Plan.

Policy WWME B 2.2.3 Wastewater Service for New Development. New development shall pay its proportionate or "fair share" of expanded treatment and collection system capacity and upgrades. New development will only be permitted if adequate capacity is available within the wastewater collection system and/or Water Resource Recovery Facility.

Policy WWME A 7.2.1 Recycled Water Supply. The City will make available recycled water to substitute for existing potable water uses as allowed by law and to supply new non-potable uses.

Conservation and Open Space Element (COSE)

Policy COS 4.3.1 Use of best available practices. The City will employ the best available practices in energy conservation, procurement, use and production, and will encourage individuals, organizations and other agencies to do likewise. "Best available practices" means behavior and technologies that reflect recommendations of specialists and that use the least energy for a desired outcome, considering available equipment, life-cycle costs, social and environmental side effects, and the regulations of other agencies. Best available practices include use of sustainable sources. Sustainable sources are naturally renewed in a relatively short time and avoid substantial undesirable side effects.

Policy COS 4.3.3 Energy-efficient improvements. The City will continue to identify energy efficiency improvement measures to the greatest extent possible, undertake all necessary steps to seek funding for their implementation and, upon securing availability of funds, implement the measures in a timely manner.

Policy COS 4.3.4 Use of Energy Efficient, Renewable Energy Resources. The City will promote the use of cost effective, renewable, non-depleting energy sources wherever possible, both in new construction projects and in existing buildings and facilities.

Policy COS 4.3.6 Energy Efficiency and Green Building in New Development. The City shall encourage energy-efficient "green buildings" as certified by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Program or equivalent certification.

Policy COS 4.4.1 Pedestrian- and Bicycle-friendly Design. Residences, work places and facilities for all other activities will be located and designed to promote travel by pedestrians and bicyclists.

Policy COS 4.4.2 Alternative Transportation. The City's transportation and circulation systems shall foster travel by modes other than motor vehicles, including walking, bicycles and public transit.

Policy COS 4.5.1 Solar Access Standards. To encourage use of solar energy, reasonable solar access shall be provided and protected. The City will protect reasonable solar exposure for existing collectors and likely locations of future collectors, both active and passive. Standards for the subdivision and development of property should assure desirable solar access.

Policy COS 4.5.2 Subdivision Design for Solar Access. In subdivisions, the layout of streets and lots shall provide and protect solar exposure. To assure the maximum control over potential shading features, the longest dimension of each lot should be oriented within 30 degrees of south, unless the subdivider demonstrates that for certain lots any of the following applies:

A. The lots are large enough to allow desirable solar access, regardless of lot orientation.
B. Buildings will be constructed as part of the tract development, and the buildings will be properly oriented, with adequate solar access.
C. Topography makes variations from the prescribed orientation desirable to reduce grading or tree removal, or to take advantage of a setting that would favor greater reliance on early morning or late afternoon solar exposure.
D. Topographical conditions, such as steep, north-facing slopes or shading by the mass of a hill, make solar energy infeasible.
E. The size of the subdivision, combined with the existing orientation of surrounding streets and lots, precludes desirable lot orientation.

Policy COS 4.5.3 Solar Access Easements. Solar access easements will be required in all new subdivisions, as provided in the State of California Solar Rights Act, unless any of the following applies:

A. The subdivision incorporates a building development plan that will assure desirable solar access.

B. Desirable solar exposure will be protected by the City's Zoning Regulations.

C. The subdivision establishes yard or height standards designed to assure desirable solar access, supplementary to the Zoning Regulations, which would make a system of easements for each lot unnecessary.

Policy COS 4.5.7 Unwanted Solar Heat Gain. Sites and buildings should be designed to avoid unwanted heat gain from solar exposure. Features that provide shading at suitable times of the day and year and generally should be "passive" or automatic, avoiding the need for occupants to regularly monitor or adjust them.

Policy COS 4.6.5 Encourage Sustainable Employee Commuting Practices. Encourage alternatives to employees commuting as occupants of individual vehicles powered by non-sustainable fuels.

Policy COS 4.6.8 Energy Efficient Project Design. Encourage energy-efficient project design by emphasizing use of daylight and solar exposure, shading and natural ventilation, as opposed to designing a particular image and relying on mechanical systems to maintain functionality and comfort. Educate City staff, citizen advisers, developers and designers on ways to exceed minimum state energy standards.

Policy COS 4.6.9 Solar Access for New Development. Address solar access in all plans needing City discretionary approval, considering both structures and vegetation. Shading by vegetation is also subject to the California Solar Shade Control Act. This act prohibits the placement of vegetation that would shade a solar collector on another's property, if the collector meets certain height and setback criteria. The City will advise those seeking permits for solar collectors to document vegetation existing when the collector is installed or built.

Policy COS 4.6.11 Financial Assistance for Energy Efficiency Improvements. The City will actively seek all available sources of funding for implementing energy efficiency improvement and utilities infrastructure renewable projects, including federal and state budget appropriations, federal, state, and private sector grant opportunities, utilities and other unique public/private sector financing.

Policy COS 4.6.17 Require Solar Power for New Dwellings. Within new single-family residential projects of 20 or more dwelling units, 5 percent of the total number of dwellings shall be built with photovoltaic solar collectors beginning in 2008; this percentage shall

increase 4 percent each year until 2020. Multi-family residential developments shall be exempt from this requirement, except for common-use facilities such as recreation rooms, spas, or swimming pools. In these cases, the common facilities shall be built with photovoltaic solar collectors.

Policy COS 5.4.3 Material Recycling in Private Development, Businesses, and Operation. The City will promote waste diversion and material recycling in private development, business and operations, and will encourage businesses or nonprofit entities to provide building materials recycling and source reduction services.

Policy COS 5.5.8 Recycling Facilities in New Development. During development review, the City shall require facilities in new developments to accommodate and encourage recycling.

Policy COS 10.2.2 Ahwahnee Water Principles. In planning for its water operations, programs and services, the City will be guided by the Ahwahnee Water Principles and will encourage individuals, organizations, and other agencies to follow these policies:

A. Community design should be compact, mixed use, walkable and transit-oriented so that automobile generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible.

B. Natural resources such as wetlands, flood plains, recharge zones, riparian areas, open space, and native habitats should be identified, preserved and restored as valued assets for flood protection, water quality improvement, groundwater recharge, habitat, and overall long-term water resource sustainability.

C. Water holding areas such as creekbeds, recessed athletic fields, ponds, cisterns, and other features that serve to recharge groundwater, reduce runoff, improve water quality and decrease flooding should be incorporated into the urban landscape.

D. All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater.

E. Permeable surfaces should be used for hardscape. Impervious surfaces such as driveways, streets, and parking lots should be minimized so that land is available to absorb storm water, reduce polluted urban runoff, recharge groundwater and reduce flooding.

F. Dual plumbing that allows grey water from showers, sinks and washers to be reused for landscape irrigation should be included in the infrastructure of new development, consistent with state guidelines.

G. Community design should maximize the use of recycled water for appropriate applications including outdoor irrigation, toilet flushing, and commercial and

industrial processes. Purple pipe should be installed in all new construction and remodeled buildings in anticipation of the future availability of recycled water.

H. Urban water conservation technologies such as low-flow toilets, efficient clothes washers, and more efficient water-using industrial equipment should be incorporated in all new construction and retrofitted in remodeled buildings.

I. Ground water treatment and brackish water desalination should be pursued when necessary to maximize locally available, drought-proof water supplies.

Policy COS 10.3.1 Efficient Water Use. The City will do the following in support of efficient water use, and will encourage individuals, organizations, and other agencies to do likewise:

A. Landscaping:

1. Choose plants that are suitable for the climate and their intended function, with emphasis on use of native and drought-tolerant plants.
2. Prepare soils for water penetration and retention.
3. Design and operate suitable and efficient irrigation systems.
4. The City will encourage drought-tolerant landscaping, vegetable gardens and fruit trees in lieu of large expanses of lawn or other more water-demanding plantings.
5. Landscape maintenance: Landscaped areas will be properly designed for upkeep and replacement of low-flow irrigation fixtures and equipment.
6. Facilitate use of tertiary-treated water and seek to legalize use of grey water for non-potable household purposes.

Circulation Element (CE)

Policy 1.7.1. Encourage Better Transportation Habits. San Luis Obispo should: 1. Increase the use of alternative forms of transportation and depend less on the single-occupant use of vehicles; and 2. Ask the San Luis Obispo Regional Transportation Agency to establish an objective similar to #1 and support programs that reduce the interregional use of single-occupant vehicles and increase the use of alternative forms of transportation.

Policy 1.7.2. Promote Alternative Forms of Transportation. San Luis Obispo should: 1. Complete a network of bicycle lanes and paths, sidewalks and pedestrian paths within existing developed parts of the city by 2035, and extend the system to serve new growth areas; 2. Complete improvements to the city's transit system serving existing developed areas by 2035, and provide service to new growth areas; 3. Support the efforts of the County Air Pollution Control District to implement traffic reduction programs; and 4. Support and develop education programs directed at promoting types of transportation other than the single-occupant vehicle.

San Luis Obispo Municipal Code

Title 13 - Public Services. Title 13 of the City Municipal Code provides regulations and standards for development within the City relating to public services, including water service, water conservation, sewers, underground utilities, and recycled water.

Chapter 8.05, Mandatory Construction and Demolition Debris Recycling Program (Ordinance 1381). Chapter 8.05 of Title 8 of the City Municipal Code establishes the City's program for the mandatory recycling of construction and demolition debris. This program requires any applicant for a building or demolition permit complete and submit to the City for review and approval a recycling plan estimating the volume or weight of project construction and demolition debris and a plan for recycling of at least 50 percent of the weight of all debris.

San Luis Obispo Urban Water Management Plan (UWMP)

The City adopted its 2015 UWMP on June 14, 2016, which provides the State of California's Department of Water Resources an assessment of the City's present and future water resources needs. Specifically, this document provides water supply planning for a 25-year planning period in 5-year increments. Part of the recent amendment was the addition and enhancement of the Water Shortage Contingency Plan. The plan identifies water supplies for existing and future demands; quantifies water demands during the normal year, single-dry year and multiple-dry years; and identifies supply reliability under the three hydrological conditions. The UWMP document has been prepared in compliance with the requirements of the Urban Water Management Planning Act as amended in 2009.

City of San Luis Obispo Climate Action Plan

The City's Climate Action Plan, adopted by Resolution No. 10388 in 2012, is a strategic document, based on the idea that effective global solutions to climate change will largely be the result of collective action of local communities and governments. The Climate Action Plan enables the City to maintain local control of implementing state direction (AB 32 – the California Global Warming Solutions Act) to reduce GHG emissions to 1990 levels by 2020. GHG reduction strategies align with existing General Plan policies, and adoption of a Climate Action Plan is an "Other Important Objective" in the City's 2011-13 Financial Plan.

The Climate Action Plan proposes strategies to reduce GHG emissions from community-wide activities and government operations. Community-wide activities are broken down

into six focus areas: buildings, renewable energy, transportation and land use, water, solid waste, and parks and open space. Corresponding goals include: energy-efficient buildings, clean and renewable energy sources, improved transportation options, reduced water consumption, reduced waste, and maintenance and growth of the urban forest.

The City is currently engaged in the process of updating its Climate Action Plan to identify new measures and targets to achieve or exceed the State's GHG reduction targets identified for the year 2030 under SB 32. In addition, the City, in a City Council hearing held on September 18, 2018, declared its intent to adopt a target for achieving citywide carbon neutrality by the year 2035. The update to the Climate Action Plan will identified new measures and policies applicable to development within the City for reducing carbon emission from various sources, include energy consumption, to achieve this target.

Clean Energy Choice Program

The City is currently developing local amendments to the 2019 California Building Code to encourage all-electric new buildings. When paired with MBCP's carbon free electricity supply, all electric new buildings are carbon free and avoid health and safety issues associated with fossil fuels. At its meeting on Tuesday, September 3, 2019, the City Council approved the Clean Energy Choice Program, which involves ordinance amendments that take effect January 1, 2020. The City joins more than 50 other California communities currently considering ways to encourage cleaner buildings. Unlike some cities that are banning natural gas entirely, the proposed Clean Energy Choice Program will provide options to people who want to develop new buildings with natural gas. New projects wishing to use natural gas will be required to build more efficient and higher performing buildings and offset gas use by performing retrofits on existing buildings or by paying an in-lieu fee that will be used for the same purpose.

3.14.3 Environmental Impact Analysis

3.14.3.1 Thresholds for Determining Significance

Thresholds are based upon Appendix G of the State CEQA Guidelines. Implementation of the Project would have significant adverse impacts on utilities if the Project would:

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

b) Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
e) Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Implementation of the Project would have significant adverse impacts on energy if the Project 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.

3.14.3.2 Impact Assessment Methodology

Existing and forecasted capacities of public and private utility service providers were obtained from the General Plan WWME (2018), 2015 UWMP (2016), Wastewater Master Plan (2015), Wastewater Collection System Infrastructure Renewal Strategy (2015), Recycled Water Master Plan (2017), the City's Water Resources Status Report (2018), the Sewer System Management Plan Update (2019), and reports including a Project-specific Water Supply Assessment (WSA) performed by RRM Design Group (2019) for the Project (see Appendix K) and reviewed/approved by the City's Utilities Department. The General Plan WWME and coordination with the City's Utilities Department provided additional information used to establish levels of significance for water supply and distribution, and sewer system impacts.

Energy resource information is based on energy use data reported by the CEC, Caltrans, estimated energy demands for the Project based upon California Emissions Estimator Model (CalEEMod) v. 2016.3.2 modeling results (see Appendix D), and energy conservation goals and policies established in the City's Climate Action Plan (2012).[2]

This analysis evaluates the adequacy of existing and planned utility infrastructure to serve the proposed Project. Projected increased demands for public and private utility service resulting from the proposed Project were calculated using local demand factors from adopted City plans and policies or energy demand and conservation standards. Project demand for water, wastewater, and solid waste are based on demand factors found within the General Plan, as well as information provided within the Project-specific WSA. Water demand for the proposed Project site was compared to water available for allocation within the City and wastewater generation was compared to available capacity at the City's WRRF and supporting infrastructure such was sewer mains and lift stations. Energy providers for the Project (PG&E, MBCP, and SoCal Gas) also serve much larger service areas. Demand estimations for natural gas and electricity are based on CalEEMod results (Appendix D) and associated use factors. Impacts related to stormwater management infrastructure, site hydrology, and drainage/storage capacity are addressed in Section 3.8, *Hydrology and Water Quality* and are therefore, not addressed further in this section.

3.14.3.3 Project Impacts and Mitigation Measures

This section discusses utility and energy impacts associated with the construction and operation of the Project. Utility and energy impacts associated with the Project are summarized in Table 3.14-6.

[2] The City is currently updating the Climate Action Plan; see also, Section 3.3, *Air Quality and Greenhouse Gas Emissions*.

Table 3.14-6. Summary of Project Impacts

Utility Impacts	Mitigation Measures	Residual Significance
UT-1. The Project would require the expansion of utility infrastructure to serve new development, including water, sewer, natural gas, and electricity into the site; the construction of which could cause environmental effects.	MM AQ-1 MM BIO-1 MM CR-3 MM CR-4 MM CR-5 MM HAZ-1 MM HYD-1 MM HYD-2 MM NO-1 MM NO-2 MM NO-3 MM NO-4 MM TRANS-1 MM UT-1	Less than Significant with Mitigation
UT-2. Project-related increases in water use would increase demand for the City's potable water supply.	None required	Less than Significant
UT-3. Project-generated wastewater would contribute to demand for wastewater collection facilities and remaining available and planned capacity of the City's WRRF.	MM UT-2	Less than Significant with Mitigation
UT-4. The Project would generate additional solid waste for disposal at the Cold Canyon Landfill.	None required	Less than Significant
UT-5. The Project would result in an increase of energy consumption and requirement for additional energy resources.	None required	Less than Significant

Impact UT-1 The Project would require the expansion of utility infrastructure to serve new development, including water, sewer, natural gas, and electricity into the site; the construction of which could cause environmental effects (Less than Significant with Mitigation).

The Project would install new underground infrastructure and connections to provide associated utility services to the Project site (refer to Figure 2-13 and Figure 2-14). Potential onsite construction would include trenching for utility installation, transport of pipes and other material to the site, and associated increases in construction-related traffic. Onsite trenching could impact sensitive biological or subsurface cultural resources, lead to increased erosion and possible sedimentation, and generate noise. Offsite trenching would occur along LOVR and may adversely affect traffic, cause delays or congestion, and generate air emissions. These impacts are further described below; construction impacts are also evaluated throughout this EIR for affected resource areas.

The proposed water and wastewater lines would tie into the City's water supply, including potable and recycled water, and wastewater collection systems, both located along LOVR adjacent to the Project site's northeastern boundary (refer to Section 2.4.4, *Utilities and Services*). The proposed water and wastewater lines would follow the Project's proposed street alignments with lateral connections to proposed buildings and would be installed concurrent with roadway construction during Phase 1 of the Project. Individual lateral connections to proposed building would be installed during vertical construction activities of Phases 2 through 4.

The proposed gravity wastewater lines within the Project site would transport flows to the existing 18-inch gravity wastewater main located along the southern shoulder of LOVR. Flows would then be conveyed south to the Calle Joaquin lift station, and then through the existing force main to a gravity sewer main that crosses U.S. 101 to the Laguna lift station and ultimately to the WRRF. The proposed water lines would convey potable water to Project buildings from the City's water distribution system located approximately 75 feet east of the Specific Plan area boundary.

Construction of this system of water and wastewater lines would potentially require trenching and disturbance of agricultural grazing land and potential wetland and riparian habitats, along with potential for erosion, sedimentation, air quality, and GHG emissions associated with construction. One of these proposed water mains would cross the Froom Creek corridor near the eastern edge of the Project site. For the Madonna Froom Ranch portion of the Project site, the gravity lines would follow the proposed Local Road "A" connection with LOVR at the Auto Park Way intersection, which would result in grading and construction across wetlands within the LOVR ditch (see Section 3.4, *Biological Resources*). The gravity lines within the Villaggio portion of the Project site would cross portions of Drainage 2 and 3 and serpentine grassland habitats and then cross Froom Creek with potential construction impacts to sensitive habitats (refer to Section 3.4, *Biological Resources* and Section 3.7, *Hydrology and Water Quality)*. Utility line construction could also impact unknown subsurface archaeological resources (see Section 3.5, *Cultural and Tribal Cultural Resources*). Construction of these lines would generate noise and traffic along LOVR, as discussed within Section 3.9, *Noise*, and Section 3.13, *Transportation and Traffic*. This construction would also have the potential to release hazardous materials contamination into proximate sensitive areas or surface waters, as discussed in Section 3.7, *Hazards, Hazardous Materials, and Wildfire*.

Construction of underground utilities including gas and electrical utilities would also include excavation and trenching within the Project site to install subterranean pipelines, gas lines, and electrical conduits. Construction of gas and electrical utilities would occur in conformance with the Uniform Plumbing Code and City standards and would be subject to review and approval of proposed utility plans by the City Utilities Department as a standard regulatory requirement.

Construction of proposed new utilities to serve the Project would have the potential to disturb biological and cultural resources, adversely affect hydrology and water quality, and generate hazardous materials, noise, traffic, and air emissions, which would be *potentially significant*. Construction mitigation measures to reduce these impacts are discussed in relevant resource sections (i.e., Section 3.3, *Air Quality and Greenhouse Gas Emissions*, Section 3.4, *Biological Resources*, Section 3.5, *Cultural and Tribal Cultural Resources*, Section 3.7, *Hazards, Hazardous Materials, and Wildfire,* Section 3.8, *Hydrology and Water Quality*, Section 3.10, *Noise*, and Section 3.13, *Transportation and Traffic*).

Mitigation Measures

MM AQ-1 shall apply.

MM BIO-1 shall apply.

MM CR-2 shall apply.

MM CR-3 shall apply.

MM CR-4 shall apply.

MM HAZ-1 shall apply.

MM HYD-1 shall apply.

MM HYD-2 shall apply.

MM NO-1 shall apply.

MM NO-2 shall apply.

MM NO-3 shall apply.

MM NO-4 shall apply.

MM TRANS-1 shall apply.

MM UT-1 *The Applicant shall amend the FRSP to require that the size, location, and alignment of all on- and offsite water supply, recycled water, wastewater, and energy infrastructure shall be subject to review and approval by the City's Public Works and Utilities Departments. The Applicant shall be responsible for constructing all required onsite and offsite utility improvements, as well as for repaving of damaged roadways.*

Plan Requirements and Timing. The Applicant is required to implement the above standard mitigation measures prior to approval of grading and the final VTM. City staff shall ensure the above measures are incorporated into the Final FRSP and building plans prior grading and recordation of the final VTM.

Monitoring. City staff shall ensure measures are on all Project plans. City staff shall work with the Applicant to ensure that these requirements are implemented.

Residual Impacts

Mitigation required above would ensure utility installation would avoid significant impacts to onsite natural resources (e.g., horizontal directional drilling below wetland areas to avoid disturbance, onsite monitoring for cultural resources), minimize risk of hazardous materials release, and control construction traffic, noise, and air emissions. MM UT-1 would ensure Project utilities are engineered consistent with City standards. With implementation of mitigation measure MM UT-1, as well as construction-related mitigation measures for air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, and transportation and traffic, residual impacts would be *less than significant with mitigation*.

Impact UT-2 Project-related increases in water use would increase demand for the City's potable water supply (Less than Significant).

Though construction of the Project would result in demand for water supplies for fugitive dust control, establishment of vegetation for habitat replacement and creation, and other purposes, this water is likely to be trucked from offsite or pumped from the existing groundwater well onsite. This water is not anticipated to come from the City's existing water supply and is not considered as part of the Project's impact on the City's potable water supply. The proposed Project during operation would increase water demand within the City.

The Project's WSA estimated a Project-created water demand using the 1999 City of San Luis Obispo Water Use Factors based on a breakdown of land uses (Table 3.14-7). The WSA estimated an indoor potable water demand of 134.6 AFY. The WSA estimated outdoor water demand at 39.59 AFY based on mapping of the proposed irrigated water use zones to determine outdoor irrigation recycled water demands; the Project proposes to irrigate all landscaping with recycled water (see Appendix K). Using the WSA-estimated total indoor water demand for the proposed land uses and the WSA-estimated outdoor irrigation water demand values, the total water demand of the Project is estimated at approximately 174.18 AFY.

This analysis additionally assumes the Project would require approximately 62.25 AFY of recycled water, as indicated by the WSA and associated City Water Use Factors. The Project's indoor water demand, outdoor water demand, and recycled water demand result in a total cumulative demand of 236.48 AFY of demand.

The estimated long-term Project-generated demand for potable water of 236.48 AFY would be 10 percent of the City's 2,271 AFY of available water. Therefore, the City would have potable water supply capacity to serve the Project (Table 3.14-8), including consideration for dry years and multiple dry years (drought), as depicted by Table 3.14-5.

According to Tables 5 and 6 of the City's *2017 Recycled Water Master Plan*, the City has a short-term and long-term surplus of recycled water Considering the Project's estimated recycled demand for 62.25 AFY of recycled water[3], available surplus recycled water, sufficient supplies exist to service the proposed Project. The City continues to monitor recycled water storage constraints and treatment plant limitations to ensure an adequate recycled water supply would be available to all City recycled water customers.

Consistent with Ahwahnee Water Principles and the City's General Plan, COSE Policy 10.2.2, the Project would use recycled water for irrigation of the Project site's landscaping and habitat restoration areas. Based on these water demand projections, there would be a sufficient supply of water to meet the Project's needs, and impacts would be *less than significant*.

[3] The City's *2017 Recycled Water Master Plan* included an estimate of the recycled water demand from the Froom Ranch Specific Plan area as approximately 60 acre -feet per year.

Table 3.14-7. Estimated Water Demand from Project WSA based on City Water Use Factors

Areas	Quantity and Units	Water Use Factor (AFY)[1]	Outdoor Water Demand (AFY)	Indoor Water Demand (AFY)	Total Water Demand Estimation (AFY)
MADONNA FROOM RANCH					
Housing (R-3 attached townhomes)	130 dwellings	0.3	0	39.0	39.0
Apartments (R-4 multi-family/ affordable)	44 apartments	0.18	3.1	4.8	7.9
Commercial – Retail	30,000 sf	0.06	0.5	1.3	1.8
Hotel (with restaurant)	120 rooms	0.43	15.5	36.1	51.6
Basin Planting	2.8 acres	**	**	**	**
Parks, Trails, Parkways, and Open Space (including creek planting)	11.3 acres	**	**	**	**
Subtotal			19.1	81.2	100.3
VILLAGGIO					
Independent Living (standalone residential units)	61 dwellings	0.3	0	18.3	18.3
Garden, Village Suite and Standard Apartment Units (senior)	305 apartments	0.1	12.2	18.3	30.5
Assisted Living Units (senior apartments)	38 apartments	0.1	1.5	2.3	3.8
Memory Care and Skilled Nursing (beds)	51 occupants	0.08	1.63	2.45	4.08
Commercial – Mixed Use Occupancy	51,500 sf	0.06	0.93	2.16	3.09
Maintenance Office	5,300 sf	0.032	0.05	0.12	0.17
Restaurants	8,000 sf	1.32	3.17	7.39	10.56
Fitness Facility with Pool	13,000 sf	0.26	1.01	2.37	3.38
Common Area Landscaping	15.6 acres	**	**	**	**
Subtotal			20.49	53.39	73.88
Total (AFY)			39.59	134.59	174.18[2]

Source: Water Supply Assessment 2019; see Appendix K.
[1]Water Use Factors from the 1999 City of San Luis Obispo Water Use Factors.
[2]Does not reflect total potable water demand, nor total demand for the Project. The indoor domestic demands were calculated using the City's water use factors percentage of indoor water use to determine the domestic water use since landscape water is proposed to be irrigated with recycled water for all uses.
** values indicate a recycled water use separate from potable water use.
AFY = acre-feet/year sf = square feet

Table 3.14-8. City Water Supply Availability and Froom Ranch Water Usage

City Primary Water Supply	City Water Usage	City Primary Water Supply Available	Froom Ranch Specific Plan use (calculated by use factors)
7,496 AFY	5,225 AF in 2018	2,271 AFY	236.48 AFY

AFY = acre-feet/year

Impact UT-3 Project-generated wastewater would contribute to demand for wastewater collection facilities and remaining available and planned capacity of the City's WRRF (Less than Significant with Mitigation).

Using wastewater generation factors provided by the General Plan LUE and indoor water demand estimates from 3.14-7, the Project is estimated to generate from 85,689 gpd and 120,154 gpd of new wastewater flows to the City's sewer system and the WRRF, resulting in an incremental increase to wastewater flows Citywide (see Table 3.14-9).

Table 3.14-9. Wastewater Projections Resulting from the Project.

Specific Plan Proposed Development[1]	Quantity	Land Use Type[2]	Wastewater Generation Factor[2]	Wastewater Flow
VILLAGGIO				
Independent Living Units	366 units	Multi-Family	105 gallons/unit/day	38,430 gpd
Assisted Living Units	38 units	Single-Family	150 gallons/unit/day	5,700 gpd
Health Care Units	51 beds	Single-Family	150 gallons/unit/day	7,650 gpd
Health Care Administration Building	85,078 sf	Office	54 gallons/1,000 sf/day	4,594 gpd
Ancillary Uses	84,078 sf	Commercial	60 gallons/1,000 sf/day	5,045 gpd
Villaggio Subtotal				**61,419 gpd**
MADONNA FROOM RANCH				
Medium-High Density Residential	130 units	Multi-Family	105 gallons/unit/day	13,650 gpd
High Density Residential	44 units	Multi-Family	105 gallons/unit/day	4,620 gpd
Hotel with Restaurant	70,000 sf	Commercial	60 gallons/1,000 sf/day	4,200 gpd
Other Commercial	30,000 sf	Commercial	60 gallons/1,000 sf/day	1,800 gpd
Madonna Froom Ranch Subtotal				**24,270 gpd**
Grand Total				**85,689 gpd**

gpd = gallons per day
[1]Refer to Table 2-2 for summary list of proposed development
[2]City of San Luis Obispo LUCE EIR 2014a Table 4.16-7.

Wastewater generated at the Project site would be conveyed to the Calle Joaquin lift station, through a force main north to the Laguna lift station, and then conveyed to the City's WRRF for treatment. As discussed above, the Calle Joaquin lift station does not experience

capacity issues and is capable of accommodating Project flows. However, the City notes the gravity main that extends under U.S. 101 to the Laguna lift station currently experiences capacity issues and needs replacement in order to accommodate new development within the service area of this lift station, particularly the recently approved San Luis Ranch development (Personal communication with Jennifer Metz, City of San Luis Obispo Utilities Department, May 2019). Operation of the Project and associated new wastewater flows to this lift station would contribute towards existing capacity constraints, resulting in need for upsizing the gravity main under U.S. 101.

According to the City's Utilities Department, in 2018 the City's WRRF treated an average of 3.3 MGD wastewater of its 5.1 MGD design capacity, during dry-weather conditions. The Project would contribute additional wastewater to the WRRF, beginning in 2022 with operation of the Lower Area of Villaggio. Since the WRRF has ample service capacity, the Project's contribution would not exceed dry-weather wastewater treatment capacity. Further, as discussed below, improvements to capacity treatment facilities at the WRRF are underway.

The 2015 WRRF Facilities Plan addresses upgrades of the WRRF in response to stricter discharge limits required by the Central Coast RWQCB to increase dry-weather wastewater treatment capacity to serve the City's population at General Plan buildout, and to replace existing aging facilities at the end of their service life. Construction of the WRRF upgrade will be initiated in late 2019, and the WRRF's capacity will increase to 5.4 MGD upon completion (City of San Luis Obispo 2019). These pending WRRF upgrades would increase capacity to handle dry-weather flow anticipated under full buildout of the City General Plan and improve the facilities capabilities in treating wet-weather flow.

During wet-weather conditions, the Project would incrementally exacerbate the existing deficiency of the WRRF to process and treat peak flows that can exceed 20 MGD under existing conditions. While peaks in wastewater flow may result in permit violations and release of effluent to San Luis Obispo Creek, the Project's contribution of 85,689 gpd to 120,154 gpd to this existing issue is nominal.

Any wastewater pipe installed as part of the Project would be consistent with City standards for new pipeline material and sizing to adequately convey Project's wastewater effluent to the WRRF; the City has not experienced inflow and infiltration issues in newer construction; therefore, the Project is not likely to exacerbate the cause of current wet-weather peak flows as a result of inflow and infiltration. Further, to help offset the effects of wastewater generation, new development is required to pay development impact fees to

the City for the connection to a public sewer. As the Project would require the connection to the City collection system, the Applicant would be subject to development impact fees implemented by the City for utility services to offset any impacts to capacity at the City's WRRF. Payment of these fees as a condition for Project approval would ensure that the Applicant pays a fair share of costs associated with the wastewater infrastructure needed to serve the Project and ensure adequate WRRF capacity to serve the development.

While the City's WRRF has capacity to serve the Project and mandatory compliance with existing regulations and fee programs would address the Project's contribution to increases in wastewater treatment, impacts associated with the generation of new wastewater flows and the inadequate capacity of the system to serve the Project are considered *potentially significant.*

Mitigation Measures

MM UT-2 *The Applicant shall pay fair share costs for replacement of the Laguna lift station or construction of capacity improvements through negotiation of a private reimbursement agreement with the City.*

Plan Requirements and Timing. Negotiation of a private reimbursement agreement with the City will fulfil the Project's fair share financial obligation towards construction of necessary capacity improvements or replacement of the Laguna lift station. Appropriate fees shall be negotiated with the City. Payment of fees shall be required prior to issuance of building permits for each development phase.

Monitoring. The City shall approve the private reimbursement agreement and verify that the Applicant contributes appropriate fair share fees as approved by the City.

Residual Impact

Implementation of MM UT-2 requiring payment of fees to fund the cost of improvements to the Laguna lift station would compensate for the Project's contribution to capacity issues at the Laguna lift station. Residual impacts would be *less than significant with mitigation.*

Impact UT-4 The Project would generate additional solid waste for disposal at the Cold Canyon Landfill (Less than Significant).

Non-organic solid waste generated by the Project from future residents, employees, and visitors would be collected and hauled by San Luis Garbage Company to the Cold Canyon Landfill for management and disposal, including recycling. Organic waste generated by the Project would be hauled to the Kompogas Organic Recycling Plant. Expansion of the Cold Canyon Landfill was approved in 2013, increasing capacity from 1,620 to 2,050 tons per day. As of 2015, the Cold Canyon Landfill had 14,500,000 cy of capacity remaining out of its total maximum permitted capacity of 23,900,000 cy, which means that the landfill had approximately 60.7 percent available capacity remaining (CalRecycle 2018). The landfill has an anticipated closure date of 2040; therefore, it is expected that Cold Canyon Landfill has adequate capacity to accommodate the Project's solid waste disposal demands. The Project would contribute an estimated 6.7 tons per day of solid waste (Table 3.14-10). Based on these daily solid waste projections, the Project would contribute approximately 0.3 percent of the potential daily waste capacity of Cold Canyon Landfill. Anticipated increases in waste generated at the Project site would therefore comprise a nominal portion of excess capacity of existing solid waste facilities.

Long-term waste disposal impacts are also minimized by including facilities for the collection and storage of recyclables in the new development. Under the FRSP, Villaggio would include a centralized trash compactor and perform its own trash pick-up and recycling from independent living housing units, assisted units, and other ancillary facilities within the development. This waste would then be collected by San Luis Garbage Company, which implements various strategies and measures for achieving reductions in the solid waste diversion stream to achieve a 75 percent reduction in solid waste by 2020, pursuant SB 341 and City Climate Action Plan strategy WST 1. Significant reductions in the community waste stream generated by the Project would be accomplished through mandatory compliance with Chapter 8.05 of Title 8 of the City Municipal Code, which requires a solid waste reduction plan for recycling discarded construction material be prepared to reduce waste generated from Project construction. Given waste produced by the Project would not substantially affect the landfill's capacity or ability to comply with federal, state, or local regulations. Therefore, impacts regarding the generation of solid waste by the Project would be *less than significant*.

Table 3.14-10. Estimated Solid Waste Production

Waste Generation Source	Proposed Uses	Quantity (# of Units)	Waste Generation Factor	Waste Generation (lbs/day)
VILLAGGIO				
Multi-family	Independent Living Units	366 units	8.6 lb/day/unit	3,147.6
Nursing/Retirement Home	Assisted Living Units	38 units	5 lb/person/day[1]	190
Hospital	Health Care Units	51 beds	16 lb/bed/day[1]	816
Office	Administration Building and Ancillary Uses	85,078 sf	0.006 lb/sf/day	510.5
Commercial Sector (Commercial Retail)	Ancillary Uses	84,078 sf	0.046 lb/sf/day	3,867.6
Subtotal				8,531.7
MADONNA FROOM RANCH				
Multi-family	Medium-High Density Residential	130 units	8.6 lb/day/unit[3]	1,118
Multi-family	High Density Residential	44 units	5.31 lb/day/unit[4]	233.6
Service Sector (Other Services)	Hotel with Restaurant	70,000 sf	3.12 lb/100 sf/day	2,184
Commercial Sector (Commercial Retail)	Other Commercial	30,000 sf	0.046 lb/sf/day	1,380
Subtotal				4,915.6
Estimated Total Waste Generation (lbs per day)			**13,447.3**	
Estimated Total Waste Generation (lbs per year)			**4,908,264.5**	
Estimated Total Waste Generation (tons per day)			**6.7**	
Estimated Total Waste Generation (tons per year)			**2,454.1**	

[1]CalRecycle estimates 5 lb/person/day for nursing/retirement home waste generation, and 16 lb/bed/day for hospitals. As the assisted living component lies within this range, the conservative estimate is used for this analysis.
[3]Utilized highest "Multi-family" generation factor to ensure a conservative analysis.
[4]Utilized second-highest "Multi-family" generation factor to align the estimated generation in comparison to the Medium-High Density Residential proposed use.
Source: CalRecycle 2013a; 2013b; 2013c.

Impact UT-5 The Project would result in an increase of energy consumption and requirement for additional energy resources (Less than Significant).

Electricity and Natural Gas Consumption

Implementation of the proposed Project would result in the commitment of additional energy resources, including consumption of natural gas and electricity through operation of the Project. As provided in Appendix D, operation of the proposed Project is estimated to generate a new demand for 128,574.7 therms per year (therms/yr) of natural gas and

5,289.7 megawatt-hours per year (MWh/yr) of electricity (Table 3.14-11) based on CalEEMod modeling results.

Table 3.14-11. Estimated Project Electricity and Natural Gas Demands

Land Use	Area/Quantity	Estimated Electricity Use (MWh/yr)[1]	Natural Gas Demand (therms/yr)[2]
VILLAGGIO			
Independent Living Units	366 units	1,661.5 MWh/yr	37,327.8 therms/yr
Congregate Care (Assisted Living and Health Care Units)	89 units	367.4 MWh/yr	7,689.1 therms/yr
Administration Building and Ancillary Uses (wellness center, restaurants, theater, etc.)	169,748 sf	581.7 MWh/yr	34,083.8 therms/yr
Subtotal		**2,610.6 MWh/yr**	**79,100.7 therms/yr**
MADONNA FROOM RANCH			
Medium-High Density Residential	130 units	565.3 MWh/yr	13,258.5 therms/yr
High Density Residential	44 units	191.3 MWh/yr	4,487.5 therms/yr
Hotel with Restaurant	70,000 sf	533.4 MWh/yr	31,017.0 therms/yr
Other Commercial	30,000 sf	320.7 MWh/yr	711.0 therms/yr
Other Parking Areas	274,000 sf	1,068.4 MWh/yr	0
Subtotal		2,679.1 MWh/yr	49,474.0 therms/yr
Total		**5,289.7 MWh/yr**	**128,574.7 therms/yr**

[1] 1,000 megawatt-hours (MWh) = 1 gigawatt-hours (GWh)
[2] 1 therm = 100 thousand British Thermal Units (BTU)
Source: See Appendix D, CalEEMod Worksheets, Section 5.0 Energy Details.

The City's Clean Energy Choice Program will be effective in 2020 and will apply to Project implementation. Under the City's recently adopted Clean Energy Choice Program, the Project would be encouraged to provide all-electric buildings and paired with MBCP's carbon free electricity supply. It is possible the natural gas demands estimated for the Project could convert to electricity demands; however, it is unknown at this time if this conversion would be feasible for the Project or if the mix of energy sources would potentially change through design and approval of the development projects for Villaggio and Madonna Froom Ranch. Therefore, the energy demand estimates provided in Table 3.14-11 are representative of overall Project energy demands, including natural gas. It is expected that the natural gas buildings will be required to be more efficient and higher performing buildings and offset gas use by performing retrofits on existing buildings or by paying an in-lieu fee that will be used for the same purpose.

Fuel Consumption

Construction Diesel Fuel

During the five-year Project construction period, diesel fuel would be required to power heavy construction equipment and trucks. The total construction fuel consumption is calculated as the sum of total estimated fuel consumption for each piece of equipment used in each phase of construction. To calculate total fuel consumption for specific equipment, Section 3.0, *Construction Detail* in the CalEEMod Worksheets located in Appendix D provides detailed construction phasing, construction equipment used in each phase, total number of days worked, equipment horsepower, equipment load factor, and equipment quantities based on typical construction equipment and default model assumptions. Total fuel consumption is then based on a fuel consumption factor of 0.05 gallons per horsepower per hour (gal/hp/hr) for diesel engines as derived from the South Coast Air Quality Management District CEQA Handbook Table A9-3E.[4]

The total fuel to be required during construction of the Project is estimated to be 502,347.2 gallons (Table 3.14-12). Refer to detailed calculations of Project Construction Fuel Consumption in Appendix D.

Table 3.14-12. Estimated Project Construction Fuel Consumption

Phase	Fuel Consumption from Construction Equipment (Gallons)	Fuel Consumption from Construction Vehicle Trips (Gallons)	Totals (Gallons)
Phase I	111,495.1	14,509.6	126,004.7
Phase II	116,778.8	65,195.3	181,974.1
Phase III	99,297.6	38,489.5	137,787.1
Phase IV	40,721.0	15,860.3	56,581.3
Grand Total	**368,292.5**	**134,054.7**	**502,347.2**

Source: Appendix D.

Operational Vehicle Fuel Consumption

Operation of the Project would result in the daily consumption of vehicle fuel for Project trips. As provided in Section 3.13, *Transportation and Traffic*, operation of the Project is anticipated to result in the generation of an additional 46,894 daily VMT, or approximately 5.5 percent of the City's estimated 851,939 daily VMT in 2014 and 0.5 percent of the City's estimated 8,016,501 daily VMT for the year 2035 (City of San Luis Obispo 2014a;

[4] The South Coast Air Quality Management CEQA Handbook details on diesel engine fuel consumption rates represent the best available information on and remain relevant for typical diesel engines.

SLOCOG 2010). Compared to average per capita VMT, the Project would result in higher daily VMT per capita than the City, County, and state (Table 3.14-13). Using vehicle fleet mix data provided in Appendix D and average fuel economy information provided by the Bureau of Transportation Statistics, the Project-generated annual VMT would result in the consumption of approximately 2,548.8 gallons of fuel per day, or an estimated 927,763.2 gallons per year (Table 3.14-14). Refer to Section 3.13, *Transportation and Traffic* for additional discussion regarding Project VMT.

Table 3.14-13. Per Capita Vehicle Miles Traveled

	Population (2018)	Total Daily VMT	Daily VMT per capita
City	46,548	851,939	18.3
County	281,101	8,016,501	28.5
State	39,557,045	930,958,904	23.5
Proposed Project	1,231	46,894	38.1

Source: Appendix J; SLOCOG 2010; City of San Luis Obispo 2014; U.S. Census Bureau 2018, 2019.

Table 3.14-14. Estimated Operational Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Daily VMT	Average Fuel Economy (miles/gallon)[2]	Total Daily Fuel Consumption (gallons)
Passenger Cars	58.9	27,620.6	23.3	1,185.4
Light/Medium Duty Vehicles	34.1	15,990.9	17.1	935.1
Heavy Duty Vehicles/Other	6.6	3,095.0	7.3	424.0
Motorcycles	0.4	187.5	43.4	4.3
Total	**100%**	**46,894**	**--**	**2,548.8**

[1] Percentage of Vehicle Trips and Fleet Mix information provided in Table 4.4, *Fleet Mix* of Appendix D.
-Passenger Cars is the sum of the light-duty-auto fleet mix trip percentage column.
-Light/Medium Duty Vehicles is the sum of the LDT1, LDT2, and MDV fleet mix trip percentage columns.
LDT = light-duty truck; MDV = medium-duty vehicle
-Heavy Duty Vehicles/Other is the sum of the LHD1, LHD2, MHD, HHD, and bus fleet mix trip percentage columns.
LHD = light-heavy-duty; MHD = medium-heavy-duty; HHD – heavy-heavy-duty
Motorcycles is the sum of the MCY fleet mix trip percentage column. MCY = motorcycle
[2] Average fuel economy based on average 2014 U.S. vehicle fuel efficiency (mpg) from Table 4-12: Average Light Duty Vehicle, Long Wheel Base Fuel Consumption and Travel, and Table 4-13: Single-Unit 2-Axle 6-Tire or More Truck Fuel Consumption and Travel of the *National Transportation Statistics*.
Source: Appendix D, CalEEMod Worksheets, Section 4.2. *Trip Summary Information*; Bureau of Transportation Statistics 2016.

Energy Assessment

Operation of the proposed Project would result in the demand for approximately 128,574.7 therms/yr of natural gas, 5,289.7 MWh/yr of electrical supplies, and 927,763.2 gallons/yr of vehicle fuel. Further, construction of the Project is anticipated to result in the total

consumption of an additional 502,347.2 gallons of fuel over a five-year construction period. Based on existing energy demands and capacity of service providers, estimated operational demand for electricity and natural gas as part of the Project would represent less than 0.001 percent of PG&E's and SoCal Gas' total 2018 energy demands for the County. Further, additional vehicle fuel demand under operation of the Project would result in an increase in statewide fuel demand by less than 0.001 percent.

The Project's estimated per capita electricity and natural gas demands would be below City, regional and statewide demands (Table 3.14-15). Based on this comparisons of the Project's electricity and natural gas demands with statewide, regional, and City demand, the proposed Project is not expected to result in the use of a large amount of electricity or natural gas in an unnecessary, wasteful, or inefficient manner, nor would it affect regional supplies or peak/base periods of demand as the estimated energy demand is typical for a Project of this size, and would result in a negligible increase in Citywide and regional demands. The Project would be served by existing utility providers and infrastructure and would not necessitate the expansion of existing facilities or construction of new energy generation or transmission facilities beyond the onsite facilities proposed as part of the Project to serve the new development.

Table 3.14-15. Comparison of Total and Per Capita Electricity and Natural Gas Demands

		Total		Per Capita	
	Population	Natural Gas Demand (therms/yr)	Electricity Demand (MWh/yr)	Natural Gas Demand (therms/yr)	Electricity Demand (MWh/yr)
City[1]	46,548	9,586,861	239,580.9	205.9	5.1
County	281,101	83,787,570	1,778,503.6	298.1	6.3
State	39,557,045	12,571,045,750	288,613,480.2	317.8	7.3
Proposed Project	1,231	128,574.7	5,289.7	104.4	4.3

[1]Electricity and natural gas demands for the City represent demands as of 2016.
Source: CEC 2018; U.S. Census Bureau 2019b; City of San Luis Obispo 2019b.

As shown in Table 3.14-15 above, the Project's per capita electricity demand for natural gas is 49.3 percent less than the 2016 City average, 65.0 percent less than the regional average, and 67.1 percent less than the state average. Electrical demand per capita for the proposed Project is 15.7 percent less than the 2016 City average, 31.7 percent less than the County average, and 41.1 percent less than the state average.

As described in Section 2.0, *Project Description* and Section 3.9, *Land Use and Planning,* the Project would be required to implement and be consistent with existing energy design

standards at the local and state level. The Project would be subject to energy conservation requirements in the California Building Standards Code (Title 24), California Energy Code (Part 6) and CALGreen. Adherence to state code requirements would ensure new energy efficient requirements of Title 24 would be incorporated into the Project, including, but not limited to, installation of efficient appliances and space-conditioning equipment, lighting controls, and development of solar ready buildings. In addition to standard required energy conservation requirements, the Project includes a range of policies and programs that would proactively reduce the construction and operational energy demand of future development of the site, further reducing the Project's potential to result in the wasteful or inefficient use of energy resources, and promote the conservation of energy and fuel (refer to Section 2.4.2.2, *Sustainability Initiatives*). However, it should be noted that energy efficiency improvements provided by these goals, policies, and regulations cannot be quantified for the Project due to the nature of the FRSP as a program document and lack of detail regarding proposed infrastructure and energy efficiency designs.

Based on the above, the demand for energy under the Project is anticipated to be lower than City, County and state average energy demands, and the Project would generally be more efficient than proximate existing uses. When considering the potential for the Project to result in greater conservation of electricity, natural gas, and transportation fuel supplies through the implementation of proposed Project design features not quantified above, the proposed Project's potential to result in adverse impacts on energy resources and conservation is very low. The Project design features and measures listed in Section 4.7 of the Draft FRSP which would improve energy conservation include: requiring orientation of buildings to maximize solar exposure to improve daylighting and overall energy efficiency; adherence to energy efficient design in conformance with the California Building Code with the goal to be Net Zero GHGs in 2020; use of energy efficient appliances and lighting; use of sustainable building materials; and installation of photovoltaic collectors. The Project would also be required to comply with federal, state, and local regulations, pertaining to improved energy efficiency and conservation in both Project construction and operation, further reducing the Project's potential to result in wasteful or inefficient use of energy resources.

In addition, various mitigation measures identified in other sections of this EIR would have the secondary effect of reducing Project energy demands. For instance, MM AQ-3 through -6 require the Project to implement measures which would reduce Project VMT and energy demands. Applicable measures for reducing VMT and associated transportation fuel demands from MM AQ-3 and -6 include, but are not limited to, development of park-and-

ride lots, subsidizing vanpool programs, funding bicycle facility improvements, rideshare programs, provision of senior shuttle services, and car share programs. Applicable measures for reducing electricity and natural gas demands from MM AQ-5 include achievement of 100 percent carbon neutrality consistent with the City's 2035 carbon neutrality target and mandatory requirements for and exceedance of Title 24 Part 11 (CalGreen) minimum standards for all proposed commercial and health-care facilities. These measures are intended to reduce Project energy demands to the maximum extent feasible for the proposed Project and demonstrate commitment to reducing energy demands and the use of energy supplies in as efficient a manner as possible. Therefore, the direct impacts to energy resources and conservation are considered *less than significant.*

3.14.3.4 Cumulative Impacts

Implementation of the Project would result in an increased demand for water supply, wastewater treatment, solid waste management, and energy supplies (e.g., electricity, gas, transportation fuel). Other than wastewater treatment, all existing utilities systems have sufficient capacity to provide service to the Project site, as well as to future development under the City General Plan buildout. Implementation of this Project and other proposed or current projects listed in Table 3.0-1 would increase the cumulative demand on utilities; however, these projects would be required to comply with standards for adequate utilities set forth in the City's General Plan, would be subject to City planning and review processes, and would be required to pay development impact fees to offset any contribution to cumulative impacts from utility infrastructure needs and service capacities. As such, and as indicated by the LUCE Update EIR, with implementation of Project-specific mitigation, the Project would not result in any significant or adverse cumulative effects on the supply of water and solid waste. The Project, along with other cumulative development within the City and region, would be required to comply with state and City requirements for implementing energy efficiency measures and help the City achieve carbon neutrality by 2035, which would help to reduce inefficient or wasteful use of energy supplies within existing and future development within the City.

For cumulative impacts to wastewater collection and treatment, the WRRF's capacity to process and treat up to 5.4 MGD of wastewater would be sufficient for flows generated by the Project and the City at General Plan buildout, including the cumulative projects identified in Table 3.0-1, under dry-weather conditions. Under wet-weather conditions, cumulative development could exacerbate the deficiency of the WRRF to process and treat peak flows that can exceed 20 MGD. Since peaks in wastewater flow may result in permit

violations and release of effluent to San Luis Obispo Creek, the contribution of the Project's wastewater plus effluent generated from future pending projects could be cumulatively considerable. However, as described above, any new pipes installed by cumulative projects would be consistent with City standards, including the requirement for seamed sewer lines, and therefore would not result in a considerable contribution to the wet-weather issues that cause peak wet-weather flows due to inflow and infiltration. The WRRF Upgrade Project which would increase capacity to handle both wet-weather and dry-weather flows would help to alleviate the impact of cumulative development on the WRRF's capacity to sufficiently treat the City's wastewater to meet RWQCB standard and avoid periodic spills into San Luis Obispo Creek.

Further, a gravity sewer main to the Laguna lift station serving the southwestern portions of the City (including the Project site) currently experiences capacity issues. Cumulative development within this portion of the City, including the San Luis Ranch development, would contribute towards exceedance of capacity of the wastewater collection system. However, the Project, along with other cumulative development approved within the City and which would be served by this infrastructure, would be required to pay its fair share towards the upsizing of the gravity sewer main.

With implementation of Project-specific mitigation, mandatory compliance with existing regulations and policies, and expansion of the WRRF facility, cumulative impacts to utilities and energy resources, or as a result of installation or expansion of utility infrastructure, are considered *less than significant with mitigation*.

3.15 MINERAL RESOURCES

This section describes existing mineral resources and analyzes the potential for the Project to result in the loss of availability of a known mineral resource that is valuable regionally or statewide, or of a locally important delineated mineral resource recovery site. A mineral is a naturally occurring chemical element or compound formed from inorganic processes (not biological in origin), with a definite chemical composition and orderly crystal structure. Examples of minerals include metals, rock, sand, petroleum products, and geothermal resources. Mineral deposits are important to many industries, including construction, transportation, and chemical processing. Due to their importance for construction purposes, the value of mineral deposits is enhanced by their close proximity to urban areas; however, mineral deposits are endangered by the same urbanization that enhances their value. The non-renewable characteristic of mineral deposits necessitates the careful and efficient development of mineral resources to prevent the unnecessary waste of these deposits due to exploitation and/or conflicts caused by land use decisions and urbanization.

3.15.1 Environmental Setting

3.15.1.1 Regional Setting

There are a wide variety of mineral resources found in the County, although relatively few minerals are currently extracted commercially. Quarries and mines in the San Luis Obispo area produce basaltic stone for masonry, "red rock" for road base and surfacing, and cinnabar, an ore of mercury. Petroleum, natural gas, mercury, gypsum, sand and gravel, construction stone, and clay are also produced in the County. The primary factor in the production of sand, gravel, and stone is local demand, and this activity is directly related to growth trends and construction needs (County of San Luis Obispo 2010; City of San Luis Obispo 2006).

The San Luis Obispo-Santa Barbara Production-Consumption Region is defined by the California Department of Conservation as the 2,062 square miles in western San Luis Obispo and Santa Barbara counties in which significant aggregate resources and active operations exist (California Department of Conservation 2017b). Within the San Luis Obispo-Santa Barbara Production-Consumption Region, mining sites are currently

permitted for approximately 75 million tons of extraction, and there are an estimated total of 10.7 billion tons of these resources present within the County. These resources cover an estimated 40,895 acres. These estimates take into account existing land uses that preclude mineral extraction (California Geological Survey 2011). The majority of extraction sites are in the northern portion of the County.

3.15.1.2 Local Setting

The City has no active aggregate operations within its jurisdiction, and no quarry or mine operations are pending reactivation or initiation (California Geological Survey 2011; City of San Luis Obispo 2006). A petroleum company's request in the 1980s to explore City-owned land in the Lopez Lake area was denied based on the environmental qualities of the area. Since that time, no other such requests have been received (City of San Luis Obispo 2006).

There are very few active mining sites in the San Luis Obispo area surrounding the Project site. The Alberti Ranch Red Rock Quarry, located approximately 3.5 miles north of the Project, is permitted for 5 acres of disturbance and mining for shale production. The Mainini Home Pit, located approximately 6.5 miles northwest of the Project, is permitted for mineral production but is considered idle as of 2017. The Beecham Red Rock Pit is located approximately seven miles west near Los Osos (California Department of Conservation 2017).

3.15.1.3 Project Site

A 5.5-acre permitted red rock quarry is located in the northwestern portion of the Project site (see Figure 2-2). The quarry is known to have been mined for red rock as early as 1936. The quarry is permitted under the Surface Mining and Reclamation Act (SMARA; Mine ID; 91-40-0024) and has an associated reclamation plan and performance bond in place with the County (California Department of Conservation 2017a). Under the SMARA permit, the red rock quarry has no set limit to its approved production amount either annually or gross; rather, the production limits are set by the permitted area boundaries, which means the SMARA permit would expire once the boundaries of the permitted mine area are reached. As of December 2017, approximately 0.5 acres of the quarry have been reclaimed in accordance with the quarry's approved reclamation plan; no areas are currently undergoing reclamation. Mining continued within the remaining portions of the

quarry, and in 2017, two acres of the quarry were disturbed for mining purposes. The quarry is also currently used for concrete and asphalt recycling, temporary stockpiling, and a construction office. Historically, the property was also mined for chromium during World War II, though precise locations are unknown and these operations ceased following the end of the war (FirstCarbon Solutions and Chattel, Inc. 2017). To date, up to five acres of the permitted quarry area continue to be disturbed for mining and construction equipment and materials staging purposes, while approximately 0.5 acre has been reclaimed in accordance with the approved reclamation plan with the County (California Department of Conservation 2017a).

The 5.5-acre permitted red rock quarry located within the Project site is also permitted to store soil and aggregate along with construction equipment.

The onsite quarry, including the current ancillary construction activities, are permitted and monitored annually by the County, most recently in December 2017. The County recognizes the quarry as the Froom Ranch Pit, but the quarry is not currently acknowledged in the County General Plan or specifically in the California Department of Conservation's designated San Luis Obispo-Santa Barbara Production-Consumption Region; however, the Froom Ranch Pit is included in the proposed Mining Designation Amendments for the Conservation and Open Space Element of the County's General Plan. These proposed amendments include the Project site as an Energy and Extractive Area combining designation (EX) and would include a Mining Disclosure Rezone area of 0.25 mile around the quarry (see Section 3.15.2, *Regulatory Setting*, for more information). These proposed amendments are currently in draft form.

3.15.2 Regulatory Setting

State and local laws, regulations, plans, or guidelines that are potentially applicable to the Project are summarized below.

3.15.2.1 State

Surface Mining and Reclamation Act (SMARA)

SMARA is the primary regulator of onshore surface mining in the state. It delegates specific regulatory authority to local jurisdictions. The Act requires the State Geologist (California Geological Survey) to identify and classify all mineral deposits in the state based on their local, regional, and state significance. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at specific sites, and to incorporate mineral resource management policies into their general plans. A key concern of state legislators in enacting SMARA was addressing the loss of mineral production sites as a result of development practices that might preclude future extraction.

Mineral Resource Zones

SMARA Sections 2761(a) and (b) and 2790 provide for a mineral lands inventory process termed Classification-Designation. The California Geological Survey and the California State Mining and Geology Board are the state agencies responsible for administering this process. The primary objective of the process is to provide local agencies, such as cities and counties, with information on the location, need, and importance of minerals within their respective jurisdictions. It is also the intent of this process, through the adoption of general plan mineral resource management policies, that this information be considered in future local land use planning decisions.

Areas are classified on the basis of geologic factors, without regard for existing land use and land ownership for each Production-Consumption Region. The mineral resource areas within the San Luis Obispo-Santa Barbara Production-Consumption Region are categorized into one of four Mineral Resource Zones (MRZs), described below (California Department of Conservation 1989).

- **MRZ-1**: A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2**: A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.
- **MRZ-3**: A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.

- **MRZ-4**: A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

3.15.2.2 Local

City of San Luis Obispo Zoning Ordinance

The City Municipal Code, Title 17 Zoning Regulations, establishes allowable uses by zoning district within the City. As the Project would be subject to City Municipal Code upon annexation, these Zoning Regulations would apply to the Project site, including Section 17.10.020.F Prohibited Uses, which prohibits mineral extraction and commercial mining in all zones.

County of San Luis Obispo General Plan

The County General Plan designates mineral resources within the EX Area combining designation in the Framework for Planning (Inland) (i.e., the County's Land Use Element equivalent). Mineral resources are also addressed in the County's Conservation and Open Space Element. Combining designations identify areas with characteristics that are either of public value or are hazardous to the public. The special location, terrain, man-made features, plants or animals of these areas create a need for more careful project review to protect those characteristics, or to protect public health, safety and welfare. EX combining designations are established to recognize the importance of continuing availability of mineral and energy resources by avoiding land use decisions that may inhibit the continuing viability of energy and extractive operations and result in unnecessary or premature termination of the use of such resources. The EX combining designation is intended to:

1. Identify areas where mineral or petroleum extraction occurs, is proposed to occur, or where petroleum or mineral reserves of statewide significance exist, as defined by the State Geologist.

2. Protect existing extraction areas so that land uses incompatible with continuing extraction activities will not be developed on adjacent properties.

3. Protect existing energy production areas and regional production facilities so that incompatible uses will not be developed on adjacent properties such that the energy

production facilities may become dangerous or detrimental to public health and safety.

4. Protect energy production areas from encroaching urban development or other incompatible land uses that may hinder their continued operation.

The existing onsite quarry, or Froom Ranch Pit, is not currently identified by the County's General Plan as a specific mapped mineral resource and is not within an EX combining designation.

Draft EX Combining Designations Amendments

The County is currently updating the EX combining designations and has included the Froom Ranch Pit as a part of this proposed amendment. The proposed update would incorporate recent updates by the California Mining and Geology Board. These proposed amendments adjust boundary maps of regionally significant Mineral Resource Areas, EX designated areas, and Mining Disclosure Zones (MDZ) throughout the County. For EX designated areas, the proposed amendments also include a MDZ combining designation, which would apply to a 0.25 mile buffer around legally established mining activities that is intended to serve as a means of notification and public disclosure for landowners and the general public within the vicinity of the mine. The proposed amendments would designate the Froom Ranch Pit within the EX combining designation and apply a 0.25 mile MDZ to the site. While a portion of the Project site would be designated MDZ under the County's draft amendments, there are no proposed specific restrictions for this designation. The proposed amendments are expected to be reviewed and adopted by the County Board of Supervisors in spring 2020 (Cody Scheel, San Luis Obispo County Planner 2019).

Despite these EX combining designation amendments and designation of the Froom Ranch Pit, the Draft FRSP is being evaluated under the City's regulatory framework in anticipation of annexation of the site. The City and County have coordinated on this issue and have agreed that the proposed EX combining designation amendments would not apply to the Project site in the event of an annexation.

3.15.3 Environmental Impact Analysis

3.15.3.1 Thresholds of Significance

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

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;

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

3.15.3.2 Impact Assessment Methodology

This section evaluates the impact of the Project on the availability of significant mineral resources within the region and state. Regional importance of the onsite quarry was determined by reviewing proposed amendments to the County EX combining designation, as well as associated boundary maps. Production levels for concrete aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region were determined by the Mineral Land Classification Update published by California Geological Survey. Production and capacity levels of the onsite quarry were determined using SMARA Permit Annual Reports for 2018. Permitted land uses within the City were determined using the City's Zoning Ordinance.

3.15.3.3 Project Impacts and Mitigation Measures

Impacts to mineral resources associated with the Project are summarized in Table 3.15-1 below.

Table 3.15-1. Summary of Project Impacts

Mineral Resources Impacts	Mitigation Measures	Residual Significance
MN-1. Project implementation would result in the loss of the existing onsite red rock quarry (Froom Ranch Pit)	None required	Less than Significant

Impact MN-1 **Project implementation would result in the loss of the existing onsite red rock quarry (Froom Ranch Pit) (Less than Significant).**

Current operations at the onsite quarry are limited to asphalt and concrete recycling and stockpiling, though the SMARA permit is active and approximately five acres of unreclaimed area remains available for red rock mining. Although the quarry has historically mined red rock for use in regional construction projects, it is not planned to be utilized for further production. Despite general cessation of red rock production, the quarry is included in the County mining designation amendments because the owner continues to hold an active SMARA permit, reclamation plan, and performance bond, and currently uses the 5.5-acre quarry area for aggregate recycling and construction storage activities.

The Project would reclaim the existing quarry site consistent with the SMARA permit reclamation plan (including grooming and reseeding the area with pasture mix) and then develop up to 130 units of medium-high density multi-family housing within the Madonna Froom Ranch area of the site. Reclamation would occur during Phase 1 of Project construction and, consistent with the quarry's reclamation plan (County of San Luis Obispo 1980), would include removal of excess materials and waste, recontouring, topsoil replacement, and hydroseeding with native grasses and fertilizers. Reclamation would be financed by the independently held performance bond that guarantees funds would be available.

Proposed annexation of the quarry site into the City would result in the prohibition of continued mining activities, consistent with the City's Zoning Ordinance. Although the quarry is considered a mineral resource by the state and County, mining is not allowed within the City and the quarry would no longer be usable for mineral production. When the mine closes and the reclamation plan is completed, the quarry would no longer be subject to ongoing permitting or regulation by the state and would not be subject to the mineral resources policies of the County.

The impact of the Project on available resources within the region and state would be minimal. There is no current or expected future red rock production from the 5.5-acre quarry, and further mining would be prohibited under the Project following annexation to the City. Available acreage for onsite mineral production is 0.01 percent of the 40,895 acres

available within the Production-Consumption Region for this resource, which is a nominal loss of mineral production to local and state needs. There are also local sources of red rock, including the Alberti Ranch Red Rock Quarry and the Beecham Red Rock Pit, that would continue to produce this particular mineral to meet local and regional demand. This nominal reduction in available acreage for red rock extraction that would result from the Project would be *less than significant*.

3.15.3.4 Cumulative Impacts

The Project would not result in effects that, when considered in combination with the impacts of nearby regional projects, would be considered significant. The City does not allow mineral resource extraction and there are no other proximate active mines identified for future annexation into the City. Therefore, there are no projects within the City that are expected to further reduce currently available supplies. The County's proposed mining designation amendments would adjust EX combining designations to reflect state-designated regionally significant mineral resources and would help prevent closure and elimination of these sites. The County's Infrastructure and Facilities Capital Improvement Plan does not indicate expectation of any projects that would impact availability of mineral resources or mineral resource recovery sites. Therefore, the Project is not expected to result in significant cumulative impacts to mineral resources or mineral resource recovery sites. Potential cumulative impacts would be *less than significant*.

4.0 OTHER CEQA ISSUES

This chapter presents the evaluation of additional environmental impacts analyses required by CEQA that are not covered within the other chapters of this EIR, including significant unavoidable environmental effects of the Project, irreversible environmental changes, growth inducing impacts (including removal of obstacles to growth), and resource areas that are found not to be significant. Section 15126 of the CEQA Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. Accordingly, in addition to the analysis provided in Chapter 3, *Environmental Impact Analysis and Mitigation Measures*, this EIR must identify growth inducing impacts and significant irreversible environmental changes that would potentially result from implementation of the Project.

4.1 IRREVERSIBLE ENVIRONMENTAL IMPACTS

CEQA Guidelines, Section 15126.2(d) requires evaluation of irretrievable commitments of resources to assure that such consumption is justified. This includes use of nonrenewable resources, the commitment of future generations to similar uses, and irreversible damage that can result from environmental accidents associated with the Project.

The Project would facilitate the construction of new buildings and paved surfaces, involving consumption of building materials and energy, some of which are nonrenewable or locally limited natural resources (e.g., fossil fuels and wood). Non-renewable resources utilized for the Project could no longer be utilized for other purposes. Consumption of building materials and energy is associated with any development in the region, and these commitments of resources are not unique or unusual to the Project. The Project would represent an incremental commitment to long-term use of non-renewable resources, particularly gasoline for increased automobile use and oil, coal, and natural gas for power generation (see also, Section 3.14, *Utilities and Energy Conservation*). Although not unique to the Project, the automobile-oriented nature of the Project would result in it being a larger energy consuming development, particularly for gasoline, than most current projects in the City (see also, Section 3.0.3, *Cumulative Impacts Analysis* for discussion of cumulative projects). In addition, as discussed in Section 3.3, *Air Quality and Greenhouse Gas Emissions*, use of each of these forms of non-renewable energy would contribute to the generation of GHGs with an incremental contribution to global climate change. To help alleviate impacts to non-renewable resources, the Project would meet or exceed the requirements of the California Building Code (CBC) and California Title 24 in effect at the time of construction, and would comply with the City's green building certification system

and City Conservation and Open Space Element (COSE) Policy 5.5.7, which outlines energy efficiency and green building certifications in new development. Proposed sustainable site design and development practices would include water conservation measures, efficient appliances, and energy conscious heating and cooling systems to offset new energy demand. Moreover, the Project is proposed to include native and non-invasive drought tolerant plant materials to conserve water. These sustainable building features could reduce new energy demand and the consumption of water and non-renewable fossil fuels. Consumption of these resources would occur with any development in the region and are not unique to the Project.

As described in Section 3.2, *Agricultural Resources*, implementation of the Project would irreversibly commit approximately 47.6 acres of prime (if irrigated) soils designated as Farmland of Local Potential by the California Department of Conservation to residential and other development. The Project would commit future generations to similar uses within the Specific Plan area. The irretrievable commitment of this site for these uses is mitigated through compliance with City LUE Policies 1.8.1, *Open Space Protection*, and 1.9.2, *Prime Agricultural Land*, which require permanent protection of offsite agricultural lands of equal area and quality to be put into an agricultural conservation easement via mitigation measure MM AG-1.

The Project would not be expected to result in environmental accidents or upsets that have the potential to cause irreversible damage to the natural or human environment; however, the potential for wildfire is exacerbated by the Project (see also, Section 3.7, *Hazards, Hazardous Materials, and Wildfires*). While recovery from wildfire damage involves rebuilding and restoration of damaged areas, which would ultimately correct the effect on the natural and human environment, there is a possibility that wildfire may result in the permanent loss of structures or natural features (e.g., sensitive habitats and species, heritage and other mature trees), which would be potentially irreversible. The commitment of these resources for Project development has been planned for and would achieve implementation of the City's General Plan.

4.2 GROWTH-INDUCING IMPACTS

Section 15126.2(e) of the CEQA Guidelines requires a discussion of how the Project could foster economic or population growth, or the construction of additional housing (either directly or indirectly) in the surrounding environment. Induced growth is distinguished from the direct economic, population, or housing growth of a project. Induced growth is any growth that results from new development that would not have taken place in the

absence of the project and that exceeds planned growth. CEQA Guidelines also state that growth in any area should not be assumed to be necessarily beneficial, detrimental, or of little significance to the environment.

Growth-inducing impacts are caused by those characteristics of a project that tend to foster or encourage population and/or economic growth. The Project could result in five types of growth-inducing impacts: 1) the creation of short- and long-term employment opportunities which draw newcomers to the region and increase economic growth; 2) increase in residential population from development of new residential development; 3) the generation of new commercial and tourist accommodations to entice people to the area; 4) expansion of utilities and infrastructure; and 5) removal of an obstacle to future development.

1) As discussed in Section 3.11, *Population and Housing*, the Project would construct 174 multi-family housing units and 404 independent and 51 assisted living units and provide approximately 332 full-time equivalent jobs, in addition to short-term construction employment. Most of the Project's labor force is expected to come from the local labor pool; however, some workers may come from outside areas. Therefore, there would be a minor increase in economic growth which would be further minimized by the fact that new jobs created by the Project would may be absorbed by existing residents or future residents of the City and Project.

2) The construction of 578 new units would result in a residential population growth of approximately 1,231 persons. However, construction of 174 housing units within Madonna Froom Ranch would help alleviate the City's increased housing demand, and the construction of 404 units within Villaggio would fulfill a specialized housing need and is thus not considered growth-inducing as it would not foster the need for future construction of additional housing. Population growth within the City is directly related to the increase in available housing supply, and the City's LUE Policy 1.11.2 limits the City-wide increase in housing units to one percent annually, excluding affordable housing (refer to Impact PH-1 in Section 3.11, *Population and Housing*). Therefore, population growth in the City is already controlled through General Plan policies that limit residential growth rates; the Project would be subject to these residential growth rate limits.

3) The Project would attract visitor populations to the area, including overnight visitors associated with the proposed 70,000-sf hotel. A new hotel development could attract tourists and travelers to the area and generate additional revenue for

local businesses. Visitors may also come to Villaggio to stay with relatives. Associated increases in visitors could potentially result in increased traffic and use of public facilities and services and has the potential to incrementally induce growth in the City.

4) As discussed in Section 2.4.4, *Utilities and Services*, the Project includes the construction of water supply and wastewater collection systems for the Project site that would tie into City systems. Further, the Project would allow for the extension of roadways into the site, including two commercial collectors, as well as roadway and intersection improvements on LOVR. The extension of roadways and improvements would improve access and circulation within the immediate vicinity of the site and would enable a future extension of Commercial Collector B to connect to Irish Hills Plaza. Extension of utilities and roadways within the site would not facilitate additional development along the hillside, particularly of the undeveloped 7.39-acre parcel zoned retail commercial (C-R) and located north of the Project site and adjacent to the Irish Hills Plaza. There is limited opportunity for additional future development due to the expansion of utilities and services in the Project area, as most undeveloped land surrounding the Project site is within open space easements.

5) There is an undeveloped parcel in the immediate vicinity of the Project site, which could experience development in the future due to the removal of an obstacle to development brought about by the Project. A portion of the 7.39-acre parcel north of the Project site is below the 150-foot elevation line and currently subject to City LUE Policy 6.4.7, Hillside Planning Areas, which prohibits development above the 150-foot elevation within the Irish Hills Planning Area. The Project would amend Policy 6.4.7 to allow for development over the 150-foot elevation. This could open the door for other future development in the Irish Hills area, specifically for the 7.39-acre parcel. However, all other adjacent lands surrounding the Project site are already developed (e.g. hotels along Calle Joaquin), constrained by steep slopes and existing development (Mountainbrook Church), or protected as open space lands within the Irish Hills Natural Reserve by a 2010 conservation easement owned by the Land Conservancy of San Luis Obispo; thus, these lands would not be affected by the amendment to Policy 6.4.7.

4.3 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines state that the EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR (Section 15128). After standard regulatory conditions and/or mitigation measures are applied, several resource areas were found to be below the level of significance, as identified in the Initial Study Checklist (Appendix A). Effects found not to be significant and a brief explanation as to why is included below.

4.3.1 Forestry Resources

No known forestry resources are associated with the Project site; therefore, *no impact* to forestry resources would result from the Project.

4.4 SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA Guidelines, Section 15126.2(c) requires a description of any significant unavoidable impacts resulting from implementation of a project, including impacts that cannot be mitigated to below a level of significance. The Project was evaluated with respect to specific resource areas to determine whether implementation would result in significant adverse impacts. A detailed discussion of each of the impacts can be found in Chapter 3, *Environmental Impact Analysis and Mitigation Measures*.

Specific significance thresholds were defined for each potential impact associated with each resource area. Based on the environmental impact assessment presented in Chapter 3, *Environmental Impact Analysis and Mitigation Measures*, of this EIR, the resource areas of aesthetics and visual resources, air quality and GHGs, cultural and tribal resources, hazards/hazardous materials and wildfire, land use and planning, noise, and transportation would result in significant impacts even after mitigation is applied to reduce the level of impact.

Under CEQA Guidelines Section 15065, when an EIR demonstrates that implementation of a proposed project will cause significant and unavoidable impacts, the agency must issue a Statement of Overriding Considerations before approving the project. A Statement of Overriding Considerations is a report of the lead agency's findings regarding the merits of approving a proposed project despite its significant environmental impacts and reflects the balancing of competing public objectives. Therefore, the City will be required to adopt a Statement of Overriding Considerations to address the significant impacts identified above

and discussed in detail in Chapter 3, *Environmental Impact Analysis and Mitigation Measures*. In this instance, the City may weigh the long-term benefits of the Project, such as fostering additional regional housing opportunities, including senior housing, against potentially adverse impacts created by the Project. To facilitate consideration of these issues, this EIR discloses potential impacts and provides a range of Project alternatives that could more fully alleviate environmental concerns. In addition, Section 3.9, *Land Use and Planning,* provides an overview of the City's policy context, which provides information on how the Project meets several important City policy objectives and where it may raise concerns over consistency with other City policies. All this information should be reviewed when considering this Project.

5.0 ALTERNATIVES

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines state that an "Environmental Impact Report (EIR) shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (Section 15126.6).

The CEQA Guidelines state that "the range of alternatives required in an EIR is governed by a rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the Project (Section 15126.6).

In defining feasibility of alternatives, the CEQA Guidelines state that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site" (Section 15126.6).

The alternatives must adequately represent the spectrum of environmental concerns in order to permit a reasoned choice among alternatives. The document must also provide the rationale for selecting or defining the alternatives evaluated throughout the document, including the identification of alternatives that were considered by the Lead Agency but rejected as infeasible during the scoping process.

The alternatives analysis for this EIR is presented in four sections. Section 5.2, *Project Objectives*, describes the objectives of the Froom Ranch Specific Plan (FRSP) (Project). Section 5.3, *Summary of Significant and Unavoidable Impacts*, summarizes the potentially *significant and unavoidable* short- and long-term impacts of the Project from information presented in Chapter 3, *Environmental Analysis and Mitigation Measures*. Section 5.4, *Alternatives Analysis*, discusses potential impacts under the Project alternatives, including a discussion of the alternatives considered but discarded. Section 5.5, *Identification of Environmentally Superior Alternative*, concludes with the selection of an environmentally

superior alternative, based on a Project configuration that results in the fewest significant impacts and feasibly attains most of the Project objectives.

5.2 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires a statement of a project's objectives that includes the underlying purpose of the project. The major objectives of the Project are described in Section 2.3, *Project Objectives*, and restated below.

1. Development of a mix of uses while protecting sensitive environmental resources and maintaining public views of the Irish Hills.
2. Provision of a range of housing options, including workforce housing, senior housing, and inclusionary housing.
3. Development of an economically feasible, healthy, safe, and secure Life Plan Community that will serve residents 60 years of age and over.
4. Development of multi-family housing, including housing consistent with the adopted City of San Luis Obispo (City) Inclusionary Housing Requirements in effect at the time of the Specific Plan adoption.
5. Provision of commercial retail uses that complement residential uses and facilitate pedestrian and bicycle access.
6. Provide site hydrology design to improve stormwater conveyance and management, provide a restored riparian creek corridor, and enhance fishery habitat and biological resource value.
7. Development of a public park that includes access and connection to existing trails in the Irish Hills Natural Reserve and proposed trails within the Specific Plan area.
8. Reconstruction, rehabilitation, and adaptive reuse of architecturally significant historic structures within a public park, in a setting and configuration that retains historic integrity, while avoiding seismic impacts.
9. Establishment of a cohesive transportation and circulation network of collector and residential roads, bicycle lanes, transit opportunities, and pedestrian sidewalks that is integrated with and enhances the regional transportation system.
10. Incorporation of sustainability measures that exceed the requirements of the California Building Standards Code (Title 24) and California Energy Code (Part 6) in effect at the time of construction, as well as provide onsite renewable energy facilities and Electric Vehicle (EV) charging infrastructure in all land use types.
11. Avoidance of impacts to sensitive plant and wildlife species, such as the state and federally-endangered Chorro Creek bog thistle (*Cirsium fontinale var. obispoense)*.

5.3 SUMMARY OF SIGNIFICANT AND UNAVOIDABLE IMPACTS

The Project would result in significant and unavoidable impacts to the following resources areas: aesthetics and visual resources; air quality and greenhouse gas emissions; biological resources; cultural and tribal cultural resources; hazards, hazardous materials, and wildfires; land use and planning, noise; and transportation and traffic, as summarized below.

5.3.1 Aesthetics and Visual Resources

Project development would result in significant impacts to the existing visual character of the site by changing an open space and rural setting to a commercial and residential setting, particularly as viewed from the Irish Hills Natural Reserve public trail system. As demonstrated in key viewing areas (KVAs) 4 and 5 in Section 3.1, *Aesthetics and Visual Resources*, the Project would develop up to 581 single and multi-family residences, senior assisted living facilities, commercial uses, a trailhead park, roads, bicycle paths, and other urban infrastructure that would eliminate existing high-quality scenic views. These new uses would be highly visible from numerous public trails along the southeastern edge of the Irish Hills Natural Reserve. Additionally, the Upper Terrace of Villaggio and portions of the Madonna Froom Ranch area would be developed above the 150-foot elevation line, an area that the City's General Plan currently states should be secured as permanent open space with no building sites above the 150-foot elevation in conjunction with any subdivision or development of the lower areas. These portions of the Project would be the only development above this line in the vicinity besides Mountainbrook Church, located in the unincorporated County of San Luis Obispo (County). Implementation of required mitigation measure MM VIS-1 would interrupt the contiguous massing of proposed multi-family and commercial structures by requiring onsite native tree screening plantings, although this would not sufficiently reduce the substantial damage to scenic resources resulting from loss of open space and natural visual setting. Therefore, impacts to aesthetics and visual resources under the Project would be considered significant and unavoidable.

5.3.2 Air Quality and Greenhouse Gas Emissions

During operation, air emission impacts from reactive organic gases (ROG) and nitrogen oxide (NO_x) as a result of vehicle trips, energy emissions, and additional area source emissions associated with the Project would be significant and unavoidable. In accordance with the San Luis Obispo County Air Pollution Control District's (SLO County APCD's) CEQA Air Quality Handbook (as amended by the 2017 Clarification Memorandum), all

standard mitigation measures and feasible discretionary mitigation measures would be incorporated into the Project (see MM AQ-4). Many of these measures would be incorporated as policies of the FRSP for which future development would be required to implement and would manifest as site design measures which would reduce area source emissions. Many other measures identified in MM AQ-4 emphasize transportation strategies to reduce vehicle miles traveled (VMT) and associated mobile-source NO_x emissions. Incorporation of this mix of measures is considered feasible for the Project and would substantially reduce operational ROG and NO_x emissions. However, many measures listed in MM AQ-4 do not contain quantifiable air quality emissions reductions for programs under the FRSP. While implementation of these measures can feasibly reduce ROG and NO_x, the Project's estimated emissions after implementation of these measures cannot reasonably be quantified, and long-term operational residual impacts would remain above the significance threshold identified in Section 3.3 *Air Quality and Greenhouse Gas Emissions*.

The Project was also found to have significant and unavoidable impacts related to consistency with the SLO County APCD's 2001 Clean Air Plan. The design of the Project would require relatively substantial changes to reduce inconsistency with overall land use planning principles contained in the Clean Air Plan to less than significant. The Project could hinder the County's ability to attain the state ozone standard because the emissions reductions projected in the Clean Air Plan may not be met. The anticipated population growth and increase in vehicle trips associated with the Project is inconsistent with the projections contained within the 2001 Clean Air Plan. Therefore, inconsistencies with assumptions in the Clean Air Plan would remain significant and unavoidable, even after implementation of MM AQ-4 and MM TRANS-5 and -8 through -10.

5.3.3 Biological Resources

Implementation of the Project would result in significant and unavoidable impacts to biological resources. Construction and operation of the Project would impact sensitive habitats and species, including sensitive riparian, wetland, and native grassland habitats, migratory wildlife corridors, and sensitive and endangered species. The Project would substantially impact 14 special status plant species, including the state and federally endangered Chorro Creek bog thistle, and serpentine native bunchgrass and associated habitat. Development within the Upper Terrace of Villaggio would have substantial adverse effects on native grasslands and existing springs, seeps, and wetland habitats along Drainages 1, 2, and 3, and associated wildlife corridors. The wetland adjacent to Calle

Joaquin, a federal jurisdiction wetland, could be significantly impacted through modifications to site hydrology with the realignment of Froom Creek. Additionally, development located between the realigned Froom Creek and upland grassland habitats and drainages would have significant impacts on habitat connectivity and animal movement corridors along the urban-rural interface of the City's boundary. While mitigation measures proposed in Section 3.4, *Biological Resources,* would minimize or reduce adverse effects, impacts would continue to be substantial and are, therefore, considered significant and unavoidable.

5.3.4 Cultural and Tribal Cultural Resources

The Project would result in significant impacts to onsite historic resources, including a City-, state-, and federally-eligible historic district associated with the historic Froom Ranch Dairy complex. The Project would result in a loss of three out of seven buildings that contribute to the eligibility of the Froom Ranch Dairy complex for listing on the National Register, California Register of Historic Resources (CRHR), and City Master List of Historic Resources as a historic district. Though MM CR-9 through MM CR-14 would reduce the severity of this loss, impacts to the potential Froom Ranch Dairy historic district are considered significant and unavoidable.

5.3.5 Hazards, Hazardous Materials, and Wildfires

The Project would expose occupants to substantial wildfire hazards and would impair emergency response to fires in the Irish Hills Natural Reserve. The Project site is located in an area with moderate to very high fire hazard potential due to highly flammable vegetation and fire-prone topography within the adjacent Irish Hills Natural Reserve, as well as winds that periodically blow southeast downslope toward the Project site. Additionally, the Project would utilize security fencing, retaining walls, and closely spaced residential units in the western portion of Villaggio's Lower Area that would limit access for firefighters and vehicles to the wildfire interface. Although the Project would be required to implement mitigation measures to reduce wildfire risks, occupants would still be exposed to wildfire hazards and emergency response to a wildfire in the Irish Hills would continue to be impaired by the Project as currently designed. Therefore, impacts related to wildfire hazards would remain significant and unavoidable.

5.3.6 Land Use and Planning

The Project would substantially conflict with City General Plan policies for the protection of visual, biological, cultural resources, and wildfire hazards. The Project would develop

residential units above the 150-foot elevation line in Villaggio's Upper Terrace, which would be require a General Plan amendment and would be substantially inconsistent with the General Plan Land Use Element (LUE) and Conservation and Open Space (COSE) policies. These policies protect sensitive biological, open space, and visual resources, including LUE Policies 1.8.6, *Wildlife Habitats*, and 6.4.7, *Hillside Planning Areas*, and COSE Policies 7.3.1, *Protect Listed Species*, 7.3.2, *Protect Species of Local Concern*, and 9.2.1, *Views to and from public places, including scenic roadways.* Additionally, the Project would relocate or demolish structures associated with the historic Froom Ranch Dairy complex, a potential historic district under the City's Historic Preservation Ordinance and the CRHR. While mitigation measures would minimize these impacts, potential adverse physical effects related to the potential inconsistencies with City policies would remain significant and unavoidable.

5.3.7 Transportation and Traffic

Project traffic would exacerbate existing queuing and peak hour traffic congestion for automobiles, and poor levels of service for pedestrian, bicycle, and transit modes of transportation, causing transportation deficiencies in the Project vicinity, including Los Osos Valley Road (LOVR) and U.S. Highway 101 (U.S. 101), resulting in significant impacts. Although the Project would implement MM TRANS-2 and MM TRANS 12 through -18, which would require roadway improvements to improve multimodal facilities, increase capacity, and alleviate queuing impacts, feasible mitigation is not available to fully mitigate the Project impacts. Specifically, implementation of MM TRANS-6 requires the completion of the Prado Road Overpass/Interchange project, which cannot be ensured by this Project. Therefore, if Prado Road Overpass/Interchange project is not in place by Project occupancy, impacts would be significant and unavoidable.

5.4 ALTERNATIVES ANALYSIS

This section discusses alternatives to the proposed Project, including alternatives which were considered and discarded. Each of these considers the ability of a particular alternative to comply with the City General Plan or substantially reduce or eliminate the Project's significant environmental impacts, while still meeting basic project objectives. The EIR also includes a No Project Alternative and an analysis of possible alternative sites that may not have the same environmental resource sensitivity as the selected project site. Those alternatives carried forward for consideration and analysis include:

- CEQA "No Project" Alternative;

- Alternative 1 – Clustered Development Below the 150-Foot Elevation Alternative (Actionable Alternative)
- Alternative 2 – Residential Development Project Alternative
- Alternative 3 – Minimum LUCE-Compliant Alternative

5.4.1 Alternatives Considered but Discarded

CEQA Guidelines Section 15126.6(c) requires that an EIR disclose potential alternatives that were considered and discarded and provide a brief explanation as to why such alternatives were not fully considered in the EIR. As required by the State CEQA Guidelines, the selection of alternatives includes a screening process to determine a reasonable range of alternatives that could reduce significant effects but also feasibly meet most of the Project objectives. If an alternative does not clearly provide any environmental advantages compared to the proposed Project, meet key project objectives, or achieve overall agency policy goals, it has been eliminated from further consideration. Characteristics used to eliminate alternatives from further consideration include:

- Failure to meet basic Project objectives;
- Limited effectiveness in reducing Project environmental impacts;
- Inconsistency with City policies regarding jobs/housing balance and provision of a mix of housing types;
- Potential for inconsistency with applicable plans and policies; and
- Reasonableness of the alternative when compared to other alternatives under consideration.

The following alternatives were considered but eliminated from further analysis by the Lead Agency based on the above considerations.

5.4.1.1 Alternative Land Use Mixes – Increased Commercial Retail/Elimination of Housing

Under this potential alternative, the site would not be developed with residential uses or the Life Plan Community and would instead be developed with commercial retail uses within the proposed developed portion of the site. Froom Creek would not be realigned, and additional flood control improvements may be required to accommodate increased runoff from additional impermeable surfaces and development. To accommodate increases in personal and commercial vehicle trips to serve the commercial uses, a secondary access road would also be constructed onto LOVR. Under this alternative, 50 percent of the site would remain dedicated open space.

This alternative would be inconsistent with the General Plan LUE performance standards for the Project site and would not achieve a majority of the Project objectives, which include the provision of a variety of housing types and provision of commercial uses that complement residential uses. Further, development of the site solely for commercial uses would not meet identified housing needs and would be inconsistent with City goals to provide a mix of housing types and increase the City's housing stock for residents. Further, this alternative would likely result in increased impacts to traffic, roadway congestion, and associated air quality due to the increased number of trips to and from the site. Therefore, this option was considered and discarded, consistent with CEQA Guidelines Section 15126.6(c).

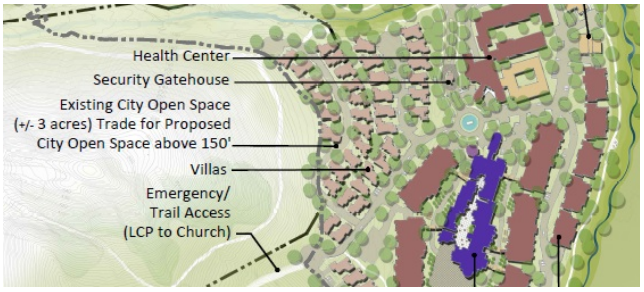
5.4.1.2 Maximum Buildout Consistent with the General Plan, including LOVR Bypass

Under this alternative, substantially less housing and substantially more commercial uses would be developed on the site, consistent with the General Plan LUE and the existing performance standards for the SP-3, Madonna on LOVR Specific Plan area. These performance standards include a maximum of 350 residential units and 350,000 square feet (sf) of commercial space with a minimum of 50 percent of the site designated for open space. This alternative would not develop the site for a senior Life Plan Community as envisioned under the Project. This change in land use could change the mix and type of residential units, with a lower percentage of medium density units compared to commercial uses than the proposed Project. Further, analysis of this alternative would include consideration of planned transportation and traffic improvements (primarily the LOVR Bypass) and the effects those improvements would have on allowable General Plan buildout of the Project site and cumulative regional transportation. The LOVR Bypass would present additional offsite environmental impacts in addition to site development consistent with the General Plan.

However, this alternative would not meet several of the Project objectives, including development of a Life Plan Community and development of a broader range of housing options, including multi-family units, senior, and inclusionary housing. In addition, the City has conducted a cost-benefit analysis for the LOVR Bypass and found that there were little-to-no benefits to overall traffic circulation associated with the project to justify the costs of the project and potential impacts to agricultural resources and riparian habitat. Therefore, this potential alternative is not reasonable or feasible to mitigate environmental impacts and this alternative has been considered and discarded, consistent with CEQA Guidelines Section 15126.6(c). In addition, this alternative was already considered within

the Land Use and Circulation Element (LUCE) Update EIR under the 'Maximum Circulation Improvement Alternative,' which assessed both buildout of the Project site under the General Plan scenario and development of the LOVR Bypass improvements. Further detailed analysis of this alternative need not be reconsidered under this EIR.

5.4.1.3 Land Swap Alternative



Early consideration of alternatives to the FRSP included a conceptual plan to "swap" land in the City-owned Irish Hills Natural Reserve. In this considered but discarded alternative, the Project would develop land at the base of the Irish Hills Natural Reserve but would dedicate the Upper Terrace to the City. This land swap was deemed infeasible in consultation between the Applicant and the City.

Under this alternative, development proposed within Villaggio's Upper Terrace would be relocated below the 150-foot elevation contour line. The Upper Terrace area would be dedicated open space and an emergency/trail access easement would be constructed from Mountainbrook Church to the Villaggio Life Plan Community development. To accommodate relocation, building density would be increased, along with structure heights within the Lower Area of Villaggio. In addition, an approximately 10-acre area outside the Project site within the eastern edge of the Irish Hills Natural Reserve and situated below the 150-foot elevation (referred to as the "land swap" area) would be developed with R-3-SP zoned residential senior housing. On the Madonna Froom Ranch portion of the site, this alternative would result in relocation of historic structures and the proposed trailhead park to the upper northwestern corner of the Project site along Froom Creek, while the four attached multi-family housing structures would be relocated to the prior proposed trailhead park location. Further, this alternative would include additional circulation improvements, such as an easement onsite for a Class I bike path that parallels LOVR, a multi-modal roadway connection to Calle Joaquin, and a multi-modal roadway connection to the Irish Hills Plaza from Mountainbrook Church. Consistent with the General Plan development standards for the site, 50 percent of the site would remain dedicated for open space.

While this alternative would relocate some development below the 150-foot elevation contour in the Upper Terrace, structures would remain above this elevation and development would intrude into 10 acres of the Irish Hills Natural Reserve in the Lower

Area. Increased density and building heights in the Lower Area of Villaggio to accommodate relocation of proposed Upper Terrace development would result in similar or incrementally greater obstruction of views of the natural hillsides of the Irish Hills. As such, this alternative would continue to result in conflicts with the development standards and policies of the General Plan LUE. While benefits would include increased multi-modal connectivity to the Project site, reduced impacts associated with construction on slopes, and greater avoidance of sensitive serpentine bunchgrass grasslands and the federally-endangered Chorro Creek bog thistle (*Cirsium fontinale* var. *obispoense*), development would not lessen or avoid significant impacts associated with air quality, greenhouse gas (GHG) emissions, and transportation, and would conflict with conservation plans and easements for the Irish Hills Natural Reserve. Further, acquisition of the proposed land swap area would require modifications of a conservation easement held by The Land Conservancy for San Luis Obispo County, an Open Space Easement held by the County of San Luis Obispo, and restriction included in a Grant Agreement with The Nature Conservancy. Acquisition of this land for development would directly conflict with those plans, making acquisition of the land swap area infeasible. As such, this alternative was considered and discarded, consistent with CEQA Guidelines Section 15126.6(c).

5.4.1.4 Low Density Upper Terrace Alternative

Under this alternative, development proposed within Villaggio's Upper Terrace would be substantially reduced to include four large-lot estates relocated below the 150-foot elevation contour line. Each estate would include a 10-acre lot with a one-story single-family home within a one-acre building envelope. Areas in the Upper Terrace outside the estates would be dedicated open space. Access to the estates would be provided via a Calle Joaquin and the driveway to Mountainbrook Church, where a new local road would connect the estates then terminate at a cul-de-sac. The roadway would require three culvert crossings of Drainages 1, 2, and 3. An emergency/trail access easement would be constructed from the cul-de-sac to the Lower Area of Villaggio. Within the Lower Area and Madonna Froom Ranch, no changes would be made compared to the Project.

While this alternative would reduce the density of development above the 150-foot elevation contour in the Upper Terrace, structures and private yard space would remain above this elevation. Estate lots would disturb approximately 40 acres in the Upper Terrace, potentially impacting biological and cultural resources similar to the Project. Benefits would include reduced impacts associated with construction on slopes, and greater avoidance of sensitive serpentine bunchgrass grasslands and the federally-endangered

Chorro Creek bog thistle (*Cirsium fontinale* var. *obispoense*). However, the area of disturbance, including indirect impacts from private use of land during operation, would continue to impact these resources. Further, while the reduced density would substantially increase development setbacks from drainages, the estate lots would disrupt wildlife corridors and habitat continuity in the Irish Hills. The reduced building density and heights would reduce visual change in the Upper Terrace, but the development would remain visible from public trails in the Irish Hills Natural Reserve. As such, this alternative would continue to result in conflicts with the development standards and policies of the General Plan LUE. Development would not substantially lessen or avoid significant impacts associated with air quality, biological resources, GHG emissions, and transportation. As such, this alternative was considered and discarded, consistent with CEQA Guidelines Section 15126.6(c).

5.4.1.5 Alternate Site in City of San Luis Obispo

Alternate sites within the City were considered for development of the proposed Project. Such sites would need to be large enough to accommodate the proposed Life Plan Community, multi-family housing, commercial square footage, public park, and requirement for 50 percent preservation of the site as open space (minimum 101.4 acres or greater) and be undeveloped or underdeveloped. Very few sites within the City are large enough to accommodate the proposed Project and those that do are already programmed for development under the General Plan LUE. In fact, many larger sites are currently undergoing concurrent development proposals, including the Avila Ranch Development Plan (SP-4 Avila Ranch) and the San Luis Ranch Specific Plan (SP-2 San Luis Ranch). Other large sites addressed within the General Plan LUE include properties in the County that lie outside the City's urban reserve line (URL) and may not align with City policies and regulations.

Further, alternate locations in the City may also be constrained (e.g., presence of historic resources, hazardous material site, etc.) in ways that would not permit the development of the Project with fewer potential impacts, including aesthetics, hazards, traffic, noise, and air quality. Alternate sites in the City are also not under ownership or management of the Project Applicant, nor do they have an interest from Villaggio as candidates for the Life Plan Community component. Because alternate locations are constrained in ways that would not permit the development of the Project with fewer potential impacts, and the alternate sites are not under the ownership or management of the Project Applicant and are not currently available for development, alternate locations in the City were determined

not to be feasible for development of the Project. Therefore, this alternative was discarded from further consideration, consistent with CEQA Guidelines Section 15126.6(c).

5.4.2 Alternatives Carried Forward for Analysis

5.4.2.1 No Project Alternative

Under the No Project Alternative, no development or annexation of the site to the City would occur, and the site would remain designated for agricultural and commercial uses by the County. The site would continue to be designated as SP-3 of the City General Plan and remain within the City's Sphere of Influence, and all General Plan LUE requirements for SP-3 for potential future development would remain applicable. No new development or construction would occur under this alternative – for an analysis of development that could be allowed under the current General Plan, see Alternative 3.

Under the No Project Alternative, the site would continue to be used as grazing land and as a staging and operations site for the existing construction company. There would be no disturbance to existing soils or vegetation, except for any ongoing grading permitted by the County, and the site would remain as undeveloped open space. Froom Creek would not be realigned or enhanced and no changes to existing stormwater conveyance and management systems would occur. The existing wetlands and onsite stormwater detention basin would remain. All structures associated with the Froom Ranch Dairy complex would remain in place, would not be rebuilt or restored, and would continue to be utilized for construction business operations (offices, equipment storage, etc.). Daily vehicle trips would remain low/negligible associated with limited employee trips from the existing construction business onsite.

Analysis – No Project Alternative

Under the No Project Alternative, a number of significant and unavoidable environmental impacts would be avoided or reduced compared to the proposed Project, although beneficial impacts to population and housing would also not occur. Impacts to aesthetics and visual resources, biological resources, cultural and tribal cultural resources, noise, and impacts to and/or from hazards would be substantially less when compared to the Project, due to the absence of construction activities and operation of the Project. Mitigation measures would not be necessary for these resource areas to avoid significant impacts under this alternative. However, Froom Creek would not be enhanced or restored, and existing historic structures would likely continue to deteriorate.

Aesthetics and Visual Resources

This alternative would result in no impact to aesthetics and visual resources, as there would be no new development of the site which would result in obstruction or degradation of views of the Irish Hills or from the public trails within the Irish Hills Natural Reserve.

Agricultural Resources

This alternative would result in no impact to agricultural resources, as there would be no development that would affect agricultural soils or conflict with existing agricultural zoning. The No Project Alternative would not require reconfiguration of the existing agricultural conservation easement and would not reduce the viability of existing or potential agricultural operations onsite, including within the existing open space.

Air Quality and GHG Emissions

Impacts to air quality and GHG emissions within the Project site and immediate vicinity would be reduced, as there would be no construction emissions under this alternative. Continued dust generation from construction company operations (e.g., staging of construction equipment, storage of fill material, site grading) would contribute to air quality emissions; however, such emissions would be the same as existing conditions and would be substantially less than the construction and operational emissions produced by the Project. Further, as no new development would occur, this alternative would remain consistent with the City and state goals for achieving carbon neutrality, and would be consistent with the land uses and VMT traveled identified in the 2001 Clean Air Plan.

Biological Resources

Impacts to biological resources would be negligible and substantially less than under the proposed Project. Existing wetland and riparian habitat and associated sensitive species within the Project site would be subject to ongoing management practices, including grazing and occasional maintenance and removal of wetland vegetation with the existing stormwater detention basin. Realignment of Froom Creek would not occur and adjacent unpermitted grading would need to be addressed. Froom Creek would also not be enhanced with habitat for steelhead and riparian habitat areas. LOVR widening improvements would not occur and would not impact Calle Joaquin wetlands or the LOVR ditch. Sensitive plants species and habitats within the Upper Terrace would continue to be subject to low to moderate impacts from horse and cattle grazing and would remain unprotected through any

land protection mechanism. Compared to the Project, no mitigation measures would be required to lessen the significance of impacts upon the site's biological resources.

Cultural and Tribal Cultural Resources

Identified historic structures would remain in place under the No Project Alternative; no structures would be rebuilt or restored and the main residence and some of the structures would continue to be utilized for construction business operations (offices, equipment storage, etc.). Permanent direct loss of structures composing a potential historic district would not occur as a result of this alternative, although some historic structures would continue to deteriorate. Impacts to buried or undiscovered cultural and archaeological resources within the Project site would be avoided, although ongoing onsite activities (mining, construction staging, grading) may impact such features.

While the No Project Alternative would not involve the physical alteration of any onsite historic structures affecting their significance or eligibility, these historic resources would not receive the same benefits as under the Project. Eligible historic structures/resources would not be rehabilitated and preserved, nor would they be relocated outside the potential active fault zone to more geologically stable locations. Under the No Project Alternative, these resources would continue to be utilized for storage and construction business operations, with no specialized maintenance or upkeep. As such, these structures may further deteriorate and continue to be at risk of failure or collapse. Over time, the deterioration of the structures may result in a loss of integrity while remaining on site and a loss of the resource value entirely when deterioration results in removal of the structures. Retention of these structures in their current place and status would not result in any changes to the eligibility of the resources or the potential historic district in the short-term, which would less impacts compared to the Project, but in the long-term, the No Project Alternative would inevitably result in negligence of the buildings and eventual loss of eligible structures. Therefore, impacts would ultimately be greater than under the Project.

Geology and Soils

Impacts to and from geologic and soil resources under the No Project Alternative would be much less than under the proposed Project. No soil disturbance beyond existing agricultural operations and ongoing period grading would occur. Implementation of this alternative would not expose structures or persons to or create or exacerbate known or potential geologic and soils hazards.

Hazards and Hazardous Materials and Wildfire

Implementation of the No Project Alternative would not result in any impacts to hazards and hazardous materials. This alternative would not construct new development that exacerbates existing hazards and would not expose persons to existing hazards or hazardous materials. This alternative would also avoid exacerbation of wildfire hazards, by both reducing the potential for ignition and keeping residential land uses out of high fire hazard areas at the urban wildland interface.

Hydrology and Water Quality

Implementation of the No Project Alternative would not result in any impacts to hydrology or water quality. This alternative would not increase impermeable surfaces on the Project site and would not result in the potential to expose surface and groundwater sources to pollutants from construction and equipment. Froom Creek would not be realigned and restored, the habitats within the Calle Joaquin wetlands and LOVR ditch would remain similar to existing conditions, and the existing Irish Hills stormwater detention basin and associated wetlands would remain in operation along with impacts of periodic maintenance activities. However, this alternative would not result in alleviation or improvement of flood conditions at the U.S. 101 box culvert. Compared to the Project, flood conditions under this alternative would be worsened and result in greater impacts.

Land Use and Planning

Impacts to land use under this alternative would be less than those anticipated under the proposed Project. The No Project Alternative would result in continued discrepancies between the existing agricultural uses and the General Plan LUE intent for the area to provide a substantial number of residential units, Neighborhood Commercial or Retail Commercial uses, and preserved open space; however, the existing use would continue to be consistent with the County General Plan. This alternative would result in less than significant impacts related to consistency with General Plan LUE policies as no development would conflict with policies relating to Froom Creek, development above the 150-foot elevation contour, and development on agricultural and biologically sensitive lands. However, the City's housing supply, particularly for senior units, would not be expanded, and conflicts with Housing Element (HE) goals for provision of such housing could potentially occur.

Noise

The No Project Alternative would not result in any impacts related to noise. Under this alternative, no construction or operational noise would be generated. Noise levels at the site would remain similar to the existing setting at the Project site.

Population and Housing

Impacts to population and housing under this alternative would likely be greater than under the proposed Project. Compared to the Project, this alternative would not result in beneficial impacts to the housing supply nor assist in meeting the City's Regional Housing Needs Allocation targets. The No Project Alternative would not meet existing and future housing needs or provide increased affordable housing opportunities. The jobs/housing imbalance within the City, as described in Section 3.11, *Population and Housing,* would continue or be exacerbated. Increased demand for housing within the City to support employment and economic growth would continue. As a result, increasing numbers of households may opt to find housing opportunities outside of the City, and would travel to job opportunities within the City, as further discussed in Section 3.11, *Population and Housing*. Indirect impacts caused by the jobs/housing imbalance within the City and associated commuter trips include increased energy consumption, GHG emissions, and air pollutant emissions from additional commuters and increased commute distances and times. As the No Project Alternative would not provide housing opportunities within the Project site, this alternative would not partially alleviate some of these direct and indirect impacts to population and housing.

Public Services and Recreation

The No Project Alternative would not result in any impacts to public services and recreation. Under this alternative, no additional police officers or fire fighters would be needed and there would not be an increase in population that would require construction of additional educational or recreational facilities.

Transportation and Traffic

Traffic and transportation impacts would be much less than the proposed Project under this alternative, as there would be no development that would generate additional trips to and from the Project site or on adjacent roadways. Therefore, the significant and unavoidable impacts caused by the Project would not occur under this alternative. This alternative would also not contribute to transportation improvements in the vicinity, such as LOVR

improvements (i.e., Class IV bike lanes and sidewalks) or intersection improvements at Auto Park Way.

Utilities and Energy Conservation

Impacts to utility and energy supplies and services would be much less compared to the proposed Project. There would be no new significant demand for water, electricity, natural gas, and fuel supplies nor additional demand for or increased strain on utility services and infrastructure. Implementation of the No Project Alternative would not require treatment capacity from the Wastewater Resource Recovery Facility (WRRF) during dry or wet-weather conditions.

Mineral Resources

Under this alternative, the onsite red rock quarry would continue as an existing permitted mining site in the County, though the quarry is not planned to be utilized for further production. Impacts to this mineral resource would be less than the proposed Project.

5.4.2.2 Alternative 1 – Clustered Development Below the 150-foot Elevation Alternative (the Actionable Alternative)

Through review of the Draft FRSP, the City acknowledged potential inconsistencies of the Project with hillside protection policies prohibiting development above 150-foot elevation line within the Irish Hills, requiring a General Plan amendment as part of the Project to accommodate the proposed Upper Terrace and Madonna Froom Ranch development that would intrude into the hillsides onsite. In the interest of Project review and decision-making, the City requested the Applicant develop an "Actionable Alternative" involving a land use configuration that would meet the Project objectives but could be approved under the existing City policy framework without substantial amendments. Alternative 1 was directly influenced by the Applicant's work on the Actionable Alternative, which proposes to relocate development downhill and increased density within the Lower Area. This alternative is analyzed in project-level of detail compared to the Project to facilitate flexibility in City decision-making and action.

Alternative 1 would include a major reconfiguration of the proposed land use plan and redesign of key Project elements specifically to cluster proposed land uses into a smaller development footprint, thereby reducing environmental impacts identified in the EIR. Alternative 1 represents an alternative largely designed by the Project Applicant (see Appendix C for a conceptual design plan that informed this alternative analysis) with three

key changes to respond to the EIR's impact analysis for the Project, as discussed further below. This alternative is analyzed at a high level of detail to allow City adoption of this alternative (if selected).

Alternative 1 would include three primary features that differ from the Project to substantially reduce identified Project impacts:

1) Consistent with the 2014 General Plan LUE, all new urban development would occur below the 150-foot elevation line. All residential land uses under Alternative 1 would be relocated to areas within the Project site that are below the 150-foot elevation line and all development within the Upper Terrace would be removed. The only development that would occur above the 150-foot elevation line would be the proposed public park containing the same four Froom Ranch Dairy structures proposed to be retained by the proposed Project. This would restrict development to roughly 30 percent of the site;

2) Development would be clustered within the Lower Area of Villaggio and Madonna Froom Ranch. Overall building density in developed areas of the site would increase to accommodate the same capacity for development as the Project but within a smaller area. Maximum heights of some buildings would increase by approximately one story.

    a. The Lower Area would remain designated R-3-SP, but development of buildings within the Lower Area would be reconfigured and some building heights and sizes would increase by one story, including the Villaggio Commons buildings and the proposed tower.

    b. Residential areas within Madonna Froom Ranch would be designated R-4-SP and maximum residential density would increase to 24 units per acre from 20 units per acre under the Project;

3) Emergency access would be provided via three different connections: 1) from the Irish Hills Plaza into Madonna Froom Ranch; 2) from LOVR to the Lower Area of Villaggio; and 3) from Calle Joaquin to the Lower Area of Villaggio through the proposed stormwater detention basin area.

Required discretionary actions would be similar to the proposed Project:

- General Plan Amendment and Pre-zoning. Similar to the Project, Alternative 1 would exceed a maximum of 350 units as identified in Section 8.1.5 of the General

Plan LUE, which would require a General Plan amendment to LUE SP-3 performance standards to ensure consistency with the Specific Plan. Because the site is currently unincorporated, it would also need to be pre-zoned based on the approved Project before annexation to the City could be approved (see Table 5-1). Since Alternative 1 would only include a public park within the existing permitted quarry area developed above the 150-foot elevation, including retention of rural ranch buildings from the Froom Ranch Dairy complex, and would not involve urban development above the 150-foot elevation line, this alternative would not require a General Plan amendment to address hillside policy inconsistency related to grading, visual resources, biological and cultural resources, and hydrology associated with the Project. Specific amendments to the General Plan include:

  - Amend LUE Section 8.1.5 – Performance Standards to allow a Life Plan Community senior housing land use, including health, support, and recreational amenities, and up to 404 senior housing residential units with 51 beds in health care facilities within the Specific Plan area.

- FRSP Adoption. The General Plan LUE identifies Froom Ranch as a Specific Plan area (SP-3, Madonna on LOVR) that requires the adoption of a Specific Plan prior to any development. The proposed Project would require adoption by the City prior to implementation, including Planning Commission and City Council discretionary review proceedings.
- Vesting Tentative Tract Map (VTTM). The Project would require a vesting tentative tract map (VTTM) to implement the provisions of the adopted Specific Plan. The VTTM establishes the proposed lot lines to allow individual ownership of properties and to layout the required infrastructure, water supply assessment, and utilities.
- Architectural Review and Planning Commission Approval. Final architectural review of housing, commercial buildings, and some site facilities by the City's Architectural Review Commission would be required, with a recommendation provided to the final action hearing body.
- Annexation. If the Project is approved, the City would initiate the annexation process with the San Luis Obispo County Local Agency Formation Commission (LAFCO). Annexation would depend on the City's ability to address any key issues raised by LAFCO, such as the ability to provide public services to the site (e.g., water, wastewater treatment, solid waste collection and disposal, and fire and police services) and the nature of a tax-sharing arrangement with the County.

Responsible and trustee agency permit requirements would remain similar to the Project and regulatory permits would be required from the California Department of Transportation (Caltrans), U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CFDW), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries), Federal Emergency Management Agency (FEMA), and SLO County APCD (refer to Section 2.5, *Required Approvals*).

Land Use Plan and Site Design

The land use plan under Alternative 1 would substantially reduce the area of disturbance and development compared to the Project, including limiting residential and commercial land uses to areas of the site below the 150-foot elevation line (see Figure 5-1). Overall developed area would decrease by 8.2 acres as compared to the Project, and more than 6.1 additional acres within the Upper Terrace area would remain as open space, substantially reducing direct and indirect disturbance of habitats and natural resources in this area. Similar to the Project, Alternative 1 would allow for the development of up to 174 multi-family units, 404 independent and assisted senior villas and townhomes, and 51 beds in residential health care facilities. These residential uses would be located within medium-high and high-density residential zones, with 100,000 sf of commercial uses within retail-commercial zones (Table 5-1).

Table 5-1. Summary of Alternative 1 Zoning and Land Uses

Proposed Zones	Acreage	Housing Units/ sf
VILLAGGIO		
R-3-SP Medium-High Density Residential	**23.5**	**404 units/ 51 beds**
Independent Living Units		*366 units*
Assisted Living Units		*38 units*
Health Care Units (Skilled Nursing & Memory Care)		*51 beds*
Health Care Administration Building		*85,670 sf*
Ancillary Uses (wellness center, restaurants, theater, etc.)		*76,509 sf*
MADONNA FROOM RANCH		
R-4-SP High Density Residential	**7.4**	**174 multi-family units**
C-R-SP Retail-Commercial	**3.1**	**100,000 sf**
Hotel with Restaurant		*70,000 sf*
Other Commercial		*30,000 sf*
PF-SP Public Facilities	**3.3**	**--**
ADDITIONAL USES		
C/OS-SP Conservation/ Open Space	**66.8**	**--**
Designated Open Space	*59.7*	**--**
Reconfigured Agricultural Easement	*7.1*	**--**
Roadways	**5.6**	**--**
TOTAL	**109.7**	**578 units/51 beds[1] 100,000 sf commercial**

[1] Total exceeds Maximum 350 units as allowed in Section 8.1.5 of the General Plan LUE due to transition of allowed commercial land uses to residential land uses. This total assumes all units planned within residential land uses.

Similar to the Project, Alternative 1 would include adoption of specific zoning standards to govern development within the Specific Plan area. Modified development standards for residential uses from the City's Municipal Code would apply to the Specific Plan area (Table 5-2).

Table 5-2. Proposed Development Standards for Residential Zones

Standard	R-3-SP	R-4-SP
Maximum Density (units/acre)	20 du/ac	24 du/ac
Maximum Building Coverage	60%	60%
Maximum Building Height[1,2,3]	55 feet for Villaggio only	35 feet
Minimum Street Yard Setback[4]	15 feet	15 feet
Minimum Other Yard Setback[4]	0-5 feet	0-5 feet
Minimum Lot Size[5]	1,000 sf	1,000 sf
Minimum Lot Width[5]	20 feet	20 feet
Minimum Lot Depth[5]	50 feet	50 feet

[1] Building heights are measured from finished grades established at the time of completion of subdivision grading.
[3] Components of solar energy systems, towers, and mechanical equipment screening may extend up to 10 feet above the maximum building height.
[4] Yard setbacks do not apply to development in Villaggio as all development is located along private streets.
[5] Lot area and dimensions standards do not apply to Villaggio as individual lots for housing units are not proposed.

Villaggio Development

Alternative 1 would continue to provide a Life Plan Community in Villaggio, designated within 23.4 acres of R-3-SP located entirely within the lower portion of the site. Alternative 1 development standards would only differ from the Project related to maximum building heights, where maximum building height within Villaggio would increase from 45 feet to 55 feet to accommodate higher density development within the Lower Area. This would result in changes to building configurations in proposed structures surrounding the Commons where additional Piazza Apartments and Community Village Suite Apartments would be provided (see Appendix C). Clustered development and taller buildings in the central Community Village area of Villaggio, including the proposed apartment buildings in the Commons, would accommodate more units compared to the Project in this area. Similar to the Project, Villaggio would provide planned residential use with independent living units and specialized residential facilities for assisted living, skilled nursing, and memory care (Table 5-3).

Table 5-3. Types of Senior Housing within Villaggio

Type of Senior Housing	Units	Size (sf)
Independent Living Units	366 units	700-2,000 sf
Piazza Apartments	*180 units*	700-1,900 sf
Village Suites	*85 units*	700-1,900 sf
Garden Terraces	*60 units*	1,300-1,800 sf
Villas	*41 units*	1,700-2,000 sf
Assisted Living Units[1]	38 units	310-620 sf

[1] Assisted Living Units are assumed to be single occupancy.

Independent living units would vary in size, as follows:

- Piazza Apartments and Village Suites – 265 total units within the upper floors of three- to four-story multi-use buildings up to 55 feet in height;
- Garden Terraces – two- to three-story apartment buildings, containing a total of 60 two-bedroom units; and
- Villas – 41 detached one-story single-family homes with two bedrooms, up to 20 feet in height.

Similar to the Project, residential land uses would extend to the southwest portion of the Project site and would be proximate (i.e., within 50 feet) to the confluence of Drainages, 1, 2 and 3 with Froom Creek, but would not extend to the Upper Terrace. Alternative 1 would replace two Garden Terrace apartment buildings along the western bank of Froom Creek with Piazza Apartment development and would include additional Villas accessed via cul-de-sac at the base of Drainages 1, 2, and 3 to accommodate more units within the designated residential area.

Like the Project, Alternative 1 proposes non-residential development to serve future Villaggio residents, including health care facilities, ancillary restaurant and recreational uses, and other private amenities. These uses are proposed to serve onsite residents, guests, and staff only, and would not be open to the public or residents of Madonna Froom Ranch. Non-residential development within Villaggio would include:

- Health Care Administration Building – A three-story 85,670-sf building within the lower terrace near the Villaggio entrance gate. This building includes the assisted living units, memory care, and skilled nursing beds where residents require 24-hour care and supervision.
- Wellness Center – A 17,720-sf wellness center located within the lower terrace would provide recreational facilities, including an outdoor swimming pool, restrooms, lockers, yoga area, exercise equipment, and physical therapy services.

- The Commons – A four-story mixed-use building, known as "The Commons", would serve as the community center and include ground floor resident-serving uses, such as restaurants, craft areas, workshops, recreation rooms, and a movie theater.
- Assembly Room – A 5,688-sf room would accommodate a variety of functions and gatherings.
- Tower – A 60-foot-tall tower is proposed that would include a library on the first floor, a total of four guestrooms on the second and third floors, and an observation deck on the fourth floor.
- Security Gatehouse – An approximately 250-sf security gatehouse structure would be located at the main entrance to Villaggio to control access and entry of residents, and provide directions, parking passes, etc. for visitors, employees, and deliveries.

Madonna Froom Ranch Development

Madonna Froom Ranch would continue to provide multi-family housing and retail commercial uses similar to the Project within 7.4 acres of High Density Residential (R-4-SP) and 3.1 acres of Retail Commercial/General Commercial (C-R-SP) designated areas. All proposed development standards for R-4-SP would remain the same as the Project; however, the proposed density of the residential areas would increase slightly from a maximum of 20 units per acre under the Project to 24 units per acre under Alternative 1. This change would accommodate the same number of residential units as the Project within a smaller development footprint and cluster the residential development within areas below the 150-foot elevation line. As a result of the reconfigured residential land uses, a portion of the multi-family homes would be relocated eastward to lower elevations within Madonna Froom Ranch, away from the habitats and wildfire hazards of the Irish Hills.

Under Alternative 1, the trailhead park would be provided within 3.3 acres of Public Facilities (PF-SP) designated area and would be relocated above the 150-foot elevation line in the northwest corner of the Project site adjacent to the Irish Hills Natural Reserve. This would increase the size of the public park by approximately 0.4 acre. Alternative 1 would include the same commercial uses as the Project located in the northeast portion of the Specific Plan area, including a three-story, 70,000-sf hotel up to 45 feet in height with ground floor retail and restaurant uses and 30,000 sf of retail and office uses within a one-story building up to 24 feet in height.

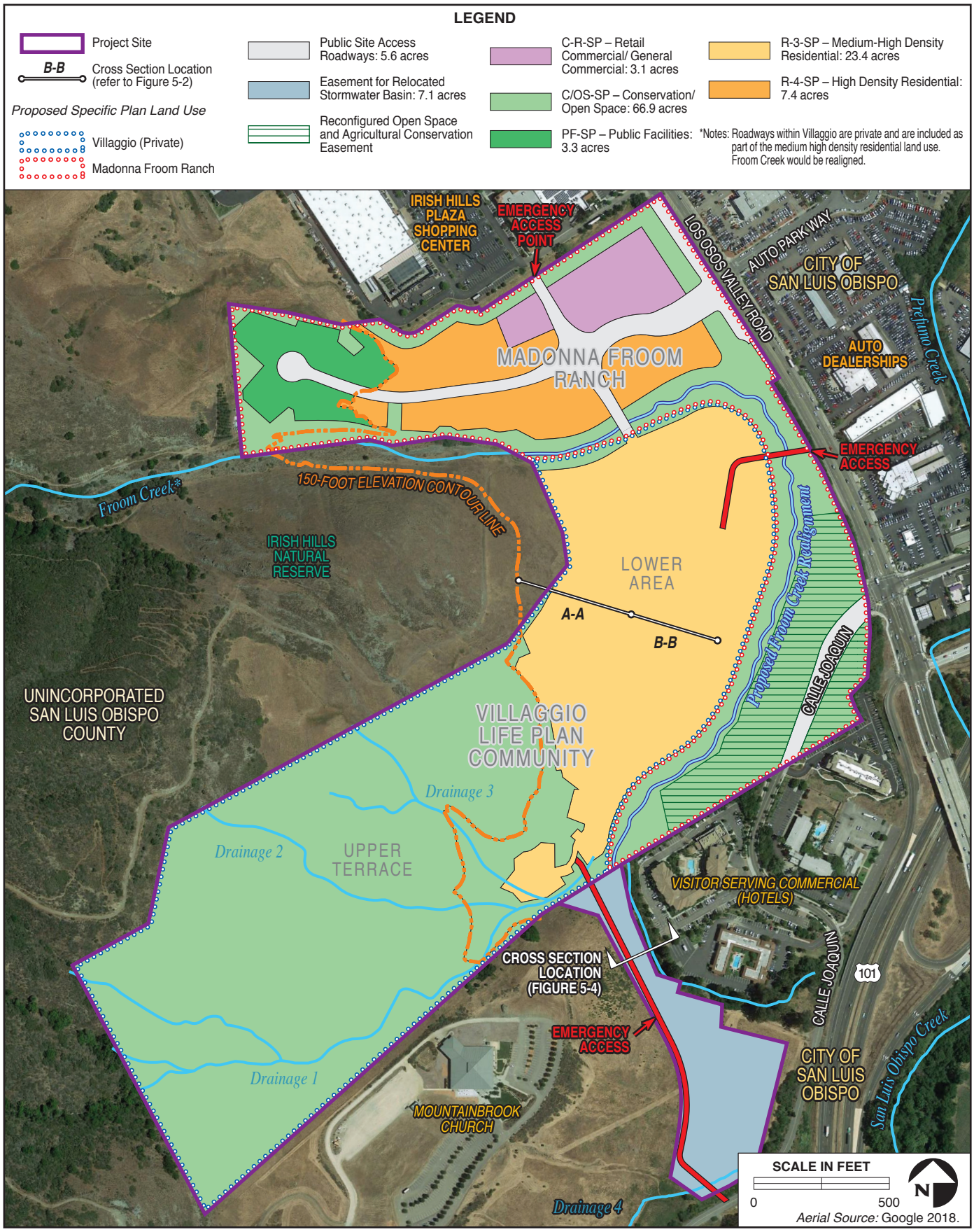
The reconfigurations included in Alternative 1 would ensure the land use plan better aligns with the policies of the City's General Plan regarding development above the 150-foot elevation contour and natural resource protection. The land use plan for Alternative 1 would reserve 66 percent of the Specific Plan area (66.9 acres) in Conservation/Open Space

(C/OS-SP), which would be consistent with the City General Plan performance standard of providing a minimum of 50 percent of the Specific Plan area as Open Space/Agriculture (LUE Section 8.1.5. SP-3, Madonna on LOVR Specific Plan area). Alternative 1 would also comply with the General Plan LUE 150-foot elevation development limit line within the Irish Hills Hillside Planning Area, specifically, Subsection 6.4.7.H of the LUE (see also, Section 3.9, *Land Use and Planning*).

Alternative 1 would be similar to the Project in many ways but would represent a substantially more clustered approach to site design, with development restricted to approximately 30 percent of the site (34 acres) in the lower portions of the site. Alternative 1 would reduce overall residential acreage by 8.2 acres while increasing open space by 7.9 acres and public park acreage by 0.4 acres. Increased clustering under Alternative 1 would require substantial changes in the Villaggio design when compared to the Project, including changes to building locations and footprints, increases in maximum residential building heights by one floor (i.e., 10 feet), and an increase in the proposed tower height by five feet (refer to Table 5-4). Most significantly, all development would be removed from the Upper Terrace and nearly 50 acres of land in this area would be retained as contiguous, permanent open space within Villaggio adjacent to the Irish Hills Natural Reserve. These changes would substantially increase contiguous open space and result in improved ecologic and hydrologic connectivity within the Project site compared to the Project.

Site Design Features

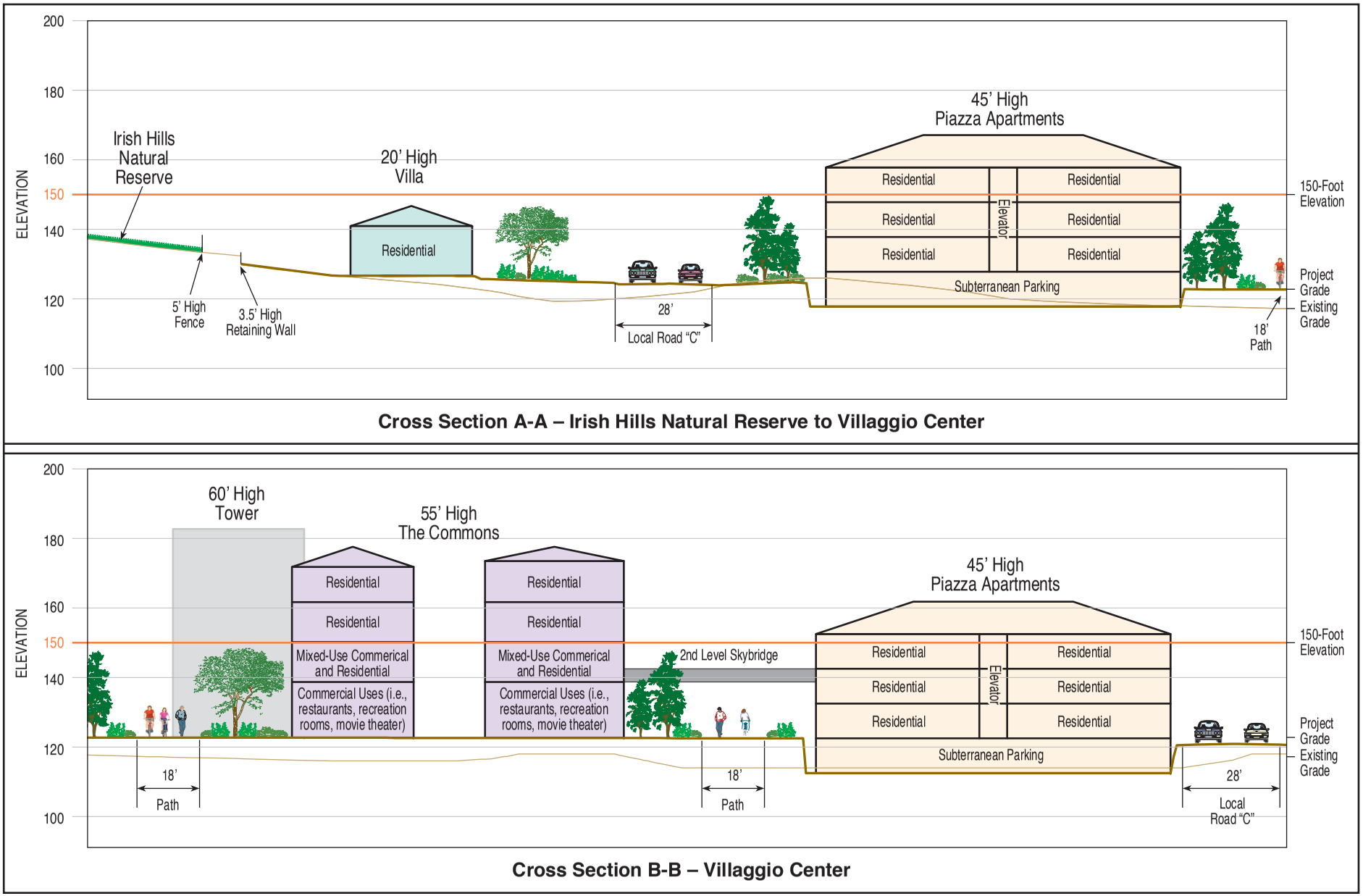
Froom Creek would be realigned and restored similar to the Project and stormwater management would be provided similar to the Project; see Section 2.5.4, *Stormwater Management System and Froom Creek Realignment*. Froom Creek would be realigned to along the eastern edge of development and a public trail along the realigned Froom Creek would be developed, similar to the Project. Additionally, the LOVR ditch would be reconstructed and revegetated similar to the Project and would experience the same reconfiguration to accommodate widening of LOVR. However, due to the reduction in developed area, fewer onsite retention and treatment features would be required, including one stormwater treatment area, one linear water quality treatment area, and four headwall and pipe culverts that would no longer be required in the Upper Terrace.



wood.

Alternative 1 Land Use Plan

FIGURE 5-1



wood.

Alternative 1 –
Villaggio Life Plan Community Conceptual Cross Sections
(refer to Figure 5-1 for cross section locations)

FIGURE 5-2

As with the proposed Project, at least two major retaining walls would be required under Alternative 1. An approximately 300-foot-long retaining wall would be constructed along the border of the Irish Hills Natural Reserve and northwestern area of Villaggio adjacent to proposed Villa units (refer to Cross Section A-A on Figure 2-6 within Chapter 2, *Project Description*). Another 75-foot-long retaining wall would be located near the historic dairy barn in Madonna Froom Ranch to support the eastern corner of the building if it is retained in its current location in the final design of the public park. These walls would vary from 3 feet to 8 feet in height but would be limited to a maximum exposed above ground height of 8 feet.

Similar to the proposed Project, Alternative 1 would include five-foot-tall security fencing to enclose Villaggio and adjacent to the residential areas within Madonna Froom Ranch. Villaggio would be a gated community with keyed access points for residents to access the Irish Hills Natural Reserve public trail system and the proposed public trail along the realigned Froom Creek. In addition to Villaggio security fencing, five-foot-tall wildlife-compatible agricultural fencing would surround the Specific Plan area and would be designed to allow for animal passage to open space areas, water sources, and wildlife corridors within the site.

In summary, Alternative 1 would differ from the Project in several ways, including a reconfigured residential land use plan, but would retain the basic features of the Project to provide a senior living community and multi-family neighborhood, as detailed in Table 5-4.

Circulation and Site Access

Circulation within Alternative 1 would involve public roadways within Madonna Froom Ranch and private roadways in Villaggio similar to the Project; however, the road system would be substantially reduced in length compared to the Project due the clustered development of Alternative 1. Similar to the Project, Alternative 1 would have a primary entrance from LOVR at Auto Park Way. Private access roads within Villaggio would only serve Villaggio and no roads would extend to the Upper Terrace above the 150-foot elevation line. Public roadways would lead to the public park at the northwestern corner of the site (above the 150-foot elevation) and the private gated entrance to Villaggio. Major components of the Alternative 1 circulation system are similar to the Project and are summarized below:

Table 5-4. Comparison of Alternative 1 to the Proposed Project

Item	Project	Alternative 1	Alternative 1 Difference
Froom Creek			
Froom Creek Realignment	Realigned	Realigned	None
Emergency access road through proposed stormwater detention basin area.	No emergency access road in proposed stormwater detention basin area.	20-foot-wide emergency access road along west edge of proposed stormwater detention basin area.	Emergency access road would replace the Project's proposed emergency access road through Mountainbrook Church. Drainage crossings would be required for Drainage 1 and Drainage 4.
Residential Uses			
Residential: Acreage	39.1 acres	30.9 acres	-8.2 acres
Residential: Units	578 units/51 beds	578 units/51 beds	None
Mix of Units	534 R-3-SP units 44 R-4-SP units	404 R-3-SP units 174 R-4-SP units	-130 R-3-SP units +130 R-4-SP units
Retail Commercial Uses			
Acreage	3.1 acres	3.1 acres	None
Maximum Square Footage	100,000 sf	100,000 sf	None
Potential Uses	Hotel, restaurants, and other commercial	Hotel, restaurants, and other commercial	None
Open Space & Parks			
Open Space: Acreage	59.0 acres	66.9 acres	+7.9 acres
Parks: Acreage	2.9 acres	3.3 acres	+0.4 acres
Parks: Number	1 trailhead Park	1 trailhead Park	None
Building Heights			
Maximum Height	Residential: 20' to 45' (1 to 3 stories) Tower: 55'	Residential: 20' to 55' (1 to 4 stories) Tower: 60'	+10' (1 story) residential buildings +5' tower

1) A proposed signalized intersection with LOVR and the proposed main entrance to serve as the primary access to the Specific Plan area;
2) Widening of LOVR along a portion of the Project site's frontage;
3) Proposed internal roadway network consisting of public and private roads;
4) Proposed bicycle and pedestrian facilities throughout the Specific Plan area;
5) Parking facilities to accommodate residents, employees, and visitors within the Specific Plan area; and
6) A new bus stop that would be integrated into the regional public transportation system.

Major circulation improvements under Alternative 1 within Madonna Froom Ranch and the lower portion of Villaggio would be the same as under the proposed Project. As with the Project, primary access to the Specific Plan area under Alternative 1 would be via a new two-lane road Commercial Collector "A", which would intersect with LOVR at Auto

Park Way and would be located approximately 1,000 feet south of the intersection of Froom Ranch Way with LOVR. The intersection would be signalized and would provide four-way pedestrian crosswalks.

Alternative 1 would include improvements to an 813-foot-long segment of LOVR along the northeastern boundary of the Specific Plan area at the proposed intersection of Commercial Collector "A" and LOVR. LOVR would be widened along this segment by about 35 feet into the Specific Plan area to accommodate new left and right turn lanes into the Project site (Figure 2-9). Alternative 1 would also include restriping the existing travel lanes, Class II bicycle lanes, and center median along this segment and a new sidewalk and parkway would be installed along approximately 550 feet of the west side of LOVR to connect to the Project site entrance (see Figure 2-10 in Chapter 2, *Project Description*). Bicycle racks would continue to be provided at the proposed retail commercial zone and the trailhead park within Madonna Froom Ranch.

Similar to the Project, all roadways within Madonna Froom Ranch would be open to the public and accessible by motorists, bicyclists, and pedestrians from LOVR. Similar to the Project, Alternative 1 would also include two public Commercial Collector roadways, "A" and "B". Commercial Collector "A" would connect LOVR to residential and commercial areas within Madonna Froom Ranch. Commercial Collector "B" would connect to the main entrance to Villaggio and terminate at the Project site's boundary to the north to only allow pedestrian, bicycle, and emergency access to Irish Hills Plaza. Local Road "A" would be a public roadway that extends to residential areas within Madonna Froom Ranch and to the proposed trailhead park. Proposed Class II striped bicycle lanes would be included along Commercial Collector "A" and Class III bicycle routes would be provided along Commercial Collector "B" and Local Road "A" to connect the public park and residential areas within Madonna Froom Ranch. All roads in Madonna Froom Ranch would have sidewalks, similar to the Project (see Figure 2-11 in Chapter 2, *Project Description*).

As with the Project, all roadways within Villaggio would be private roads. Similar to the Project, Alternative 1 would include Local Roads "B" and "C" as private roads within Villaggio (see Figure 2-11 in Chapter 2, *Project Description*). Local Road "B" would serve as the primary ingress/egress to Villaggio from Commercial Collector "B" to the Villaggio entrance gate. Local Road "C" would provide private access throughout Villaggio and would not provide sidewalks; however, a network of private walking trails separated from vehicle roadways would be provided for Villaggio residents similar to the Project (see Figure 2-12 in Chapter 2, *Project Description*).

Alternative 1 would include the proposed Froom Creek Trail that would be accessible from Madonna Froom Ranch, Villaggio, and the existing Irish Hills Natural Reserve trails system. The proposed Froom Creek Trail would be a 6-foot-wide, decomposed granite (or other stabilized natural surface) public pedestrian trail along the north bank of the realigned Froom Creek. Under Alternative 1, the public trail would terminate at a wetlands viewing area adjacent to a Villaggio gated access point similar to the Project, but would provide an additional connection through to the proposed emergency access road in the proposed stormwater detention basin area. This additional connection would give pedestrians the opportunity to reach the public trail and its connections to the Irish Hills Natural Reserve and proposed public park, as well as Irish Hills Plaza, from Calle Joaquin, including the adjacent hotel properties. In contrast to the Project, under Alternative 1, the trailhead park would be located at the highest elevation on the Madonna Froom Ranch side of the site, immediately adjacent to the Irish Hills Natural Reserve, providing complementary amenities and direct access to this existing City open space.

Parking would be similar to the proposed Project and provided in accordance with City development standards consistent with the requirements of Chapter 17.16 of the City Municipal Code. Parking in Madonna Froom Ranch residential and commercial areas would be provided via surface parking lots while parking in Villaggio would be a combination of surface parking lots and subterranean parking garages. A public surface lot would be located within the trailhead park, as under the Project.

Similar to the Project, a single new bus stop is proposed at the site's main entrance at Auto Park Way. Refer to Section 3.13, *Transportation and Traffic,* for a more complete description of transit operations.

Emergency Access

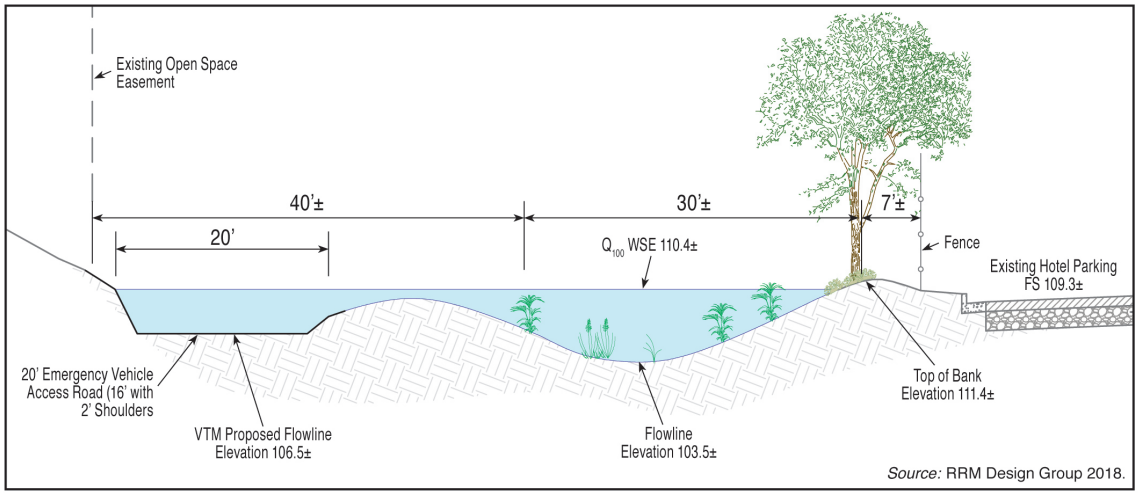
Emergency access to Mountainbrook Church would not be part of Alternative 1. Rather, emergency access would be provided via three different connections:

1. From the Irish Hills Plaza into Madonna Froom Ranch. A paved, level connection between Madonna Froom Ranch and Irish Hills Plaza would be provided near the end of Commercial Collector "B" and controlled with removable bollards that would be opened under emergency conditions, such as wildfire evacuation. This would require an easement from Irish Hills Plaza owners.

2. From LOVR to Villaggio. Another emergency access point would be provided via construction of a new free span bridge and access road across the realigned Froom

Creek channel to connect LOVR with Villaggio. This bridge and access road would be located roughly 800 feet east of the primary project entrance at Auto Park Way.

3. From Calle Joaquin to Villaggio through the proposed stormwater detention basin area. Because the two emergency access routes described above would funnel all evacuees onto LOVR and introduce challenges for ingress and egress of emergency responders, an additional 20-foot-wide paved emergency access road would be installed along the western edge of the proposed stormwater detention basin to connect Calle Joaquin to the Project site (see Figure 5-1); however, evacuees along this route would also ultimately funnel to LOVR further south and would connect to U.S. 101. This alternate emergency access road is included in Alternative 1 to replace the Project's proposed emergency access through Mountainbrook Church and would supplement the two emergency access points discussed above to ensure a southern access/evacuation route for Villaggio that connects with Calle Joaquin, similar to the Project (See Figures 5-1 and 5-3). Given that this road would be immediately adjacent to the proposed stormwater detention basin, during times of very high stormwater flows the road could be partially submerged. Given that this road is intended primarily for emergency access during the fire season (e.g., typically August-November), occasional submersions during periods of heavy rain appears consistent with its use as a fire evacuation or access route. Figure 5-3 presents a conceptual design, but final engineering design would account for City standards.



wood.

Emergency Access Road Cross Section

FIGURE 5-3

Onsite Historic Structures

Similar to the Project, Alternative 1 would include relocation of three structures contributing to the historic Froom Ranch Dairy complex, namely the creamery, the main residence, and the dairy barn, to the public park area; the fourth contributing structure, the granary, would remain in place within the park. These four structures would be rehabilitated and adaptively reused as part of the trailhead park, including interpretive signage/displays to document the history of Froom Ranch. The buildings would be relocated and reconstructed on graded terrain to maintain the historic configuration and proportional relationship of the buildings to each other. Similar to the Project, three contributing structures (shed/storage building, old barn, and bunkhouse) to the potential historic district would be demolished and removed from the site, and documented consistent with Secretary of Interior (SOI) standards.

Proposed Housing and Population

The proposed mix of housing types under Alternative 1 would be similar to the Project with slight modifications to the location/extent of residential zones and distribution of units within each zone; the allocation of units between different allowable densities and product types (e.g., Life Plan Community, multi-family units) would remain similar. Alternative 1 would alter the land use plan and incrementally adjust dwelling unit allocation, resulting in a reduction of 130 R-3-SP units to be replaced with an increase of 130 R-4-SP units, a net zero change (Table 5-5).

Similar to the Project, proposed housing components of Alternative 1 would include a mix of single-family or duplex units in Villaggio and higher density multi-family condominiums and apartments in both Madonna Froom Ranch and Villaggio. Residential uses would have a similar mix of housing densities and average lot sizes as proposed for the Project, with dispersed single-story Villas, two story Garden Terraces, and up to four-story buildings supporting Piazza Apartments and Community Village Apartment suites. Exact unit layout and design is not currently known (see Appendix C for Applicant's conceptual site plan that informed Alternative 1).

Table 5-5. Summary and Comparison of Housing and Population

Residential	Project		Alternative 1	
Housing Type	**Project Proposed Units**	**Estimated Population**	**Alternative 1 Proposed Units**	**Estimated Population[1]**
R-3-SP - Villaggio	404 units/51 beds	825 people	404 units/51 beds	825 people
R-3-SP – Madonna Froom Ranch[2]	130 units	303 people	-	-
R-4-SP -Madonna Froom Ranch[2]	44 units	103 people	174 units	406 people
TOTAL	**578 units/51 beds**	**1,231 people**	**578 units/51 beds**	**1,231 people**

[1] Population estimates are based on the number of units multiplied by the average number of persons per household Based on the 2050 Regional Growth Forecast, the City's average persons per household is 2.33 as of 2015 (SLOCOG 2017)

[2]Per City zoning, R-3 and R-4 units are expressed as density units. The number of actual dwelling units in the R-3 and R-4 zone may vary depending on the number of bedrooms.

Project Construction and Phasing

Similar to the Project, this EIR analysis assumes that Alternative 1 construction would occur over approximately five years between 2020 and 2024 although Alternative 1 would only require three phases (see Table 5-6).

- Phase 1 would involve construction activities including site preparation such as grading, realignment of Froom Creek, and installation of roadways, utility infrastructure, and trails.
- Phase 2 would include final grading and vertical development of Villaggio (to be located entirely in the lower portion of the site).
- Phase 3 would include final grading and vertical development of Madonna Froom Ranch, including extension of utilities and construction of residential and commercial buildings.

Each phase of Alternative 1 would follow a progression of stages similar to that proposed for the Project, as follows: construction design and permitting, site preparation and grading, construction, and final landscaping. Equipment anticipated for use during these stages would be similar to that of the Project. Alternative 1 would include a different assortment of construction activities within each construction phase, but it would follow a similar progression of development within the Project site. Each phase would be subject to permit review to ensure conformity with the approved FRSP, and consistency with applicable regulations. Each phase would identify the development activities to be performed during the phase and specify mitigation measures and best management practices (BMPs) that would apply.

Table 5-6 identifies which project component would occur within each phase.

Table 5-6. Alternative 1 Construction Phasing

Phase	Project Component	Year	Estimated Grading (cy)[1]
1	***Installation of Project Infrastructure and Stormwater Management System.*** • Rough grading for Madonna Froom Ranch and distribution of export material to Phase 2 (31,800 cy stockpiled onsite). • Realign Froom Creek and reconstruct creek corridor. • Install proposed stormwater detention basin with emergency access road and bridge between Villaggio and Calle Joaquin. • Widen LOVR and install frontage improvements along LOVR, including bicycle lanes, sidewalks, bus stop, and signalized intersection. • Install onsite public roads (Commercial Collectors "A" and "B" and associated bicycle lanes and sidewalks). • Install public utility connections along Commercial Collectors "A" and "B". • Construct crossing across Froom Creek from Commercial Collector "B". • Construct crossing across Froom Creek from Local Road "C" to LOVR for emergency access. • Modify Irish Hills Plaza drainage, including modifications to the vegetated channel prior to connection with the realigned Froom Creek. • Install stormwater management system, including removal of existing culverts and onsite stormwater detention basin. • Installation of Froom Creek Trail. • Begin site clearing of lower portion of Villaggio in preparation for Phase 2.	2020 - 2021	65,800 cut/ 34,000 fill
2	***Development of Villaggio.*** • Grading of the lower portion of the Villaggio site and import fill materials (158,000 cy import). • Install onsite private roads (Local Roads "B" and part of "C"). • Extend utility lines throughout Villaggio. • Construct water quality treatment areas within Phase 2. • Install fencing and pedestrian access gates. • Construct Villaggio residential uses. • Construct the Villaggio Health Administration Building. • Construct the Wellness Center. • Begin site clearing of Madonna Froom Ranch in preparation for Phase 3.	2020 - 2023	27,500 cut/ 185,000 fill

Table 5-6. Alternative 1 Construction Phasing (Continued)

Phase	Project Component	Year	Estimated Grading (cy)[1]
3	***Development of Madonna Froom Ranch.*** • Extend utility lines throughout Madonna Froom Ranch. • Construction of multi-family units within Madonna Froom Ranch. • Construct commercial retail buildings, including hotel, within Madonna Froom Ranch. • Construction of the public park.	2023-2024	0 cut/ 0 fill

[1] Grading estimates (cy) are approximate.

Analysis – Alternative 1 (Clustered Development Below the 150-Foot Elevation Alternative – Actionable Alternative)

The significance of each impact resulting from implementation of Alternative 1 has been determined based on impact significance criteria and applicable CEQA Guidelines for each impact topic (see Table 5-7).

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts

Impacts	Mitigation Measures	Residual Significance
3.1 Aesthetics and Visual Resources		
VIS-1. Alternative 1 implementation would change views of scenic resources, including hillsides, rock outcroppings, open space, and historic buildings, from a State Scenic Highway or local scenic roadway.	MM VIS-1	Less than Significant with Mitigation (Incrementally Less)
VIS-2. Alternative 1 would significantly impact the existing visual character of the site by changing a rural setting to a commercial and residential setting, particularly as viewed from the Irish Hills Natural Reserve trail system.	MM VIS-1	Less than Significant with Mitigation (Less)
VIS-3. Alternative 1 would introduce a major new source of nighttime light, impacting the quality of the nighttime sky and increasing ambient light.	None required	Less than Significant (Similar)
3.2 Agricultural Resources		
AG-1. Alternative 1 would convert onsite Farmland of Local Potential and prime soils if irrigated to non-agricultural uses.	None Required	Less than Significant (Similar)
AG-2. Implementation of Alternative 1 would create potential conflicts with existing agricultural zoning.	None Required	Less than Significant (Incrementally Less)
AG-3. Alternative 1 adjust the boundary of an existing open space and agricultural conservation easement to a location that would reduce the viability of agricultural operations within the recorded easement.	None Required	Less than Significant (Similar)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
3.3 Air Quality and Greenhouse Gas Emissions		
AQ-1. Alternative 1 would result in potentially significant construction-related emissions, including dust and air pollutant emissions.	MM AQ-1 MM AQ-2 MM AQ-3	Less than Significant with Mitigation (Incrementally Less)
AQ-2. Alternative 1 would result in potentially significant long-term operational emissions.	MM AQ-4	Significant and Unavoidable (Incrementally Less)
AQ-3. Release of toxic diesel emissions or naturally occurring asbestos during construction of Alternative 1 could expose sensitive receptors to emissions-related health risks.	None required	Less than Significant (Incrementally Less)
AQ-4. Alternative 1 would be consistent with the City's Climate Action Plan, but would result in potentially significant GHG emissions during construction and operation which would be inconsistent with other state and local goals for reducing GHG emissions.	MM AQ-4 MM AQ-5 MM AQ-6	Significant and Unavoidable (Incrementally Less)
AQ-5. Alternative 1 is potentially inconsistent with the SLO County APCD's Clean Air Plan.	MM AQ-2 MM TRANS-5 MM TRANS-8 MM TRANS-9 MM TRANS-10	Significant and Unavoidable (Similar)
3.4 Biological Resources		
BIO-1. Alternative 1 implementation would impact sensitive riparian, wetland, and native grassland habitats identified as sensitive natural communities under state and City policy.	MM BIO-1 MM BIO-2 MM BIO-3 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-7 MM BIO-8 MM BIO-Alt. 1 MM HAZ-2	Less than Significant with Mitigation (Less)
BIO-2. Alternative 1 implementation would have substantial direct and indirect adverse impacts on candidate, sensitive, or special-status species that are known to or may occur on the Project site.	MM BIO-1 MM BIO-9 MM BIO-10 MM BIO-11 MM BIO-12 MM HAZ-2	Less than Significant with Mitigation (Less)
BIO-3. Alternative 1 implementation would have a substantial adverse impact on state and federally protected wetlands.	MM BIO-1 MM BIO-2 MM BIO-4 MM BIO-5 MM BIO-6	Significant and Unavoidable (Less)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
	MM BIO-7 MM BIO-Alt. 1	
BIO-4. Alternative 1 construction and operation would have a substantial adverse impact on the movement of resident or migratory fish or wildlife species or resident and migratory wildlife corridors along Froom Creek, Drainages 1, 2, and 3 and across open grasslands on the Upper Terrace of the Project site.	MM BIO-1 MM BIO-2 MM BIO-3 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-9 MM BIO-11 MM BIO-12 MM BIO-14	Less than Significant with Mitigation (Less)
BIO-5. Alternative 1 construction would result in the potential disturbance, trimming, or removal of up to 75 mature trees.	MM BIO-15	Less than Significant with Mitigation (Incrementally Less)
3.5 Cultural and Tribal Resources		
CR-1. Alternative 1 grading and construction would occur within areas of prehistoric archaeological sensitivity with the potential to impact subsurface cultural or tribal cultural resources.	MM CR-1 MM CR-2 MM CR-3 MM CR-4 MM CR-5 MM CR-6 MM CR-7	Less than Significant with Mitigation (Incrementally Less)
CR-2. Future resident recreational activities could impact archaeological resources located within proposed open space.	MM CR-8	Less than Significant with Mitigation (Less)
CR-3. Alternative 1 would result in relocation, demolition, disturbance, and/or removal of historic resources onsite, including individually eligible historic resources and a historic district.	MM CR-9 MM CR-10 MM CR-11 MM CR-12 MM CR-13 MM CR-14	Significant and Unavoidable (Similar)
3.6 Geology and Soils		
GEO-1. Alternative 1 would expose people or structures to adverse effects from earthquakes and seismically induced hazards.	None required	Less than Significant (Similar)
GEO-2. Alternative 1 has the potential to exacerbate potential soils hazards, including expansive soils, differential settlement, and subsidence.	None required	Less than Significant (Similar)
GEO-3. Alternative 1 would potentially cause erosion, landslides, and rockfall.	None required	Less than Significant (Similar)
GEO-4. Alternative 1 would include subterranean parking in Villaggio and may require groundwater dewatering in areas with high groundwater.	None required	Less than Significant (Similar)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
GEO-5. Alternative 1 construction could uncover paleontological resources in geologic deposits during earthwork activities. If improperly handled, such resources could be adversely impacted.	MM GEO-1	Less than Significant with Mitigation (Similar)
3.7 Hazards, Hazardous Materials, and Wildfires		
HAZ-1. Alternative 1 would exacerbate wildfire risks by exposing occupants to wildfire hazards and impairing emergency response and would require wildfire fuel management in the Irish Hills Natural Reserve.	MM HAZ-1 MM HAZ-2 MM HAZ-3 MM HAZ-4 MM HAZ-5	Significant and Unavoidable (Less)
HAZ-2. Alternative 1 would potentially expose persons to toxic, hazardous, or otherwise harmful chemicals through accidental conditions involving the release of hazardous materials into the environment.	None required	Less than Significant (Similar)
HAZ-3. Alternative 1 site is located within the ALUP Safety Areas and would potentially result in an airport-related safety hazard for people residing or working in the Project site.	None required	Less than Significant (Similar)
3.8 Hydrology and Water Quality		
HYD-1. Alternative 1 construction activities would result in impacts to water quality due to polluted runoff and increased erosion or siltation.	MM HYD-1 MM HYD-2 MM HYD-3	Less than Significant with Mitigation (Less)
HYD-2. Alternative 1 would potentially exacerbate flooding and erosion hazards onsite and in areas downstream, particularly related to the proposed alignment and design of Froom Creek and developed areas of the site.	MM HYD-4	Less than Significant with Mitigation (Similar)
HYD-3. Operation of Alternative 1 would potentially impact water quality of Froom Creek and San Luis Obispo Creek due to polluted urban runoff and sedimentation.	None required	Less than Significant (Similar)
HYD-4. Alternative 1 would involve development of new impervious surfaces and potentially interfere with groundwater recharge.	None required	Less than Significant (Similar)
3.9 Land Use and Planning		
LU-1. Alternative 1 would allow urban development above the 150-foot elevation and would relocate portions of the Froom Ranch Dairy complex, which would potentially conflict with City General Plan policies adopted for the purpose of avoiding impacts to visual, biological, and cultural resources and wildfire hazards.	MM BIO-1 MM BIO-2 MM BIO-3 MM BIO-4 MM BIO-5 MM BIO-6 MM BIO-9 MM BIO-10 MM BIO-11	Significant and Unavoidable (Less)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
	MM BIO-12 MM BIO-13 MM BIO-14 MM CR-9 MM CR-10 MM CR-11 MM CR-12 MM CR-13 MM CR-14 MM HAZ-1 MM HAZ-2 MM HAZ-3 MM HAZ-4 MM HAZ-5	
LU-2. Alternative 1 would potentially be inconsistent with existing easements and setback requirements onsite.	None Required	Less than Significant (Incrementally Less)
3.10 Noise		
NO-1. Alternative 1 construction, including site grading and heavy truck trips, would generate noise levels that exceed thresholds established in the City's General Plan NE and Noise Guidebook with potential impacts to sensitive receptors.	MM NO-1 MM NO-2 MM NO-3	Less than Significant with Mitigation (Incrementally Less)
NO-2. Alternative 1 construction activities (e.g., excavation, transportation of heavy equipment) could result in exposure of sensitive receptors and buildings to excessive groundborne vibration.	None required	Less than Significant (Less)
NO-3. Long-term operational noise impacts would include higher roadway noise levels from increased vehicle traffic generated by Alternative 1, Alternative 1 operational noise, and exposure of future residents to high noise levels that could result in the exceedance of thresholds in the City's General Plan Noise Element and Noise Guidelines.	None Required	Less than Significant (Similar)
NO-4. Future residents and occupants of Alternative 1 could be exposed to periodic high noise levels from nearby commercial uses (e.g., delivery trucks, forklifts, backup alarms) that would exceed City thresholds for residential land uses.	MM NO-4	Less than Significant with Mitigation (Similar)
3.11 Population and Housing		
PH-1. Residential and commercial development associated with the Project would induce population growth.	None required	Less than Significant (Similar)
PH-2. Alternative 1 would provide additional housing for the City, assisting the jobs-to-housing ratio.	None required	Less than Significant (Similar)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
PH-3. The construction of affordable housing units under the Project would provide additional affordable housing for the City.	None required	Less than Significant (Similar)
3.12 Public Services and Recreation		
PS-1. Alternative 1 would increase demand on the SLOPD for police protection services.	None required	Less than Significant (Similar)
PS-2. Alternative 1 would increase the demand for SLOFD and CALFIRE fire protection services and create potential declines in firefighter-to- resident ratios, however would be located within the accepted response time performance area. Development of senior residential uses, which are associated with extraordinary calls for emergency medical service, would increase emergency calls for service beyond what the SLOFD anticipates being able to accommodate.	None required	Less than Significant (Similar)
PS-3. Alternative 1 would generate increases in enrollment at public schools (especially C.L. Elementary and Laguna Middle).	None required	Less than Significant (Similar)
PS-4. Alternative 1 would increase the demand for public parkland and neighborhood parks from increased residential population.	MM PS-1 MM PS-2	Less than Significant with Mitigation (Incrementally Less)
3.13 Transportation and Traffic		
TRANS-1. Alternative 1 construction activities would potentially create traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, equipment, etc.) as well as temporary traffic lane and sidewalk closures.	MM TRANS-1	Less than Significant with Mitigation (Incrementally Less)
TRANS-2. Under Existing plus Project conditions, the addition of Alternative 1 traffic would exacerbate existing queuing and peak hour traffic for automobiles, and poor levels of service for pedestrians and bicycle modes of transportation, causing transportation deficiencies in the Project vicinity.	MM AQ-6 MM TRANS-2 MM TRANS-3 MM TRANS-4 MM TRANS-5 MM TRANS-6 MM TRANS-7 MM TRANS-8 MM TRANS-9 MM TRANS-10 MM TRANS-11	Significant and Unavoidable (Similar)
TRANS-3. Under Near-Term plus Project (Scenario 2) conditions, the addition of Alternative 1 traffic would exacerbate existing queuing and peak hour traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation,	MM TRANS-2 MM TRANS-5 MM TRANS-6 MM TRANS-8 MM TRANS-9 MM TRANS-12	Significant and Unavoidable (Similar)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
causing transportation deficiencies in the Project vicinity.	MM TRANS-13 MM TRANS-14 MM TRANS-15 MM TRANS-16 MM TRANS-17 MM TRANS-18 MM TRANS-19 MM TRANS-20	
TRANS-4. Alternative 1 would result in traffic safety impacts and inadequate emergency access and evacuation options, resulting in potential for structural damage, injuries, or loss of life due to wildland fires or other emergency situations.	MM HAZ-4 MM TRANS-21 MM TRANS-22 MM TRANS-23	Less than Significant with Mitigation (Incrementally Less)
TRANS-5. Onsite circulation would result in safety impacts to pedestrian and bicycle access.	MM TRANS-24	Less than Significant with Mitigation (Incrementally Less)
TRANS-6. Under long-term Cumulative plus Project conditions, Alternative 1-generated traffic would result in a cumulatively considerable contribution to traffic for automobiles and poor levels of service for pedestrians and bike modes of transportation, causing transportation deficiencies in the Project vicinity.	MM TRANS-8 MM TRANS-9 MM TRANS-13 MM TRANS-25 MM TRANS-26 MM TRANS-27 MM TRANS-28 MM TRANS-29 MM TRANS-30	Less than Significant with Mitigation (Incrementally Less)
3.14 Utilities and Energy Conservation		
UT-1. Alternative 1 would require the expansion of utility infrastructure to serve new development, including water, sewer, natural gas, and electricity into the site; the construction of which could cause environmental effects.	MM AQ-1 MM BIO-1 MM CR-3 MM CR-4 MM CR-5 MM HAZ-1 MM HYD-1 MM HYD-2 MM NO-1 MM NO-2 MM NO-3 MM NO-4 MM TRANS-1 MM UT-1	Less than Significant with Mitigation (Less)
UT-2. Alternative 1-related increases in water use would increase demand for the City's potable water supply.	None required	Less than Significant (Similar)

Table 5-7. Alternative 1 Impacts, Mitigation Measures, and Residual Impacts (Continued)

Impacts	Mitigation Measures	Residual Significance
UT-3. Alternative 1-generated wastewater would contribute to demand for wastewater collection facilities and remaining available and planned capacity of the City's WRRF.	MM UT-2	Less than Significant with Mitigation (Similar)
UT-4. Alternative 1 would generate additional solid waste for disposal at the Cold Canyon Landfill.	None required	Less than Significant (Incrementally Less)
UT-5. Alternative 1 would result in an increase of energy consumption and requirement for additional energy resources.	None required	Less than Significant (Similar)
3.15 Mineral Resources		
MN-1. Alternative 1 implementation would result in the loss of the existing onsite red rock quarry (Froom Ranch Pit).	None required	Less than Significant (Similar)

Aesthetics and Visual Resources

Under Alternative 1, site design alterations would substantially reduce aesthetic impacts in comparison to the Project. Although total residential units and commercial square footage would remain the same, urban development would not occur above the 150-foot elevation line. Avoiding development of the Upper Terrace of Villaggio would reduce impacts to scenic resources, including natural habitats, historic resources, and rock outcroppings, that are visible to viewers in the surrounding area, including within the public trail system of the Irish Hills Natural Reserve. Further, relocation of the public park to the northwest corner of the Project site would relocate residential development to areas below the 150-foot elevation and reduce impacts to the scenic transition between adjacent natural habitats and residential development in the Madonna Froom Ranch.

Impact VIS-1 regarding impacts to scenic resources from a state scenic highway or local scenic roadway would be similar impacts under the Project. Unlike the Project, Alternative 1 would not include development within the Upper Terrace and scenic natural resources within this area, including serpentine rock outcroppings, woodlands, open grasslands and riparian habitat, would be preserved. Similar to the Project, impacts to views from the portion of U.S. 101 eligible for State Scenic Highway designation would not be significant, nor would impacts to viewers along Calle Joaquin (see KVA 1). Similar to the Project, views from LOVR would be substantially impacted, and increased building density and height under Alternative 1 would incrementally increase the severity of these impacts (see KVAs 2 and 3). However, implementation of MM VIS-1 would ensure that landscape

screening shields views of development as much as possible, and impacts would continue to be *less than significant with mitigation*.

Alternative 1 would eliminate development of the Upper Terrace portion of Villaggio, preserving open space within scenic vistas designated by the General Plan COSE. Photo source: hikespeak.com

Impact VIS-2, which addresses impacts to the visual character of the Project site, would be substantially reduced under Alternative 1 as compared to the Project. While residential buildings would be up to 10 feet taller under the Project, the overall aerial extent and level of development and associated changes in aesthetic character of the Project site would be less than under the Project. Under Alternative 1, the Upper Terrace of Villaggio would remain undeveloped and scenic undeveloped open grasslands, woodlands, and chaparral habitats adjacent to the Irish Hills Natural Reserve would remain intact. Alternative 1 would improve the visual transition between the Irish Hills Natural Reserve and residential development as compared to the Project by relocating the public park adjacent to the Irish Hills Natural Reserve and relocating residential uses eastward. By avoiding development above the 150-foot elevation line, Alternative 1 would preserve aesthetic resources and provide a more natural transition from rural to urban settings, particularly for viewers located above proposed development within the Irish Hills Natural Reserve (see Alternative KVAs 4 and 5). Including implementation of MM VIS-1, impacts under Alternative 1 would be substantially less than under the Project and would be *less than significant with mitigation*.

Impact VIS-3, associated with increased night lighting, would remain largely similar to the Project as the levels of lighting would be similar under this alternative. However, avoiding residential development within the Upper Terrace of Villaggio and northwestern portion of the Project site would reduce the overall development footprint and adverse impacts from nighttime lighting or glare, particularly adjacent to the Irish Hills Natural Reserve. Accordingly, as under the Project, impacts would be considered *less than significant* under Alternative 1.

Cumulative impacts on visual resources would be less than under the Project. Cumulative development is anticipated in the General Plan LUE and would be consistent with impacts associated with implementation of City General Plan policies. Alternative 1, in combination with approved, pending, and proposed development in San Luis Obispo, would contribute toward creating a transition from the rural environment along the City's perimeter to the urban environment. Consistent with long-term buildout under the General Plan, Alternative 1 and cumulative projects would be required to adhere to the design standards of the General Plan LUE and would be subject to discretionary review by the Planning Commission and/or City Council, as well as final design review by the Architectural Review Commission (with a recommendation to the final action hearing body). As identified in the LUCE Update EIR, all development that adheres to the General Plan LUE policies would result in less than significant impacts to aesthetic and visual resources. Unlike the Project, Alternative 1 would not include urban development above the 150-foot elevation line and would not be inconsistent with City policies designed to preserve scenic resources including Policy LUE 6.4, *Hillside Policies*. Additionally, this alternative would not include growth-inducing effects on adjacent parcels to create pressure for development above the 150-foot elevation. Therefore, the potential for cumulative impacts to aesthetic and visual resources would be less when compared to the Project and would be considered *less than significant with mitigation*.

KVA 1 – Project Compared to Alternative 1

***KVA 1**: Fleeting distant views of the Project site are available from U.S. 101. Under Alternative 1, the Upper Terrace would not be developed and direct views to the Irish Hills, including ridgelines, outcroppings, and natural vegetation, would be improved. Residential structures under this Alternative would be up to 10 feet taller than under the Project, but since the view from U.S. 101 is distant and channelized along Calle Joaquin, the increase in height is incremental and would not be noticed by viewers compared to the Project. Commercial development and street trees up to approximately 20 to 30 feet high, as well as telephone poles and wiring, would continue to impede views of the Project site.*

KVA 2 – Project Compared to Alternative 1

***KVA 2**: Under Alternative 1, multi-story development would eliminate most onsite scenic resources visible from this portion of LOVR, similar to the Project. Residential structures in Villaggio are not highly visible from this KVA, so even though these structures would be approximately 10 feet taller than under the Project, visual differences between building heights compared to the Project would be incremental with residential structures are set back from LOVR. As under the Project, dense willow riparian vegetation of 15 to 20 feet in height along most of the LOVR frontage that currently obscures views of the Project site would be removed. However, within the context of surrounding commercial development, this alternative would remain consistent in character, size, and scale of nearby development.*

KVA 3 – Project Compared to Alternative 1

Project

***KVA 3**: As under the Project, development of multi-story residential buildings would impede visibility of aesthetic resources, including hillsides of the Irish Hills Natural Reserve, from the LOVR Overpass. Residential buildings in Villaggio allowed under this alternative would be up to 10 feet taller than under the Project, although views from this KVA would only be incrementalally different given intervening distances. However, as no development would be permitted above the 150-foot elevation, views of the Irish Hills and associated scenic natural features would be maintained.*

Alternative 1

KVA 4 – Project Compared to Alternative 1

***KVA 4**: Under this alternative, the trailhead park would be developed in the northwestern portion of the site bordering the Irish Hills Natural Reserve within the existing quarry area, allowing for smoother visual transitions between proposed rural and urban land uses; although new development would be visible from this KVA within Madonna Froom Ranch in the mid-range view and Villaggio structures in the distant view, new structures would be clustered away from the Irish Hills Natural Reserve with other buildings along the eastern portion of the Project site. The foreground view of this KVA would contain park and open space with the relocated and rehabilitated Froom Ranch Dairy complex, which would also maintain a more historically accurate visual context for this historic resource.*

KVA 5 – Project Compared to Alternative 1

***KVA 5**: Impacts to visual and scenic resources from this KVA would be less than under the Project, as development of residential units within the Upper Terrace would be avoided, preserving views of natural habitats and other scenic resources in this area. While remaining multi-story buildings on the Project site would be up to 10 feet taller than under the Project, these changes would appear incremental from this KVA given intervening distances and adjacent urban land uses to the north and east.*

Agricultural Resources

Similar to the Project, development of Villaggio and Madonna Froom Ranch and associated urban infrastructure under this alternative would continue to result in permanent conversion of prime soils if irrigated to urban development, along with disruption of existing grazing activities on the site. Similar to the Project, development occurring under Alternative 1 would convert the majority of agricultural soils onsite, which are considered prime farmland if irrigated. Since the Upper Terrace of the Villaggio would not be developed, loss of grazing land and Farmland of Local Potential occurring above the 150-foot elevation would not occur under this alternative.

Impact AG-1, which addresses the development of land designated as Farmland of Local Potential to non-agricultural uses, would be similar under Alternative 1. As under the Project, this alternative would not result development of soils that are considered prime as no prime soils exist onsite. Therefore, impacts would remain *less than significant*.

Impact AG-2, addressing potential agricultural zoning conflicts, would be reduced under Alternative 1, although development of urban uses on agricultural land considered prime if irrigated would continue to occur. Unlike the Project, residential land uses would not be constructed in the Upper Terrace of Villaggio, thereby avoiding development on agricultural lands within this area. As under the Project, Alternative 1 would be planned for urban development with a Specific Plan (SP) land use designation under the General Plan LUE and the Project would be consistent with Policy 1.7.3, *Interim Uses*, where grazing uses would continue until urban development occurs under a Specific Plan. Therefore, similar to the Project, Impact AG-2 would be adverse, but *less than significant.*

Impact AG-3, associated with reduced viability of the existing agricultural easement within the Project site, would be similar to the Project, since the agricultural easement overlies areas within the Lower Area. However, realignment of the easement would support conservation of habitat and biological resources, particularly the protection of existing wetlands within this 1.6-acre portion east of Calle Joaquin, which is consistent with the easement's preservation intent. Thus, adjustment of the 7.1-acre easement would continue to meet the objectives and LAFCO requirements of the easement agreement and impacts, like the Project, are considered *less than significant*.

As under the Project, this alternative would contribute incrementally to the loss of agricultural land (Grazing Land and Farmland of Local Potential) to development within the City. However, this alternative would not contribute to the loss of Important Farmland.

Other cumulative development within the City that would result in the conversion of agricultural resources would be subject to Policy 1.9.2 in the LUE, Prime Agricultural Land, and Policy 8.6.3 in the COSE, Required Mitigation. Therefore, this alternative would not contribute to a cumulatively considerable loss of significant agricultural resources, and cumulative impacts would remain *less than significant.*

Air Quality and GHG Emissions

As under the Project, this alternative would use the same construction equipment, contain similar land uses, the same number of residential units, and would result in similar trip generation and air quality emissions. CalEEMod modeling for this alternative identifies impacts that would be slightly less compared to the Project (see Tables 5-8 through 5-12, below; also see Appendix D) largely due to the reduced area of disturbance required to construct the development by eliminating development above the 150-foot elevation on the site.

Impact AQ-1, which addresses construction emissions, would be similar to the Project. Alternative 1 would involve slightly more construction activities on site at the same time and increased import of fill, as excess material would no longer be available from onsite grading within the Upper Terrace of Villaggio. This would create a slightly higher maximum daily emissions level from air emissions; Alternative 1 is estimated to generate a maximum of 3.55 lbs/day more reactive organic gases (ROG) and nitrogen oxides (NO_x) compared to the Project, which is nominal, and daily maximum PM2.5 is estimated to decrease by 0.57 lbs/day compared to the Project. This impact would be similar to the Project and construction-related air quality impacts would still exceed the SLO County APCD's Tier 1 Quarterly thresholds for construction emissions of ROGs and NO_x (Table 5-8 and 5-9). As under the Project, required implementation of a Construction Activity Management Plan (CAMP) (MM AQ-1), use of low or no volatile organic compound-emission paint (MM AQ-2), and use of an offsite mitigation strategy (MM AQ-3), would bring DPM emissions below SLO County APCD Tier 2 and Tier 1 quarterly thresholds. Implementation of these mitigation measures would reduce construction-related air quality impacts to a less than significant level, consistent with SLO County APCD methodology. Therefore, residual impacts under this alternative would remain *less than significant with mitigation.*

Table 5-8. Maximum Short-term Construction Emissions (Unmitigated)

	ROG	NO_x	ROG + NOx	CO	SO_2	PM_{10}	DPM (Exhaust $PM_{2.5}$)
Overall Construction (Maximum Daily Emission)							
Peak Daily Emissions (lbs/day)	182.08	193.29	375.37	110.21	0.27	30.88	6.66
Peak Quarterly Emissions (tons/qtr)[1]	1.16	5.52	8.24[2]	3.17	<0.01	0.91	0.19
APCD Daily Thresholds (lbs/day)	--	--	137	--	--	--	7
APCD Quarterly Thresholds – Tier 1 (tons/qtr)	--	--	2.5	--	--	2.5	0.13
Above Threshold?	--	--	**YES**	--	--	NO	**YES**
APCD Quarterly Thresholds – Tier 2 (tons/qtr)	--	--	6.3	--	--	--	0.32
Above Threshold?	--	--	**YES**	--	--	NO	NO

[1] tons/qtr calculated based on maximum annual emissions divided by four (i.e., one quarter of a year).
[2] tons/qtr for ROG + NO_x emissions calculated in CalEEMod.
See Appendix D for CalEEMod worksheets.

Table 5-9. Maximum Short-term Construction Emissions (Mitigated)

	ROG	NO_x	ROG + NOx	CO	SO_2	PM_{10}	DPM (Exhaust $PM_{2.5}$)	CO_2e
Overall Construction (Maximum Daily Emission)								
(lbs/day)	60.71	122.86	183.57	129.39	0.27	19.24	4.36	27,336
(tons/qtr) includes Fugitive Dust[1]	0.42	3.49	5.09[2]	3.73	<0.01	0.52	0.13	698
APCD Daily Thresholds (lbs/day)	--	--	137	--	--	--	7	--
APCD Quarterly Thresholds – Tier 1 (tons/qtr)	--	--	2.5			2.5	0.13	--
Above Threshold?	--	--	**YES**	--	--	NO	NO	--
APCD Quarterly Thresholds – Tier 2 (tons/qtr)	--	--	6.3	--	--	--	0.32	--
Above Threshold?	--	--	NO	--	--	NO	NO	--

[1] tons/qtr calculated based on maximum annual emissions divided by four (i.e., one quarter of a year).
[2] tons/qtr for ROG + NO_x emissions calculated in CalEEMod.
See Appendix D for CalEEMod worksheets.

Impact AQ-2, addressing long-term impacts of operational air emissions, would be similar to the Project. This Alternative has the same number of residential units and commercial square footage, which would have similar trip generation, energy demand, and water demand as the Project. Therefore, operational-related air quality impacts from onsite energy use, water demand, and mobile emissions would be the same as the Project. Like the Project, while this alternative would not exceed annual emissions thresholds, projected maximum daily emissions would be above the established APCD daily thresholds for operational emissions of ROG + NO_x (see Table 5-10). Like the Project, implementation of MM AQ-4, which requires implementation of all feasible measures within Table 3-5 of the APCD CEQA Air Quality Handbook (see Table 3.3-9), would also apply to reduce adverse operational effects. However, many of the measures listed in MM AQ-4 do not include quantifiable air quality emissions reductions. As a result, the CalEEMod results for Alternative 1 demonstrate that Alternative 1 operational emissions would exceed SLOAPCD's maximum daily thresholds for ROG and NOx. Therefore, like the Project, long-term operational impacts would continue to be *significant and unavoidable*.

Impact AQ-3, addressing toxic air contaminants (TAC) or naturally occurring asbestos (NOA), would be less than under the Project. There are no existing sensitive receptors on the Project site or vicinity that would be exposed to significant Project construction emissions. Unlike the Project, no occupation of the site would occur concurrent with heavy-haul truck traffic, grading, and excavating, so the potential for exposure of residents to TAC from diesel emissions during construction would be substantially reduced or avoided. Further, areas within the Upper Terrace that potentially contain NOA would not be excavated under Alternative 1 and any soil-disturbing excavation would occur prior to occupancy of Villaggio or Madonna Froom Ranch. Similar to the Project, this alternative is outside of recommended buffer zones of sources of potential TAC, such as congested highways or intersections, and planned residential and commercial uses would not generate substantial amounts of TACs. Therefore, this alternative is not expected to expose sensitive receptors to substantial levels of TACs or NOA. Therefore, as under the Project, impacts would continue to be considered *less than significant*.

Table 5-10. Maximum Long-term Operational Emissions (Unmitigated)

	ROG	NO_x	ROG + NOx	CO	SO_2	PM_{10}	DPM (Exhaust PM_{10})	CO_2e
Overall Operational (Maximum Daily Emission)								
Area (lbs/day)	24.27	0.60	24.87	51.96	<0.01	0.29	0.29	96
Energy (lbs/day)	0.38	3.35	3.73	2.16	0.02	0.26	0.26	4,169
Mobile (lbs/day)	6.70	23.10	29.80	65.53	0.21	20.47	0.17	21,212
Total (lbs/day)	31.35	27.05	58.4	119.65	0.24	21.00	0.72	25,477
Threshold (lbs/day)	-	-	25	550	-	25	1.25	-
Significance?	-	-	**YES**	NO	-	NO	NO	-
Overall Operational (Annual Emission)								
Area (tons/year)	4.40	0.10	4.50	8.57	<0.01	0.05	0.05	14
Energy (tons/year)	0.07	0.61	0.68	0.39	<0.01	0.05	0.05	2,235
Mobile (tons/year)	1.05	3.99	5.04	11.06	0.03	3.35	0.03	3,129
Waste (tons/year)	-	-	-	-	-	-	-	253
Water (tons/year)	-	-	-	-	-	-	-	142
Total (tons/year)	5.52	4.7	10.22	20.02	0.05	3.45	0.13	5,773
Threshold (tons/year)	-	-	25	-	-	25	-	-
Significant?	-	-	NO	-	-	NO		-

Note: Values in this table are rounded for reporting purposes.
See Appendix D for CalEEMod worksheets.

Impact AQ-4, addressing global climate change from GHG emissions, would be similar to the Project. While Alternative 1 would substantially reduce the area of disturbance and onsite excavation and earthmoving, this alternative would need increased offsite import of fill, since excavation of the Upper Terrace would not occur and would not provide an onsite source of needed fill for Madonna Froom Ranch. These increased diesel haul truck trips would slightly increase construction-related GHG emissions based on CalEEMod estimates, by approximately 6.6 metric tons of carbon dioxide equivalent (MT CO2e) more than the Project's total GHG emissions, which is within the margin of error for such

projections. Construction activities under this alternative would generate an estimated 7,859 MT CO2e (see Tables 5-11 and 5-12). Amortized over a 25-year period (consistent with SLO County APCD methodology), construction of Alternative 1 would result in approximately 314 MT CO2e per year (MT CO2e/yr). Unmitigated operational GHG emissions generated by Alternative 1 would be approximately 5,773 MT CO2e. Combined with construction emissions amortized over a 25-year period (314 MT CO2e), total unmitigated GHG emissions would be approximately 6,087 MT CO2e. Similar to the Project, Alternative 1 would need to consider the goals of SB 32 and statewide goals for GHG reduction by 2030. With application of MM AQ-4 through -6 to include site-specific and communitywide GHG reduction strategies in the FRSP to attain as close to 0 MT CO2e/yr as feasible for stationary source emissions; however, mobile source emissions have potential to result in continued inconsistency with GHG reduction targets. Impact AQ-4 would remain significant and unavoidable.

Table 5-11. Estimated Construction GHG Emissions (Unmitigated)

Year	Annual Emissions MT CO_2e
2020	2,791
2021	1,560
2022	1,689
2023	1,020
2024	799
Total	**7,859**
Amortized over 25 years	***314***

Table 5-12. Estimated Operational GHG Emissions (Unmitigated)

Emission Source	Annual Emissions MT CO_2e
Area	14
Energy Use	2,235
Mobile	3,129
Water Use	253
Solid Waste	142
Total	5,773
Amortized Construction Emissions	*314*
Total Project GHG Emissions	**6,087**

Under Alternative 1, Impact AQ-5 would be similar to the Project with regards to potential inconsistencies with the Clean Air Plan. Population increases under Alternative 1 would be similar to the Project, as would total added average daily trips (ADT). As a result, similar to the Project, the rate of increase in population would continue to exceed the allowable rate of increase in vehicle trips and miles traveled, and would therefore remain inconsistent with the Clean Air Plan. As under the Project, Alternative 1 would install one new bus stop along southbound LOVR during Phase 1, ensuring transit services would be available in the Project vicinity prior to occupancy of the first unit. Despite implementation of MM AQ-2, MM TRANS-5, and MM TRANS-8 through -10 requiring reductions in Project VMTs, this alternative would remain inconsistent with the City's Clean Air Plan due to continued exceedance of population growth, vehicle trip, and VMT projections for the region. Similar to the Project, impacts would be *significant and unavoidable*.

Cumulative air quality impacts would be similar to the Project. This alternative would also result in significant and unavoidable long-term operational air quality impacts within an Air Basin that is in non-attainment and would, therefore, contribute to cumulatively considerable impacts to air quality emissions in the region. In addition, the LUCE Update Final EIR also determined that full buildout under the General Plan would be potentially inconsistent with the Clean Air Plan, and that cumulative impacts related to the increase in air quality emissions resulting from implementation of this alternative would be *significant and unavoidable*.

This alternative would contribute incrementally to GHG emissions regionally and statewide, but MM AQ-4 through MM AQ-6 would reduce construction and operational emissions to as close to 0 MT CO_2e/yr as feasible, consistent with SB 32 and emerging City regulation requiring net-zero GHG emissions by 2035. Therefore, this alternative would not contribute to a cumulatively considerable contribution of GHGs, and cumulative impacts would be *less than significant with mitigation,* similar to the Project.

Biological Resources

Under this alternative, biological resource impacts related to loss of wetland, riparian, and upland habitats and potential effects on sensitive, threatened, and endangered species would be substantially reduced compared to the Project. Residences and related infrastructure would not be constructed within the Upper Terrace of Villaggio, which would substantially reduce impacts to serpentine native bunchgrass grassland habitats and minimize impacts to springs, seeps, and wetland habitats along Drainages 1, 2, and 3, as well as associated impacts to 12 special status plant species in the Upper Terrace. Impacts

to wildlife movement and wildlife corridors would also be substantially reduced and consistency with the policies of the City General Plan would be substantially increased. In particular, consistency with LUE Policies 1.8.6, *Wildlife Habitats*, and 6.4.7, *Hillside Planning Areas*, and COSE Policies 7.3.1, *Protect Listed Species*, 7.3.2, *Protect Species of Local Concern*, 7.3.3, *Wildlife Habitat and Corridors,* and 7.7.7, *Preserve Ecotones,* would be improved.

Potential impacts to approximately 3.9 acres of native serpentine bunchgrass grassland habitat and associated special status plant species would be avoided under Alternative 1.

However, development in the southwest corner of the lower portion of Villaggio, consisting of up to 12 Villas along Froom Creek and within a cul-de-sac at the confluence of Drainages 1, 2 and 3 and adjacent to a large serpentine outcrop, would continue to impact sensitive biological resources and create potential inconsistencies with City General Plan policies. The residential cul-de-sac with Villas would be located immediately adjacent to wetlands along Drainages 1, 2, and 3 and potential special status plants on an adjacent serpentine rock outcrop. The development would also be located proximate to California bay woodland and may generate the need for fire buffer clearance within this woodland. Although reduced when compared to the Project, the Villas would continue to isolate the restored Froom Creek and sensitive natural communities such as the Calle Joaquin wetlands and LOVR ditch riparian habitat from high quality grassland and other habitats in the southern portion of the Project site above the 150-foot elevation line and the Irish Hills Natural Reserve. While these natural communities would continue to have a connection to the Irish Hills along the portion of the restored Froom Creek located between Villaggio and Madonna Froom Ranch, the broad existing ecotones with grasslands would be eliminated. While this alternative would substantially reduce impacts and improve consistency with City General Plan Polices, these units and associated infrastructure would continue to interrupt habitat continuity, wildlife habitat and corridors, and potentially impact special status plant species and thus would remain potentially inconsistent with the intent of multiple City General Plan policies, particularly COSE Policies 7.3.2, 7.3.3 and 7.7.7. Similar to the Project, this impact would require mitigation for targeted site redesign to reduce and/or avoid, as further described below.

Impact BIO-1, addressing construction impacts on sensitive riparian, wetland, and native grassland habitats, identified as sensitive natural communities under state and City policy, would be less severe than under the Project, as residential development above the 150-foot elevation would not occur, thereby preserving the highest-quality habitat within the site. Avoiding development in the Upper Terrace of Villaggio would preserve approximately 3.9 acres of native serpentine bunchgrass grassland habitat that would be impacted under the Project. This bunchgrass is a designated sensitive natural community considered biologically important by the California Department of Fish and Wildlife (CDFW). By avoiding development in the Upper Terrace of Villaggio, this alternative would reduce the perimeter length of residential development abutting open space by approximately 3,904 feet, equating to a 49 percent reduction of the wildland-urban interface. This would reduce habitat disturbance related to construction and maintenance of on- and offsite wildfire buffers by approximately 9.0 acres, including impacts to serpentine rock outcroppings and native serpentine bunchgrass grassland habitat.

Due to a reduced amount of development and required vegetation clearance for wildfire protection, 3.23 acres of coast live oak/California bay woodland habitat and 6.85 acres of coastal shrub/chaparral habitat would no longer be impacted. In addition, sensitive habitats within the Upper Terrace would not be subject to gradual degradation over time through trampling, landscape maintenance, introduction of non-native species, or other activities of new residents. Additionally, this alternative would not result in grading, vegetation clearance and management, or culvert-headwall installation along the majority of Drainages 1, 2, or 3, reducing Project impacts to creek, stream, and wetland habitat, as well as associated endangered species.

Impacts of Alternative 1 on riparian habitat areas would be similar to the Project. Permanent direct loss of 1.13 acres of riparian scrub would result from construction of the proposed stormwater detention basin, realignment of the Froom Creek corridor, widening of LOVR, and construction of a new Project entrance road. Similar to the Project, major changes to the hydrology of the Calle Joaquin wetlands could result in adverse effects to the long-term biological

Avoidance of impacts to Drainages 1, 2, and 3 under Alternative 1 would also reduce impacts to the Calle Joaquin wetlands, which provides high-quality habitat for several plant and annual species (Appendix E).

productivity or functions of these wetlands, as well as impacts to water quality and sensitive habitat from potential introduction of sediment runoff, siltation, and accidental spillage of fuel and lubricants.

Unlike the Project, this alternative would also include construction of two additional emergency access roads that could impact native riparian habitats. The first emergency access road would cross the proposed Froom Creek realignment and the LOVR ditch to provide access to LOVR approximately 800 feet southeast from the primary Project access road at Auto Park Way. Although Applicant-prepared conceptual plans do not provide specific details, this road would require construction of a second free-span bridge of approximately 24 feet in width across the 60-foot-wide realigned Froom Creek channel and a new box culvert of 24 to 48 inches across the LOVR ditch. This new emergency access road would lead to additional habitat loss and fragmentation and would further decrease the hydrologic and habitat connectivity within Froom Creek and the LOVR ditch as compared to the Project. Under this alternative, an additional emergency access road would also be constructed along the southwest edge of the proposed stormwater detention basin on the Mountainbrook Church property easement. This emergency access would connect to Calle Joaquin and would cross the confluence of the three drainages near Froom Creek, as well as cross Drainage 4 near Calle Joaquin, an intermittent, willow-lined roadside conveyance. While conceptual plans are not currently available, this access road would also likely be 24 feet in width and would require installation of a box culvert across Drainage 4, impacting willow riparian vegetation.

Similar to the Project, the following mitigation measures would be required to minimize potential impacts:

- MM BIO-1: implementation of a Biological Mitigation Plan
- MM BIO-2: ensures a qualified Environmental Monitor will oversee compliance of construction activities with the Biological Mitigation Plan.
- MM BIO-3: requirement that the Biological Mitigation Plan include a Habitat Mitigation and Monitoring Plan.
- MM BIO-4: requirement that the Biological Mitigation Plan include avoidance and replacement of sensitive natural communities outside approved development footprints.
- MM BIO-5: mitigates temporary and permanent impacts to wetlands, grasslands, and riparian habitat.
- MM BIO-6: timing and implementation requirements for habitat restoration.MM BIO-13: requires relocation of buildings along the confluence of Drainages 1, 2,

and 3 and Froom Creek outside of a buffer from the water courses to increase ecologic and hydrologic connectivity.

- MM HAZ-1: a Community Fire Protection Plan that protects sensitive habitats and species to the maximum extent possible.

The potential impacts to biological resources from Alternative 1 would be substantially lessened with inclusion of the Project's mitigation measures listed above. Policy consistency with the General Plan would also be greatly improved. However, since the emergency access roadways connecting Villaggio to Calle Joaquin and LOVR have not been designed or engineered yet, it is possible that these features may have significant impacts on riparian communities along the LOVR ditch and realigned Froom Creek and on Drainage 4. For this reason, an additional mitigation measure MM BIO-Alt. 1 is identified to ensure these alternative features are specifically mitigated.

MM BIO-Alt. 1 *The additional emergency access roadway across Froom Creek and the LOVR ditch and the southern emergency access route entering the site from Calle Joaquin shall be reviewed by the City's Public Works Department, Community Development Department, Natural Resources Manager, and Fire Department prior to adoption of the Final FRSP and approval of the Vesting Tentative Tract Map to ensure that design is adequate for City emergency ingress/egress standards and minimizes impacts to riparian vegetation and wildlife passage, and that adequate on- and offsite mitigation of impacted riparian and wetland vegetation is provided. The City shall ensure review and approval of these features as part of the Final FRSP considers the siting, alignment, width, materials, and access controls.*

Alternative 1 Plan Requirements and Timing. The Applicant is required to implement the above mitigation measures prior to FRSP and Vesting Tentative Tract Map (VTTM) approval. The access roads shall be integrated into the VTTM preliminary grading plan. City staff shall ensure the above measures are incorporated into the FRSP and VTTM prior to acceptance of the final FRSP.

Monitoring. The City shall ensure the above measure is incorporated into the Final FRSP and VTTM prior to Project approval.

Implementation of MM BIO-Alt. 1 under Alternative 1 would further reduce impacts to riparian and wetland habitats as compared to the Project. Potential alignment of the southern emergency access route under MM BIO-Alt. 1 would be designed to reduce impacts of crossing the confluence of Drainages 1, 2, and 3 and Drainage 4.

Alternative 1 would substantially reduce impacts to sensitive habitats and species and wildlife corridors as compared to the Project, particularly those associated with habitats in the Upper Terrace. This alternative as modified by the above mitigation measures would improve consistency with several policies within the City General Plan adopted to protect important natural resources, including LUE Policies 1.8.6, *Wildlife Habitats*, and 6.4.7, *Hillside Planning Areas*, and COSE Policies 7.3.1, *Protect Listed Species*, 7.3.2, *Protect Species of Local Concern*, 7.3.3, *Wildlife Habitat and Corridors,* and 7.7.7, *Preserve Ecotones*. Because Alternative 1 would not develop the Upper Terrace and would be required to implement additional mitigation measures to avoid disturbance, alteration, or removal of high value habitats, Impact BIO-1 would be substantially less than under the Project and would be considered *less than significant with mitigation*.

Impact BIO-2, which addresses direct and indirect adverse impacts on candidate, sensitive, or special status species that are known to or may occur on the Project site, would also be substantially reduced under Alternative 1. Unlike the Project, Alternative 1 would substantially reduce impacts to sensitive habitats in the Upper Terrace that support 12 known special status plant species, as well as the potential occurrence of several other species. Woodland areas and other habitats in the Upper Terrace would not be impacted by fire clearance, protecting foraging, roosting, and nesting habitat for several Species of Special Concern, including bats and birds. Additionally, avoidance of development within the Upper Terrace would protect the majority of Drainages 1, 2, and 3 where these drainages support a federally endangered species and provide water to sensitive plant and animal species.

Although the development footprint for Alternative 1 would be considerably smaller than the Project, direct and indirect impacts to species on- and offsite could continue similar to the Project, including those resulting from construction noise, increased human presence, and potential exposure to pollutants and hazardous materials. Riparian and wetland habitats and associated species would also continue to be impacted.

Alternative 1 would preserve approximately 0.25 acres of rare seep wetlands in the Upper Terrace and ensure hydrologic connectivity between Drainages 1, 2, and 3 and downstream wetlands, including the Calle Joaquin wetlands.

Mitigation measures proposed under the Project would also be implemented to reduce potential impacts. These would include implementation of MM HAZ-2, MM BIO-1, as well as MM BIO-9, ensuring access to riparian habitat for special status species would not be interrupted during construction. MM BIO-10, minimizing impacts to Chorro Creek Bog Thistle, MM BIO-11, ensuring the Biological Mitigation Plan addresses special status wildlife species management, and MM BIO-12, ensuring the Biological Mitigation Plan includes bat colony and migratory and nesting bird management, would also apply. MM BIO-13 would also further reduce impacts to creek, stream, and wetland habitat and increase habitat connectivity between the realigned Froom Creek corridor and the high quality habitats in the Upper Terrace area of Villaggio and the Irish Hills Natural Reserve through relocation of residential development and associated road infrastructure outside an adequate buffer around the confluence of Drainages 1, 2, and 3, which flow to Froom Creek. Given that development within the Upper Terrace would not occur and all applicable mitigation measures would be implemented under Alternative 1 as under the Project, Alternative 1 would have substantially reduced impacts on candidate, sensitive, or endangered species known to exist on the Project site and impacts would be *less than significant with mitigation*.

Impact BIO-3, addressing Project impacts to federally-protected wetlands, would be decreased as compared to the Project. Unlike the Project, this alternative would not include installation of culvert-headwalls or otherwise disturb Drainages 1, 2, or 3 except near the convergence of these drainages, and would avoid approximately 0.25 acres of rare seep wetlands in the Upper Terrace, as well as water sources for adjacent and downstream riparian and wetland habitat. However, CDFW and USACE jurisdictional wetlands, including the LOVR ditch and Calle Joaquin wetlands, would continue to be impacted as a result of LOVR frontage improvements, emergency access road construction, and Froom Creek realignment. As under the Project, implementation of MM BIO-4 would preserve

open space at the confluence of Drainages 1, 2, and 3 and would greatly enhance hydrologic connectivity between the Upper Terrace and downstream wetlands. Additionally, geotechnical recommendations required in MM BIO-7 to reduce potential for horizontal directional drilling operations to adversely affect Calle Joaquin wetlands would still be required.

However, interruption or redirection of ground and surface water sources for these wetlands from realignment of Froom Creek and adjacent development could still result in changes in wetland habitats and characteristics. While implementation of MM BIO-1 through -3, MM BIO-5 through -7, and MM BIO-13 would partially reduce impacts to USFWS and CDFW jurisdictional wetland areas through avoidance to the maximum extent feasible of on- or offsite wetlands, full replacement of equivalent wetland values if wetlands are affected would be challenging. Although impacts to wetlands in the Upper Terrace area of Villaggio would be less than under the Project, direct and indirect impacts to jurisdictional wetlands would continue, and impacts would remain *significant and unavoidable*.

Alternative 1 would ensure realigned Froom Creek would connect to high quality habitats in the Upper Terrace and Irish Hills Natural Reserve, allowing for safe passage between these habitats by resident and migratory wildlife.

Impact BIO-4 addressing impacts on the movement of resident or migratory wildlife species or resident and migratory wildlife corridors would be substantially reduced under Alternative 1. Unlike the Project, Alternative 1 would avoid all development in the Upper Terrace and would allow wildlife movement across the Upper Terrace and along Drainages 1, 2, and 3, which link Froom Creek through the Project site to the Irish Hills. By avoiding extensive site alteration and construction of new homes, roadways, trails, fences, and utility and drainage infrastructure within the Upper Terrace, Alternative 1 would reduce noise, lighting, and glare that would disrupt wildlife movement across the Project site. Implementation MM BIO-13 through -14 and MM BIO Alt. 1 would further reduce such impacts. As under the Project, Calle Joaquin wetlands and the restored Froom Creek channel could be isolated from wildlife and habitats in the Upper Terrace and Irish Hills Natural Reserve, replacing existing broad open grassland ecotones that currently link these habitats with intensive development, particularly near the

confluence of Drainages 1, 2, and 3. While the realigned and restored Froom Creek corridor is proposed to provide enhanced riparian habitat, it would be an urban creek corridor bordered by relatively intensive development that would limit movement of terrestrial and avian species. Long-term impacts to migrating species would be similar to the Project due to the increase in human presence onsite, including lighting located on buildings and in parking areas, increased noise from automobiles, and other human activities. These long-term impacts could cause these species to be killed, to flee the area, or could disrupt breeding and nesting efforts.

As under the Project, implementation of MM BIO-1 through -2, BIO-5 through -6, BIO-9, BIO-11 through -12, and MM BIO-13 would reduce potential impacts to resident or migratory wildlife and resident or migratory corridors. By ensuring the ability of resident or migratory wildlife to access high quality habitats, Impact BIO-4 would be substantially less severe when compared to the Project and would be considered *less than significant with mitigation*.

Alternative 1 would reduce impacts to mature trees, including coast live oak/ California bay woodland, and eucalyptus.

Impact BIO-5, related to the potential disturbance, trimming, or removal of up to 75 mature trees, would be less severe when compared to the Project. On the northwestern side of the site, potentially affected trees are located in the developed/disturbed area adjacent to the existing quarry and construction business. Mature trees in the Upper Terrace in the southwest portion of the Project site adjacent to Drainages 1, 2, and 3 would also be potentially affected. The land use map for Alternative 1 would designate residential and commercial areas to avoid direct and indirect disturbance to much of the woodland areas that would be developed by the Project in the Upper Terrace, reducing indirect fire clearance impacts to coast live oak and California bay woodlands in particular. Similar to the Project, trimming or work within the rootzone of mature trees for construction or wildfire buffering could indirectly impact these trees. As under the Project, MM BIO-15 would ensure avoidance of trees, and MM BIO-Alt. 1 would protect additional coast live oak/California bay woodlands from development or associated fire management processes. As under the Project, impacts would be *less than significant with mitigation*.

Impacts to biological resources under this alternative would be substantially less than those resulting from the Project. However, as under the Project, following incorporation of all mitigation measures described above, Alternative 1's contribution to regional cumulative impacts to biological resources would be cumulatively considerable and *significant and unavoidable*. Additionally, as discussed in the 2014 LUCE Update EIR, implementation of General Plan LUE policies and compliance with state and federal regulations would ensure cumulative impacts resulting from development under the General Plan LUE would be *less than significant*.

Cultural and Tribal Cultural Resources

Under Alternative 1, impacts to cultural resources and tribal cultural resources would be less when compared to the Project. Soil disturbance would still occur within areas considered to be sensitive for cultural resources but required grading and excavation would avoid the Upper Terrace, which has a high potential for discovery of buried archeological resources. Similar to the Project, proposed relocation of historic structures within the Froom Ranch Dairy complex would adversely affect significant historic resources, including a potential historic district. Mitigation measures would continue to be implemented to minimize potential impacts of development and operation on archaeological and prehistoric resources, as well as historic resources.

Impact CR-1 addressing potential to impact subsurface cultural resources would be less severe when compared to the Project. Per the technical studies completed for the FRSP (Appendix F) and the City's Archeological Resource Preservation Program Guidelines, there are two known prehistoric sites and archaeologically sensitive areas within the Project site that may contain undiscovered cultural resources that would be impacted by construction under this alternative, including within the Upper Terrace and a 200-foot area around the top of banks of the existing Froom Creek. Similar to the Project, mitigation measures would be implemented that would reduce potential impacts. These would include requiring a subsurface archaeological resource evaluation in areas within 200 feet of identified sites (MM CR-1), identification of Environmentally Sensitive Areas (MM CR-2), requiring preparation and implementation of an Archaeological Monitoring Plan (MM CR-3 and MM CR-4), ensuring cessation of construction activities following discovery of prehistoric or historic-period archaeological resources and/or human remains (MM CR-5 and MM CR-7), and ensuring construction personnel receive cultural resources training (MM CR-6). Unlike the Project, no development would occur within the Upper Terrace, an area which supports several recorded archaeological sites and resources. Therefore,

Impact CR-1 would be less than under the Project and considered *less than significant with mitigation*.

Impact CR-2, which addresses potential indirect impacts to archaeological resources resulting from recreational activities of future residents, would be substantially less than under the Project. By avoiding development in the Upper Terrace, proposed residential development would be located more than 100 feet from known archaeological resources and, therefore, less subject to potential indirect disturbance by future residents. Similar to the Project, the nearest residential structures in Villaggio would be enclosed by a security fence under Alternative 1 that would substantially limit incidental access to these cultural resources with the open space area. The archaeologically sensitive areas in the Upper Terrace would be preserved as protected open space under Alternative 1, further protecting them from risks associated with future development within the Specific Plan area. MM CR-8 requiring that recreational facilities and roadways are not located within 50 feet of known resources would also continue to apply. Impact CR-2 would, therefore, be less than under the Project and would be considered *less than significant with mitigation*.

Impact CR-3, addressing impacts to historic resources onsite, would remain similar to the Project, as Alternative 1 would relocate and/or adaptively reuse four Froom Ranch Dairy complex buildings (i.e., main residence, creamery, dairy barn, and granary) within the proposed trailhead park. These structures are eligible for listing on the National Register, California Register, and City Master List of Historic Resources as a historic district. Additionally, several structures onsite that contribute to the potential Froom Ranch Dairy historic district (i.e., the shed, bunkhouse, and old barn) would be demolished similar to the Project.

As under the Project, the following mitigation measures would apply to minimize potential impacts to historic resources:

- MM CR-9: ensures retention of a qualified historic architect to review and comment on construction drawings as well as conduct construction monitoring
- MM CR-10: ensures photo documentation of existing historic buildings
- MM CR-11: requires production of an educational pamphlet regarding cultural and architectural heritage of the site
- MM CR-12: requires the Applicant to maximize reuse of original building material
- MM CR-13: requires preparation of design guidelines and review for construction proximate to the Main Residence
- MM CR-14: requires a preservation plan to protect historic buildings during construction

Relocation and reconstruction of the Froom Ranch Dairy complex, including implementation of the above mitigation measures, would retain sufficient integrity to convey the buildings' significant association with the dairy industry and the Froom family. Retaining the four historic structures that contribute to the potential historic district within the trailhead park and in a natural setting more reminiscent of their historic past than the Project (i.e., set atop a rise against the natural hillside of the Irish Hills rather than set amongst multi-family housing units and commercial buildings) would lessen the potential impact to historic resources as well. However, as under the Project, the loss of three contributors to the potential historic district would also occur under Alternative 1, and, therefore, Impact CR-3 would remain significant and unavoidable.

Similar to the Project, Alternative 1 would contribute to the potential loss of significant archaeological and tribal cultural resources, though its contribution would be less than significant with mitigation identified above. As under the Project, significant and unavoidable impacts associated with the removal, relocation, and reconstruction of features associated with the historic Froom Ranch Dairy complex could occur and would be cumulatively considerable when combined with overall loss of historic resources in the City and surrounding areas for pending and future projects. As such, Alternative 1 would contribute to the cumulative loss of historic resources in the City and result in *significant and unavoidable* cumulative impacts.

Geology and Soils

Under this alternative, impacts related to geologic and soil resources would be similar when compared to the Project due to similar construction activities, geologic hazards, and minimal impacts. As under the Project, design and construction of proposed land uses would be subject to several requirements and regulations to ensure structural integrity in seismically active areas. By locating development outside of fault setbacks and implementing the most current industry standards for structural design, impacts of structural failure and risks to life and property due to seismic shaking and seismic-related ground failure would be avoided or reduced.

Impact GEO-1, addressing exposure of people or structures to adverse effects from earthquakes and seismically induced hazards, would be similar when compared to the Project. Development would be required to be sited to avoid existing fault lines, and to adhere to the California Building Code (CBC) and the City Municipal Code. Similar to the Project, the Los Osos Fault would cross Madonna Froom Ranch and Alternative 1 would include a development setback from the potentially active Los Osos Fault segments onsite.

As under the Project, compliance with state and local building regulations for site preparation and structural design would ensure that seismically induced hazards would remain *less than significant*.

Impact GEO-2, addressing potential for soil hazards, would remain the same as the Project. Potential for subsidence to occur onsite is low and development would not cause or exacerbate subsidence. Grading under Alternative 1 would require approximately 94,000 cubic yards (cy) less fill as compared to the Project. Implementation of recommendations outlined in the Project Soils Engineering Report and the geotechnical recommendations included therein would continue be implemented under Alternative 1 and would reduce impacts related to construction on loose, saturated, or expansive soils. Additionally, compliance with federal, state, and local regulations (i.e., CBC, the City's Safety Element [SE], and the City Municipal Code) would reduce direct impacts associated with expansive soils, differential settlement, and subsidence. As under the Project, impacts from Alternative 1 would be *less than significant*.

Impact GEO-3, which addresses the potential for erosion and landslides, would be less severe when compared to the Project since grading within areas above the 150-foot elevation would not occur. In the lower portions of the site and Madonna Froom Ranch, grading for site development has the potential to expose undocumented fill and existing soft alluvium, which may erode or slide. While there is the potential for limited slope instability to occur during excavation and construction activities, implementation of the CBC and compliance with federal, state, and local regulations would reduce the potential for erosion and long-term impacts during construction, similar to the Project. While potential for landslides to occur at the Project site is considered low, potential impacts would be reduced by removing private access roadways and medium-high density residential uses that are proposed under the Project in the Upper Terrace that would be located within a potential rockfall hazard area. Removal of development from the Upper Terrance under this alternative would also reduce hazards associated with development on steeper slopes. Compliance with applicable regulations and recommendations outlined in the Preliminary Soils Engineering Report and Preliminary Engineering Geology Investigation would further reduce impacts related to erosion or landslides, and impacts would be *less than significant*.

Impact GEO-4, addressing potential groundwater dewatering impacts, would result in impacts similar to those under the Project. Subsurface parking structures constructed in Villaggio adjacent to the realigned Froom Creek could require dewatering. Construction of

these structures could require excavation up to 12 feet below ground surface (bgs), potentially intercepting shallow groundwater observed at a depth of 1.5 to 4.0 feet bgs. As under the Project, compliance with the Preliminary Engineering Geology Investigation recommendations, as well as Occupational Safety and Health Administration regulations, would reduce impacts to *less than significant*.

Impact GEO-5, addressing the potential to uncover and impact paleontological resources in geologic deposits, would be similar to the Project. If paleontological resources were uncovered during construction and were then improperly handled, such unknown paleontological resources could be damaged or destroyed. As under the Project, incorporation of MM GEO-1 would ensure the protection of potential paleontological resources, and impacts would be considered *less than significant with mitigation*.

Cumulative impacts related to geology and soils would result if impacts under Alternative 1, when combined with other past, present, and future projects, would cumulatively increase the potential for geologic hazards, such as ground-shaking, or increased soil impacts, such as erosion. The City Municipal Code and the General Plan SE require all discretionary development within the City to undergo analysis of each site's geological and soil conditions prior to construction. Because all projects would be required to undergo an analysis of site-specific geological and soil conditions, and because restrictions on development would be applied in the event that geological or soil conditions pose a risk to safety, this alternative's contribution to cumulative impacts associated with seismic activity, soil instability, subsidence, collapse, and/or expansive soil would be the same as under the Project and would be considered *less than significant*.

Hazards, Hazardous Materials, and Wildfire

Under Alternative 1, impacts related to wildfire hazards would be substantially reduced due to reconfiguration of proposed habitable structures to more defensible locations within the site and provision of additional emergency access options for emergency responders. Impacts related to hazardous materials and contamination from spills would be similar to the Project due to extended construction activities. Airport safety hazards would also be similar to the Project.

Impact HAZ-1, addressing exposure of wildfire hazards and emergency response access, would be substantially reduced. The Project site is located in an area with moderate to very high fire hazards due to flammable vegetation onsite and within the adjacent Irish Hills Natural Reserve, as well as due to winds that periodically blow southeast downslope

toward the Project site. As under the Project, adherence to applicable requirements to minimize the risk from accidental construction- and operation-related wildfires, including clearance or management of flammable vegetation within 100 feet of residential development, including within the Irish Hills Natural Reserve, would mitigate this impact. Unlike the Project, all residential development within the Upper Terrace and in the northwestern portion of the site within Madonna Froom Ranch would be retained as open space, reducing wildland-urban interface by approximately 4,750 feet (50 percent of wildland-urban interface under the Project). This increased clustering within lower hazard areas in the lower portion of the site and Madonna Froom Ranch would increase the buffer between new development and very high fire hazard areas.

Impacts resulting from impaired emergency evacuation and exposure of residents and visitors to wildfire hazards would be reduced. Unlike the Project, this alternative would include emergency ingress to the Project site from a new emergency access road and bridge across LOVR ditch to LOVR approximately 800 feet southeast of the main Project entrance and a new emergency access road to Calle Joaquin located along the western edge of the proposed stormwater detention basin (see Figure 5-1). Emergency access through the Irish Hills Plaza would also be included. Therefore, a total of four access routes, including the primary entrance, would provide for evacuation and less congested access to the site for emergency respondents in the case of an emergency.

Under Alternative 1, security fencing, retaining walls, and closely spaced residential units in Villaggio would continue to limit access for firefighters to attack fires threatening residential units adjacent to the Irish Hills Natural Reserve. As under the Project, implementation of several mitigation measures would avoid or reduce impacts. MM HAZ-1, requiring construction measures to reduce the potential for brush or grass fires, MM HAZ-2, requiring preparation of a Community Fire Protection Plan, and MM HAZ-3, requiring designation of smoking areas away from onsite fire hazards would all reduce these impacts. MM HAZ-4, requiring preparation and implementation of an Evacuation Plan, and MM HAZ-5, requiring that design of the Lower Area provides direct access for emergency response vehicles to the Irish Hills Natural Reserve bordering the Project site to the west, would further reduce impacts. Despite these measures, Alternative 1 would continue to be located in an area highly susceptible to potential fire hazards, and Impact HAZ-1 would remain *significant and unavoidable*.

Impact HAZ-2, addressing accidental releases of hazardous materials, would remain the same as under the Project. The routine transport, use, or disposal of hazardous materials

would be unchanged. As under the Project, hazardous materials encountered during demolition or construction activities would be disposed of in compliance with all pertinent regulations for the handling of such waste, including requirements of the SLO County APCD and California Code of Regulations. Additionally, this alternative would not substantially increase the risk from hazardous materials to the public within the Project site or within the surrounding area. Minimal safety risks from the storage, handling, and use of hazardous materials in the Project site would be reduced through compliance with any applicable standards and regulations. Therefore, Impact HAZ-2 would continue to be *less than significant*.

Impact HAZ-3 related to airport hazards would be similar to the Project. Although portions of the Project site lie within Safety Sub-Areas S-1b and S-1c of the 2005 Airport Land Use Plan, the Project site falls outside of the Aviation Safety Areas according to criteria in the Caltrans Airport Land Use Planning Handbook (Johnson Aviation 2014). Accordingly, as under the Project, no substantial physical airport-related safety hazard is expected to occur. Therefore, aviation-related safety impacts to residents and commercial employees or patrons would be *less than significant*.

Cumulative hazards from wildfire would be exacerbated by additional construction and operation of urban uses within the City and region along the urban-wildland interface. Projects along the City's wildland-urban interface would introduce additional fire hazard-related risks from typical residential operations and increased human activity (e.g., smoking, introduction of ignition sources, landscape equipment) and would place additional people and structures at risk of injury or damage in the event of a wildfire. Further, the heightened potential for future fire hazards from the influence of climate change and warmer conditions, as discussed in Section 3.7.1.1, would contribute to the potential for a higher frequency, intensity, and size of fires that may occur in such areas. As under the Project, adherence to mitigation measures MM HAZ-1 through -5, as well as the California Fire Code, City Municipal Code, policies within the SE, and review of discretionary projects by the SLOFD would reduce impact severity. While these measures would reduce potential wildfire hazards, given the high potential for wildfire along the City's wildland-urban interface, the potential for cumulative development to exacerbate wildfire hazards would be similar to the Project and impacts would be considered *significant and unavoidable*.

Cumulative projects within the City and the Project vicinity would have the potential to expose future area residents, employees, and visitors to chemical hazards through

development of sites and structures that may be contaminated from either historic or ongoing uses. The severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Discretionary projects proposed in the City would be required to undergo individual environmental review, including review of potential impacts related to hazards and hazardous materials that are applicable to that particular development site and proposed use. Additionally, projects would also be subject to the local, state, and federal standards which require the safe removal of potentially hazardous building materials and the cleanup of contaminated properties, thus reducing the level of risk on a particular site. Because development standards or remediation requirements would be applied if hazards or hazardous materials posed a risk to safety, contribution to cumulative impacts associated with exposure to hazards or hazardous materials would be similar to those of the Project and would be considered *less than significant*.

Hydrology and Water Quality

Impacts related to hydrology and water quality would be substantially similar to the Project due to similar types of development and similar realignment of Froom Creek paired with the proposed stormwater detention basin. Increases in impervious surfaces under this alternative would decrease as compared to the Project due to the reduction in developed area on the site (approximately 18 percent decrease), and continued compliance with applicable local, regional, state, and federal requirements would further reduce the potential for significant impacts.

Impact HYD-1 addressing construction impacts to water quality would be reduced as compared to the Project. Unlike the Project, no construction would occur in the Upper Terrace of Villaggio, substantially reducing the potential for spill of oil, gasoline, hydraulic fluids, and other contaminants into Drainages 1, 2, or 3. In addition, soil erosion impacts to the drainages within the Upper Terrace would be reduced compared to the Project. Grading under Alternative 1 would require approximately 94,000 cy less fill as compared to the Project. As under the Project, construction in the lower portion of the site and Madonna Froom Ranch would present a potential for polluted construction related surface runoff to flow into onsite wetlands and Froom Creek.

Discharge of pollutants from construction equipment, including accidental spillage of fuels and lubricants, could also occur. Implementation of MM HYD-1, MM HYD-2, and MM HYD-3, requiring stormwater permitting and management actions, would be implemented. As under the Project, these mitigation measures would reduce the potential for erosion and

construction runoff to flow downstream to San Luis Obispo Creek or to the Calle Joaquin wetlands, and potential impacts would remain *less than significant with mitigation*.

Impact HYD-2, addressing potential onsite flooding and erosion hazards, would be similar when compared to the Project since the proposed stormwater system for Alternative 1 would involve the same components. Froom Creek realignment would be similar to the design under the Project. Preliminary calculations prepared by the Applicant and peer-reviewed by the City's EIR consultant, indicate the stormwater management system would be capable of accommodating a 100-year storm event. Development under Alternative 1 would be clustered, so the acreage of impervious surfaces would be less severe when compared to the Project. Replacement of approximately 8.2 acres of residential development with open space in the Upper Terrace would decrease potential stormwater surface flows. Implementation of MM HYD-4 requiring creek bank and channel bottom stability and avoidance or reduction of further erosion would continue to apply, and impacts would be less than significant with mitigation.

Impact HYD-3, addressing water quality impacts to Froom Creek and San Luis Obispo Creek due to polluted urban runoff and sedimentation, would be the same as under the Project. While development of the site increases the possibility of runoff, similar to the Project inclusion of a comprehensive stormwater management system with approximately four stormwater retention and treatment areas onsite would reduce impacts. As under the Project, this alternative would be subject to the Central Coast Regional Water Quality Control Board's (RWQCB's) Post Construction Requirements and National Pollutant Discharge Elimination System discharge permits. Implementation of proposed BMP strategies of the FRSP would also reduce impacts from urban runoff. Further, upon compliance with the City's Storm Water Management Plan, Engineering Standards, General Plan, and City Municipal Code requirements, adverse effects to water quality from operation of this alternative would be reduced. Impacts would be similar to the Project and *less than significant*.

Impact HYD-4, involving impacts to groundwater, would be lessened compared to the Project. Unlike the Project, the Upper Terrace would remain undeveloped, allowing continued natural percolation and reduced opportunities for pollutants to be carried into adjacent waterways as a result of stormwater flows. The City no longer relies on local groundwater as of April 2015, and the San Luis Obispo Groundwater Basin is not in overdraft and recharges quickly following normal rainfall years. Additionally, as under the Project, implementation of BMPs would be required consistent with City and RWQCB

standards. Similar to the Project, groundwater resources would not be depleted or degraded, and groundwater recharge would not be impeded. Groundwater impacts would be similar to the Project and would be considered *less than significant*.

Cumulative impacts to water quality would be incrementally reduced compared to the Project, including potential contribution to cumulative trends of increased urban pollutant discharge to the San Luis Obispo Creek system. As under the Project, mitigation of these impacts would be required through compliance with water quality requirements and State Water Resources Control Board (SWRCB) regulations, and potentially significant cumulative impacts would therefore be *less than significant with mitigation*.

Land Use and Planning

Under this alternative, the layout, acreage, and placement of residential and commercial development, as well as parkland and roadways, within the Project site would substantially differ from the Project. While the total number of residential units and square footage of commercial land uses would remain the same as the Project, Alternative 1 would be consistent with policies within the General Plan LUE that prohibit development above the 150-foot elevation line. This aspect of Alternative 1 would relocate residential development in upper elevations of Villaggio and Madonna Froom Ranch to lower elevations of the site and relocate the proposed trailhead park to the portion of Madonna Froom Ranch above the 150-foot elevation. Residential and commercial development would be tightly clustered within approximately 30 percent of the site (e.g., 36 acres), with over 60 acres of contiguous open space provided on the Upper Terrace and upper reaches of Madonna Froom Ranch within a public park. Overall, impacts identified within Section 3.8, *Land Use and Planning*, would be substantially less than under the Project.

Impact LU-1, regarding conflicts with City General Plan policies for visual, biological, and cultural resources and wildfire hazards, would be substantially reduced compared to the Project. Unlike the Project, urban development above the 150-foot elevation would not be permitted, consistent with the City General Plan. This alternative would be substantially more consistent with the General Plan LUE and COSE policies that protect sensitive biological, cultural, open space, and visual resources. These policies include LUE Policies 1.8.6, *Wildlife Habitats*, and 6.4.7, *Hillside Planning Areas*, and COSE Policies 7.3.1, *Protect Listed Species*, 7.3.2, *Protect Species of Local Concern*, and 9.2.1, *Views to and from public places, including scenic roadways.* However, development of 12 Villas in the southwest corner of Villaggio's Lower Area would continue to substantially impact onsite biological habitat connectivity between the Froom Creek corridor and grassland within the

Upper Terrace, and would be potentially inconsistent with COSE Policies, including 7.3.3, *Wildlife Habitat and Corridors,* and 7.7.7, *Preserve Ecotones.*

Full compliance with the General Plan LUE and COSE would protect sensitive biological, open space, and visual resources, and reduce potential fire hazards. Avoidance of development within the Upper Terrace would protect biological resources, including federal jurisdiction wetlands and 12 special status plant species. Required implementation of MM BIO-4 would result in relocation of residential uses in the southwest portion of Villaggio to maintain a buffer on the centerline of the confluence of Drainages 1, 2, and 3, and would reduce potential inconsistencies with General Plan policies designed to protect wildlife corridors and ecotones, as discussed above. Further, relocation of the proposed trailhead park to the existing quarry location in the northwest portion of the Project site and moving residential uses eastward would ensure consistency with General Plan LUE policies to protect the Froom Creek watershed and trailhead. By relocating residential structures in the northwestern portion of the Project site and Upper Terrace of Villaggio, the visual transition between the Irish Hills Natural Reserve and the Project site would be improved, substantially reducing visual impacts (refer to KVA-4 and -5, above). Removing urban development above the 150-foot elevation line would also greatly increase open space buffers between development in Madonna Froom Ranch and Villaggio, improving safety from potential wildfire hazards onsite. Additionally, implementation of MM BIO-1 through -7 and -10 through -12 and MM HAZ-1 through -5 would further reduce potential impacts to biological resources and wildfire hazards. In contrast with the Project, Alternative 1 would avoid the significant land use and planning impacts related to General Plan policy consistency by eliminating urban development above the 150-foot elevation line onsite.

However, the Project site also supports the historic Froom Ranch Dairy complex, including seven existing structures associated with the historic dairy and Froom family. These structures could constitute a potential historic district under the City's Historic Preservation Ordinance and the CRHR. As under the Project, retention and relocation of four structures (i.e., main residence, creamery, dairy barn, and granary) and demolition of three contributors to the potential Froom Ranch Dairy historic district (i.e., the shed, bunkhouse, and old barn) would impact historic resources. While implementation of MM CR-7 through -14 would reduce potential impacts, the permanent loss of the historic integrity and contributing structures of the potential historic district would result in *significant and unavoidable* impacts and potentially conflict with City policies for historic resource protection.

Impact LU-2, addressing potential inconsistencies with City setback requirements and the existing onsite agricultural easement, would be less than under the Project. Realignment of the open space and agricultural easement would support conservation of habitat and biological resources, particularly the protection of existing wetlands within this 1.6-acre portion east of Calle Joaquin, which is consistent with the easement's preservation intent. Further, because development would not be permitted within the Upper Terrace, Drainages 1, 2, and 3 would remain protected from the impacts of development. Therefore, impacts under this alternative would be less than under the Project and would be remain *less than significant*.

Significant cumulative land use and planning impacts could occur as the result of many planned and/or proposed residential developments in undeveloped open or agricultural lands along edges of the City. As under the Project, this alternative's incremental contributions to conversion of agricultural and rural land along the perimeter of the City to developed urban uses would result in loss of open space and habitat, increases in impervious surfaces, night lighting, noise, and traffic that accompany such development. However, as with the Project, development under this alternative would be generally consistent with adjacent development uses along LOVR and all pending/future projects would be required to comply with development standards and General Plan policies of the City, and potential impacts would be assessed and mitigated in accordance with CEQA and applicable City policies prior to approval. Design and implementation of mitigation measures under this alternative would ensure consistency with General Plan policies, design standards and Zoning Ordinance regulations, and cumulative impacts related to land use and planning would continue to be *less than significant*.

Noise

Construction and operational noise impacts would be similar to the Project as overall residential and commercial development would be comparable in size and scale. Development of residential and commercial land uses would result in construction noise impacts. The location of those noise sources under Alternative 1 would be confined to the lower portion of the site and Madonna Froom Ranch, as well as the proposed stormwater management system. Operationally, this alternative would have a similar amount of traffic generation as the Project, resulting in minimal increases in mobile noise from increased vehicular traffic on area roads. As with the Project, noise sensitive residential uses would be developed adjacent to existing commercial uses that could exceed acceptable noise levels under City standards.

Impact NO-1, addressing construction noise, would be less severe when compared to the Project. Similar to the Project, short-term increases in noise from the use of heavy-duty construction equipment would exceed applicable standards in the City Noise Ordinance. Also, similar to the Project, noise impacts from grading and construction would exceed City and County standards for nearby sensitive receptors, including hotels along Calle Joaquin and recreational users within the Irish Hills Natural Reserve, but would be limited to a smaller footprint on the site away from natural areas in the Irish Hills and Mountainbrook Church. Unlike the Project, development would not include the Upper Terrace of the Villaggio, thereby reducing construction noise impacts to sensitive receptors within occupied units within the Lower Area, as well as recreational users along trails within the Irish Hills Natural Reserve. As under the Project, noise impacts to sensitive receptors would be minimized to the maximum extent feasible through compliance with the City's Noise Ordinance and implementation of MM NO-1, limiting construction activities during evenings, Sundays, or holidays, MM NO-2, requiring noise attenuation measures, and MM NO-3 ensuring neighbors are informed regarding allowed construction timelines and noise complaint procedures. Noise generated from construction of this alternative would be less severe when compared to the Project, and implementation of mitigation would ensure noise levels under this alternative would not exceed City noise thresholds periodically over the construction period. Residual impacts would continue to be considered *less than significant with mitigation*.

Impact NO-2, related to ground-borne vibration, would be similar to the Project, as short-term construction activities could expose people to excessive ground-borne vibration. Construction would follow a similar progression of development within the Project site and vibrations would be temporary and intermittent during the hours of construction. Because residential units would not be developed within the Upper Terrace of Villaggio, heavy construction equipment would not pass through occupied units in the lower area and potential impacts from construction-related vibration on this population would be less than under the Project. While Villaggio would be occupied during construction of Madonna Froom Ranch, vibration would be attenuated with the intervening distance and would be at an imperceptible level at the location of proximate sensitive receptors. Therefore, vibration impacts from construction under this alternative would be less severe when compared to the Project and would be *less than significant*.

Impact NO-3, considering exposure of future residents to noise from nearby roadways, would be similar to the Project, as residential units in Madonna Froom Ranch and the lower portions of the site would remain located in an area that exceeds City noise limits for

roadway noise. Maximum allowable noise exposure resulting from transportation sources for residences, hotels, and office buildings within the City is 60 decibel average (dBA) outdoor and 45 dBA within interior spaces (see Table 3.10-5 within Section 3.10, *Noise*). As under the Project, areas could be exposed to outdoor noise levels above 60 dBA. However, the Acoustics Assessment prepared for the Project site modeled the 60 dBA noise contour to be outside of these residential areas and estimates that noise levels for residential land uses would be approximately 45 to 57 dBA (Appendix I). Traffic generated under this alternative would increase ADT on LOVR by roughly the same amount as the Project, although these increases would be negligible compared to existing levels and would not result in a perceptible increase in noise levels. As under the Project, compliance with the California Building Standards Code requirements would reduce noise levels for outdoor activity areas and exterior living spaces do not exceed acceptable levels. Similar to the Project, this impact would be *less than significant*.

Impact NO-4, addressing noise impacts from commercial uses to the north, would be similar to the Project. Approximately the same number of residential units would be developed adjacent to these commercial uses as the Project, resulting in potential impacts from commercial deliveries and other associated activities that would exceed allowed noise levels for residential areas. Similar to the Project, required implementation of MM NO-4 would reduce anticipated noise levels through the use of noise reduction measures such as a planted earthen berm or sound wall along the site boundary. As under the Project, residual impacts would be considered *less than significant with mitigation*.

As under the Project, this alternative would contribute a marginal increase in stationary and mobile noise sources, and the cumulative impact of noise levels resulting from construction and operation of this alternative would remain *less than significant with mitigation*.

Population and Housing

Population and housing impacts would be the same as under the Project, as Alternative 1 would facilitate similar levels of new residential development (578 units), and associated population increase (1,231 persons) as the Project. In addition, the composition of inclusionary affordable housing units offered by this alternative would be similar to the Project as required for consistency with City Inclusionary Housing Requirements and Specific Plan Area Expansion Area Inclusionary Housing Requirements.

Impact PH-1, addressing population growth, would be the same as under the Project. The increase in population would be well below projected population under the LUE by 2035. As under the Project, this alternative would not exceed the adopted annual City growth rate of one percent under General Plan Policy LU 1.11.2. and would be compliant with the intent of the City's growth management strategies relating to the annual average and overall increases in housing units and population. Impacts would therefore remain *less than significant*.

Impact PH-2, which addresses the City's jobs-housing balance, would be similar to the Project and would have beneficial impacts related to the City's jobs-to-housing balance and assist in achieving the target jobs-to-housing ratios of 1.5 to 1. The proposed construction of 174 new housing units would provide additional housing for the existing and growing labor force within a community that currently has a 1.6 to 1 jobs-to-housing ratio. Therefore, this impact would be *less than significant*.

Impact PH-3, which addresses construction of affordable housing within the City, would be similar to the Project. This alternative would adhere to the same requirements of the Specific Plan area and HE Policies as the Project, including the requirement to build a minimum of five percent low- and ten percent moderate-income affordable dwelling units. Because the same number of units, including low- and moderate-income affordable units, would be constructed as under the Project, impacts would remain *less than significant*.

Cumulative impacts would be similar to the Project. Cumulative development and associated growth in population and housing is anticipated in the General Plan LUE and would be consistent with City General Plan policies. This alternative, in combination with pending/future developments, would align with the City's plans for buildout as projected by the General Plan. This alternative would be consistent with the residential unit growth requirements specified by General Plan LUE Policy 1.11.2 and Table 3.11-17 within Section 3.11, Population and Housing, though there may be pressure to exceed the annual one percent rate allowed under General Plan LUE Policy 1.11.2. However, the contribution under this alternative would remain consistent with LUE and HE policies and would not result in significant cumulative contribution. Further, existing LUE policies requiring that the City manage its housing supply so that it does not exceed a growth rate of one percent per year, on average, would help to ensure population growth does not exceed planned growth or result in significant cumulative impacts associated with increases in population and housing within the City. Therefore, cumulative impacts would remain less than significant.

Public Services and Recreation

Under Alternative 1, the quantity of residential units introduced to the Project site would be the same as the Project, potentially resulting in an estimated 1,231 new residents. The new residents would increase demand for police protection, fire protection, parks, and schools, with impacts similar to the Project. The amount of parkland supplied under Alternative 1 would be incrementally greater than the Project (an additional 0.4 acre), which would directly benefit new residents and generally comply with the City's parkland requirements, although mitigation for provision of additional parkland would be required to fully comply with applicable requirements.

Impact PS-1, relating to police services, would be similar to the Project, as development would not require or result in the provision of new or physically altered facilities. Development under Alternative 1 would result in the same number of residential units and square footage of commercial area as under the Project, and therefore place a similar demand on police services. As under the Project, the anticipated population increase may require the hiring of an additional police officer to maintain the current ratio of 1.17 police officers per 1,000 residents. However, this increase would be funded through property, sales, and transient occupancy taxes throughout the City, including those resulting from Alternative 1, and would not necessitate police station expansion or construction beyond that already approved by the City. As under the Project, this alternative would be required to implement measures to decrease demand for police protection, including consistency with SLOPD's Crime Prevention Through Environmental Design Principles. Accordingly, impacts to police protection services would remain *less than significant*.

Impact PS-2, relating to fire protection services, would be similar to the Project. Population increases would be the same as under the Project, including estimated increases in seniors. Development would continue to be subject to SLOFD standards and the California Fire Code and would be located within the four-minute safe response (travel) time required by the SE of the City General Plan. While the number of firefighters required under Alternative 1 would increase, Alternative 1 would not require construction of new firefighting facilities that would adversely impact the physical environment and Impact PS-2 would continue to be *less than significant*.

Impact PS-3, relating to public schools, would be similar to the Project, as 404 of the 578 proposed residential units would be for seniors who are not expected to generate school-aged populations. As under the Project, the remaining 174 multi-family units would be anticipated to generate approximately 37 school-age children. Schools that are closest to

the Project site have the capacity to accommodate the estimated increase in the student population. As under the Project, required payment of development fees would offset potential impacts of increased enrollment on school facilities. Given school district-wide capacity and the payment of impact fees for school facilities, anticipated impacts to school facilities would be similar to the Project and would be *less than significant*.

Impact PS-4, relating to parkland availability, would be slightly less significant than the Project. Approximately 12.31 acres of parkland would be required to meet the City's standard of 10 acres of parkland per 1,000 residents, as described in Parks and Recreation Element (PRE) Policy 3.13.1. Alternative 1 would include 3.3 acres of public parkland within the Project site, which is 0.4 acre greater than under the proposed Project and 9.01 acres less than required under the City General Plan. As under the Project, implementation of MM PS-1 and MM PS-2, would require additional parkland dedication or payment of in-lieu fees to satisfy City requirements for 10 acres of parkland per 1,000 residents, including five acres of neighborhood parks. As under the Project, implementation of these measures would result in impacts to park and recreation resources that would be considered *less than significant with mitigation*.

Alternative 1, in conjunction with approved, pending, or proposed development projects in the City, proposed land use changes under the General Plan LUE, along with associated population growth, would incrementally increase overall demand for public services, including fire protection, police protection, schools, and parks. However, as under the Project, projects would be required to address potential contribution to cumulative impacts through fair share payments, as well as other standard mitigation measures. Similar to the Project, Alternative 1 would not result in cumulatively considerable deterioration of existing public facilities or service levels and cumulative impacts would be *less than significant with mitigation*.

Transportation and Traffic

Impacts related to transportation and traffic would not substantially vary in comparison to the Project due to identical levels of residential and commercial development and is anticipated to also generate 2,700 daily vehicle trips. Additionally, emergency access points will be altered as compared to the Project, lessening potential evacuation impacts.

Alternative 1 would include similar road and transportation improvements to the Project:

1) A signalized intersection with LOVR that would provide four-way pedestrian crosswalks and access to a new two-lane road (Collector "A") that would serve as the primary access to the Specific Plan area;
2) Widening of LOVR along a portion of the Project site's frontage;
3) Proposed internal roadway network consisting of public and private roads;
4) Proposed bicycle and pedestrian facilities throughout the Specific Plan area;
5) Parking facilities to accommodate residents, employees, and visitors within the Specific Plan area; and
6) A new bus stop that would be integrated into the regional public transportation system.

Emergency access roads from Mountainbrook Church would not be included in this Alternative. Emergency access roads would instead be provided via three different connections: 1) from the Irish Hills Plaza into Madonna Froom Ranch; 2) from LOVR to Villaggio; and 3) from Calle Joaquin to Villaggio through the proposed stormwater detention basin area. Following incorporation of these roadway and transportation improvements and mitigation measures discussed below, residual impacts for Alternative 1 would be similar to those identified in the City-prepared Traffic Impact Study (TIS) findings for Existing plus Project Conditions (see Tables 3.13-13 through 3.13-16 within Section 3.13, *Transportation and Traffic*; see also Appendix J).

Impact TRANS-1, associated with construction traffic impacts, would be less severe when compared to those associated with the Project because removal of development in the Upper Terrace would eliminate the need for construction vehicles to travel along Calle Joaquin and within proposed local roads within the Project site. Construction timing under Alternative 1 would change to avoid overlap between occupancy of Villaggio and construction activities in the Upper Terrace, as proposed by the Project. Alternative 1 would result in construction traffic being separated from occupied portions of the site in Villaggio and Madonna Froom Ranch and would shorten the time in which construction vehicles would interfere with regular roadway traffic. As under the Project, this Alternative would implement MM TRANS-1 requiring preparation of a Construction Transportation Management Plan for all phases of development, to be reviewed and approved by the City. Given substantial reductions in development footprint and implementation of required mitigation measures, this impact would be incrementally less severe when compared to the Project and would be *less than significant with mitigation*.

Impact TRANS-2, regarding exacerbation of queuing and peak hour traffic for automobiles and poor levels of service for pedestrians and bicycle modes of transportation under Existing plus Alternative 1 conditions, would be similar to the Project. The anticipated residential population of Alternative 1 is the same as the Project and roadway intersections impacted by the Project would continue to be impacted by Alternative 1. Although internal roadways would be lessened as a result of removal of residential uses in the Upper Terrace, internal traffic would continue to be potentially significant at occupation of Madonna Froom Ranch, although MM TRANS-11 requiring use of traffic calming measures on Local Street "A" would reduce this impact to less than significant. Although required implementation of MM TRANS-2 through -5 and MM TRANS-7 through -11 would reduce other impacts under Existing plus Alternative 1 conditions to less than significant, MM TRANS-6 requiring payment of fair share costs for the completion of the Prado Road Overpass/Interchange project would not mitigate potential impacts until this infrastructure project is complete. Therefore, similar to the Project, if the Prado Road Overpass/Interchange project is not in place by occupancy of Alternative 1, this impact would remain *significant and unavoidable.*

Impact TRANS-3, which addresses exacerbation of existing queuing and peak hour traffic for automobiles and poor levels of service for pedestrians and bicyclists under Near-Term plus Alternative 1 conditions, would be similar to the Project. As discussed above, Alternative 1 would generate similar population increases and associated traffic as the Project. Although required implementation of MM TRANS-2, -5, -8, -9, -12, -13, and -15 through -18 would reduce impacts under Near-Term plus Alternative 1, completion of MM TRANS-6 and MM TRANS-14 require completion of the Prado Road Overpass/Interchange project, which cannot be ensured by this alternative. Therefore, if the Prado Road Overpass/Interchange project is not in place by occupancy of Alternative 1, this impact would remain *significant and unavoidable*.

Impact TRANS-4, addressing inadequate emergency access and evacuations in areas of high and very high fire hazard, would be less severe when compared to the Project, as additional emergency evacuation options would be provided under Alternative 1 and development would be reduced to lower risk areas of the site. Similar to the Project, this alternative would continue to provide an emergency access route between Madonna Froom Ranch and Irish Hills Plaza. Unlike the Project, Alternative 1 would not provide an emergency access route through the Mountainbrook Church private road and would instead provide one emergency access route along the proposed stormwater basin and another across the realigned Froom Creek channel to connect to LOVR, thereby improving options

for emergency access and evacuation. The access route adjacent to the stormwater basin would allow evacuees located within the southwestern portion of Villaggio to evacuate without further exacerbating potential congestion along LOVR, as well as provide additional ingress and egress points for emergency responders. Additionally, Alternative 1 would require MM TRANS-19, inclusion of an emergency access point from the Lower Area to the existing dirt access road that connects to the utility power line structures at the top of the ridgelines, and MM TRANS-22, requiring provision of emergency respondent access to Project site perimeters, which would increase emergency access to the site and reduce potential impacts to *less than significant with mitigation*.

Impact TRANS-5, regarding pedestrian and bicycle circulation safety issues, would be similar to the Project, as anticipated generation of internal roadway trips would be the same. MM TRANS-24 would continue to be required, ensuring Alternative 1 would include Project concept designs and design guidance published by the National Association of City Transportation Officials and the Federal Highway Administration, including installation of American Disabilities Act-compliant sidewalks, Lead Pedestrian Intervals and pedestrian refuges at the LOVR/Auto Park Way intersection, and Class IV bikeways along LOVR approaching/departing this intersection. Implementation of this mitigation measure would ensure residual impacts to onsite circulation for pedestrians, and bicyclists would be *less than significant with mitigation*.

Impact TRANS-6 regarding Cumulative plus Project conditions, would be similar when compared to the Project. As under the Project, potentially significant impacts could occur to 14 separate intersections and roadway segments due to increased automobile, pedestrian, and bicycle traffic under Cumulative plus Project conditions (see Table 3.13-16 in Section 3.13, *Transportation and Traffic*). However, required implementation of MM TRANS-25 through -30, as well as MM TRANS-8, -9, and -13, would reduce cumulative impacts to *less than significant with mitigation*.

Utilities and Energy Conservation

Under Alternative 1, similar activities involving installation of public utilities and associated trenching would occur within a smaller area of development to support residential and commercial development within the lower portions of the site. New residential development (578 units) and associated population increase (1,231 persons) would be similar to the Project. However, 130 units of medium-high density R-3 units would be replaced with 130 high density R-4 units. This alternate range of unit types would not change the demand for utilities and service systems except for solid waste. Based on

the below analysis, transitioning to multi-family units with incrementally higher density units would generally result in a decrease of solid waste production compared to the Project.

Impact UT-1, regarding potential environmental impacts resulting from expansion of utility infrastructure, would be incrementally less adverse when compared to the Project. Impacts would be less adverse when compared to the Project due to reductions in building footprints and elimination of development in areas above the 150-foot elevation. Anticipated levels of service to be provided would be similar as under the Project, as would associated infrastructure requirements. Implementation of Alternative 1 would include MM UT-1, ensuring Project utilities are engineered consistent with City standards. Similar to the Project, residual impacts would continue to be less than significant with mitigation.

Impact UT-2, regarding demand increases to the City's potable water supply, would remain the same as under the Project. Residential and commercial development under Alternative 1 would be similar to the Project, and all landscaping would continue to be irrigated using recycled water and augmented with a groundwater well. Although the number of residential units in areas designated as R-3 and R-4 would change incrementally compared to the Project, units within these land use designations are similar and are anticipated to require the same level of potable and recycled water. As under the Project, demand projections indicate sufficient available supply of City potable and recycled water and impacts would continue to be *less than significant*.

Impact UT-3, regarding demand for wastewater collection facilities, would be the same as under the Project. Alternative 1 would result in construction of the same number of residential units and the same amount of commercial development and therefore would not result in greater demand for the City's available wastewater services as compared to the Project. As under the Project, the Applicant would comply with City standards, including fused sewer lines and would not significantly contribute to existing exceedance in wet-weather capacity of City facilities to process and treat wastewater; however, the City notes that the Laguna lift station currently experiences capacity issues (Personal communication with Jennifer Metz, City of San Luis Obispo Utilities Department, May 2019). Implementation of Alternative 1 would therefore contribute to, or exacerbate existing issues associated with capacity of the City's wastewater collection and conveyance system. Similar to the Project, implementation of MM UT-2 and payment of development impact fees would also be required to offset any impacts to the City's wastewater management

capacity. Impacts related to wastewater services would therefore continue to be *less than significant with mitigation*.

Impact UT-4, regarding generation of solid waste, would be less severe when compared to the Project. Alternative 1 would include development of 7.4 acres within the Madonna Froom Ranch with high density residential uses, as opposed to 6.3 acres of medium density residential and 1.8 acres of high density residential as proposed under the Project (see Table 5-1). Denser residential land uses typically generate lower levels of solid waste per unit; therefore, the Madonna Froom Ranch development under Alternative 1 would generate approximately 923.9 lbs/day from residential uses as compared to 1,351.6 lbs/day under the Project (see Table 5-13). This difference in solid waste generation equates to a decrease in 427.7 lbs/day or 76 tons/year, or an approximate 31.6 percent reduction. Based on the daily solid waste projections and similar to the Project, Alternative 1 would contribute approximately 0.3 percent of the potential daily waste capacity of Cold Canyon Landfill. The waste produced would not substantially affect the landfill's capacity or ability to comply with federal, state, or local regulations. Therefore, impacts regarding the generation of solid waste would remain *less than significant*.

Table 5-13. Estimated Solid Waste Production Under Alternative 1

Waste Generation Source	Proposed Uses	Quantity (# of Units)	Waste Generation Factor	Waste Generation (lbs/day)
VILLAGGIO				
Multi-family	Independent Living Units	366 units	8.6 lbs/day/unit	3,147.6
Nursing/Retirement Home	Assisted Living Units	38 units	5 lbs/person/day[1]	190
Hospital	Health Care Units	51 beds	16 lbs/bed/day[1]	816
Office	Administration Building and Ancillary Uses	85,078 sf	0.006 lbs/sf/day	510.5
Commercial Sector (Commercial Retail)	Ancillary Uses	84,078 sf	0.046 lbs/sf/day	3,867.6
MADONNA FROOM RANCH				
Multi-family	High Density Residential	174 units	5.31 lbs/day/unit[4]	923.9
Service Sector (Other Services)	Hotel with Restaurant	70,000 sf	3.12 lbs/100 sf/day	2,184
Commercial Sector (Commercial Retail)	Other Commercial	30,000 sf	0.046 lbs/sf/day	1,380
Estimated Total Waste Generation (lbs per day)			**13,019.6**	
Estimated Total Waste Generation (lbs per year)			**4,755,423.5**	
Estimated Total Waste Generation (tons per day)			**6.5**	
Estimated Total Waste Generation (tons per year)			**2377.7**	

Impact UT-5, regarding available energy resources and consumption rates, would remain the same as under the Project. Estimated fuel consumption for construction would be similar to estimated fuel consumption for construction under the Project. Consumption of electricity, natural gas, and gasoline during operation under Alternative 1 would also be the same as under the Project. As under the Project, compliance with federal, state, and local regulations pertaining to renewable energy, improved energy efficiency, and conservation in both construction and operation would be required. Further, though not required to reduce impacts of this alternative, a number of mitigation measures identified to reduce Project impacts to various resources would have the secondary effect of reducing Project energy demands. The demand for energy under Alternative 1 is generally lower than County and state averages, and potential direct impacts to energy resources and conservation are considered *less than significant*.

Implementation of Alternative 1 and other proposed or current projects listed in Table 3.0-1 within Section 3.0.3, *Cumulative Impact Analysis*, would increase the cumulative demand on utilities; however, these projects would be required to comply with standards for

adequate utilities set forth in the City General Plan, would be subject to City planning and review requirements, and would be required to pay development impact fees to offset any impacts from utility infrastructure needs and service capacities. As such, and as indicated by the LUCE Update EIR, no significant or adverse cumulative effects are anticipated related to the supply of water, waste water, solid waste, or energy utilities. Therefore, cumulative impacts to utilities would be *less than significant with mitigation*.

Mineral Resources

Impacts related to mineral resources would not vary from the Project. As under the Project, closure of the quarry under this alternative would nominally lower available acreage for red rock extraction, and Impact MN-1 would remain *less than significant*. Additionally, cumulative impacts to mineral resources or mineral resource recovery sites would continue to be considered *less than significant* as the City does not allow mineral resource extraction and there are no other proximate active mines identified for future annexation into the City. Therefore, there are no projects within the City that are expected to further reduce currently available supplies.

5.4.2.3 Alternative 2 – Residential Development Project Alternative

Similar to Alternative 1, Alternative 2 would include a major reconfiguration of the proposed land use plan and redesign of key Project elements, including substantially increased clustering of development within Madonna Froom Ranch and the Lower Area of Villaggio to reduce environmental impacts identified in the EIR. Alternative 2 would continue to provide a Life Plan Community and new multi-family neighborhood; however, unlike the Project and Alternative 1, Alternative 2 would eliminate commercial uses on site. Instead, Alternative 2 would support 178 multi-family residential units (four more than proposed under the Project or Alternative 1), 404 senior independent living units, 51 beds in residential health care facilities, and 3.3 acres of public parkland. Four primary features of this alternative are intended to substantially reduce identified Project impacts:

1) No commercial development (e.g., hotel, retail) would be included in the Madonna-Froom Ranch portion of this alternative; commercial uses proposed under the Project in Madonna Froom Ranch would be replaced with R-4-SP High Density Residential Uses. Resident-serving commercial uses would continue to be developed within Villaggio to serve Villaggio residents and would be similar to those proposed under the Project (e.g., restaurants, theater);

2) Consistent with the General Plan LUE, all development would be confined to areas below the 150-foot elevation, removing all development from the Upper Terrace and restricting new development to roughly 30 percent of the site within Villaggio's Lower Area and Madonna Froom Ranch;

3) Development of buildings within the Lower Area would be reconfigured, and some building heights and sizes increased to accommodate the same capacity for development as the Project of 404 units, 51 beds in health care units, and more than 160,000 sf of administrative and support facilities;

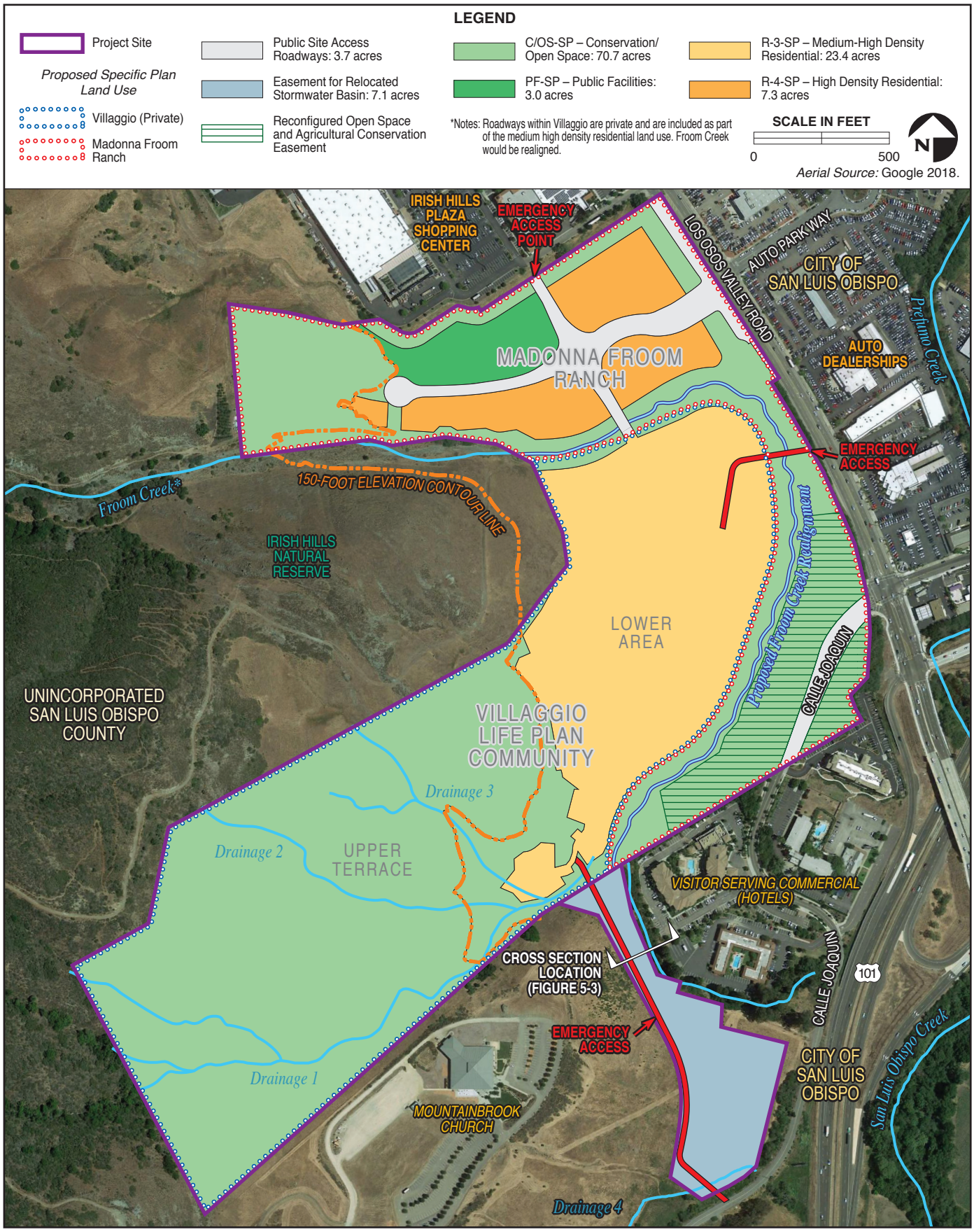
4) As with Alternative 1, emergency access would be provided via three different connections: 1) from Irish Hills Plaza into Madonna Froom Ranch; 2) from LOVR to Villaggio; and 3) from Calle Joaquin to Villaggio through the proposed stormwater detention basin area on the Mountain Brook Church easement.

Required discretionary actions would be similar to the proposed Project, while the construction phasing plan would be similar to Alternative 1 (see also Table 5-6).

As under the Project, this alternative would realign Froom Creek to improve site drainage and make space for residential development, along with additional drainage improvements as proposed under the Project (refer to Chapter 2, *Project Description*).

Land Use Plan and Site Design

Alternative 2 would increase clustering of development compared to the Project, including limiting residential and commercial land uses to areas of the site below the 150-foot elevation (see Figure 5-4). As compared to the Project, overall developed area would decrease by 8.2 acres and more than 6.1 additional acres of the Upper Terrace would remain as contiguous open space, substantially reducing direct and indirect habitat disturbance. The quarry on Madonna Froom Ranch adjacent to the Irish Hills Natural Reserve would also become open space as a new trailhead park under this alternative. Alternative 2 would allow for the development of a total of up to 582 residential units within medium-high and high density residential zones, including 178 multi-family units, 404 independent and assisted senior villas and apartments, and 51 beds in residential health care facilities, which is four more multi-family units than the Project. However, no commercial space would be provided in Madonna Froom Ranch (Table 5-14), which would reduce development compared to the Project by 100,000 sf. More than 160,000 sf of administrative and ancillary buildings would continue to be provided within Villaggio.



wood.

Alternative 2 Land Use Plan

FIGURE 5-4

Table 5-14. Summary of Alternative 2 Zoning and Land Uses

Proposed Zones	Acreage	Housing Units/ sf
VILLAGGIO		
R-3-SP Medium-High Density Residential	**23.5**	**404 units/51 beds**
Independent Living Units		*366 units*
Assisted Living Units		*38 units*
Health Care Units (Skilled Nursing & Memory Care)		*51 beds*
Health Care Administration Building		*85,670 sf*
Ancillary Uses (wellness center, restaurants, theater, etc.)		*76,509 sf*
MADONNA FROOM RANCH		
R-4-SP High Density Residential	**7.4**	**178 multi-family units**
PF-SP Public Facilities	**3.2**	**--**
ADDITIONAL USES		
C/OS-SP Conservation/ Open Space	**70.1**	**--**
Designated Open Space	*62.9*	--
Reconfigured Agricultural Easement	*7.1*	--
Roadways	**5.6**	**--**
TOTAL	**109.7**	**582 units/51 beds**[1]

[1] Total exceeds Maximum 350 units as allowed in Section 8.1.5 of the General Plan LUE due to transition of allowed commercial land uses to residential land uses. This total assumes all units planned within residential land uses.

Alternative 2 would continue to provide a Life Plan Community within 23.4 acres designated as R-3-SP in Lower Villaggio, with additional apartment units provided by expanded and taller buildings in the central area of Lower Villaggio, similar to Alternative 1. Madonna Froom Ranch would continue to provide multi-family housing within 7.4 acres of R-4-SP, with a density of 24 units per acre. A majority of these multi-family homes would be relocated eastward away from sensitive habitats and high fire hazards from the Irish Hills Natural Reserve and would replace commercial uses proposed under the Project.

A trailhead park would be provided within 3.3 acres of Public Facilities (PF-SP) designated area in the same location as under the Project. Areas proposed for Medium-High Density Residential uses under the Project within the existing quarry above the 150-foot elevation contour line adjacent to the Irish Hills Natural Reserve would be set aside as open space. These changes would ensure the land use plan better aligns with the policies of the City General Plan regarding development above the 150-foot elevation contour. The land use plan for Alternative 2 would reserve over 63 percent of the site (70.1 acres) in C/OS-SP, including preservation of almost 50 acres of contiguous open space on the Upper Terrace above the 150-foot elevation.

Froom Creek would be realigned and restored similar to the Project and stormwater management would be provided similar to the Project (see Section 2.5.4, *Stormwater Management System and Froom Creek Realignment*). Since Alternative 2 would not

involve development above 150-foot elevation, this alternative would not require a General Plan amendment to address this policy inconsistency associated with the Project. Grading, retention walls, and fencing plans would be similar to Alternative 1.

Circulation and Site Access

Similar to the Project, circulation under Alternative 2 would entail provision of public roadways within Madonna Froom Ranch (Collectors A and B) and private local roadways in Villaggio. However, because all development would be restricted to below the 150-foot elevation contour, the road system would be substantially reduced in length compared to the Project, particularly local private roads. Emergency access via Mountainbrook Church would not be part of this alternative. Similar to the Project, Alternative 2 would have a primary entrance from LOVR at Auto Park Way. This public roadway would lead to the trailhead park, Madonna Froom Ranch neighborhoods, and the private gated entrance to Villaggio. Major components of the circulation system proposed under Alternative 2 are similar to the Project and are summarized below (see also Section 2.0, *Project Description*, for more details):

1. A signalized intersection with LOVR that would provide four-way pedestrian crosswalks and access to a new two-lane road (Collector "A") that would serve as the primary access to the Specific Plan area;
2. Widening of LOVR along a portion of the Project site's frontage;
3. Internal roadway network consisting of public and private roads;
4. Bicycle and pedestrian facilities throughout the Specific Plan area;
5. Parking facilities to accommodate residents, employees, and visitors within the Specific Plan area;
6. A new bus stop that would be integrated into the regional public transportation system; and
7. Three separate emergency access points would be provided, similar to Alternative 1 (see Figure 5-4).

Proposed Housing and Population

Population and housing under Alternative 2 would be similar to the Project; allocation of units between different allowable densities and product types (e.g., Life Plan Community, multi-family units) would remain similar. Alternative 2 would alter the land use plan and incrementally adjust dwelling unit allocation, replacing 130 R-3-SP units in Madonna Froom Ranch with 134 R-4-SP units to allow for building clustering and greater densities (see Table 5-15).

Similar to the Project, proposed housing components of Alternative 2 would include a mix of single-family or duplex units in Villaggio and higher density multi-family condominiums and apartments in both Madonna Froom Ranch and Villaggio. Residential uses would have a similar mix of housing densities and average lot sizes as proposed for the Project, with dispersed single-story Villas, two story Garden Terraces, and up to 4-story buildings supporting Piazza Apartments and Community Village Apartment suites. Exact unit layout and design is not currently known

Table 5-15. Summary and Comparison of Housing and Population

Residential	Alternative 2		Project	
Housing Type	**Alternative 2 Proposed Units**	**Estimated Population[1]**	**Project Proposed Units**	**Estimated Population[1]**
R-3-SP - Villaggio	404 units/51 beds	976	404 units/51 beds	976
R-3-SP – Madonna Froom Ranch[2]	-	-	130 units	298
R-4-SP -Madonna Froom Ranch[2]	178 units	408	44 units	101
TOTAL	**578 units/51 beds**	**1,384[3]**	**578 units/51 beds**	**1,375[3]**

[1] Population estimates are based on the number of units multiplied by the average number of persons per household. In the City of San Luis Obispo, the average number of persons per household is 2.29 (City of San Luis Obispo 2015).
[2]Per the City's zoning ordinance, R-3 and R-4 units are expressed as density units. The number of actual dwelling units in the R-3 and R-4 zone may vary depending on the number of bedrooms.
[3]Differences in estimated populations are a result of rounding inaccuracies and estimated populations are assumed to be the same.

Analysis –Alternative 2 (Residential Development Project Alternative)

Impacts under this alternative would be considerably less than that of the Project. Primary changes would consist of substantially increased clustering, improved protection of open space, and removal of all commercial uses. However, four additional residential units would be constructed in Madonna Froom Ranch under this alternative. Froom Creek would continue to be realigned under this Project, resulting in continued potential adverse and beneficial impacts. Avoidance of development above the 150-foot elevation line would substantially reduce potential impacts relating to aesthetics, biological resources, and wildfire hazards as compared to the Project.

Aesthetics and Visual Resources

Since development would not occur above the 150-foot elevation, within the Villaggio Upper Terrace or Madonna Froom Ranch quarry, impacts to scenic resources would be substantially decreased under this alternative. Avoiding development above the 150-foot elevation line would protect existing onsite visual resources including natural habitats and

serpentine rock outcroppings and would ensure a more gradual transition from rural land uses within the Irish Hills Natural Reserve to the urban land uses proposed under Alternative 2. While inclusion of taller structures within Villaggio could incrementally increase visibility of these buildings, substantially increased open space protection would reduce overall impacts to key views. Impacts to key views would be similar to the Project and Alternative 1. Implementation of mitigation measures as under the Project would require vegetative screens for buildings and associated infrastructure and would ensure potential impacts to aesthetic character would be mitigated to less than significant. Impacts related to nighttime lighting and glare would also be reduced as a result of reduced building construction. Therefore, impacts from Alternative 2 would be *less than significant with mitigation*.

Agricultural Resources

Because the area impacted by development under this alternative is substantially less severe when compared to the Project, including avoidance of development within the Villaggio Upper Terrace and the existing quarry area, impacts to agricultural resources would be reduced. Further, this alternative would not result in the loss of Important Farmland. Impacts would therefore remain *less than significant*.

Air Quality and GHG Emissions

Under Alternative 2, vehicle trip generation would be slightly reduced due to removal of commercial development from Madonna Froom Ranch, decreasing potential air quality and GHG emission impacts compared to the Project. Elimination of development above 150-foot elevation would substantially reduce grading needs for this alternative and would limit use of heavy construction equipment and associated emissions. Although residential units would be approximately the same as under the Project, this alternative would greatly decrease onsite commercial development, substantially reducing vehicle trips and GHGs and other air pollutant emissions associated with operations of commercial development. Additionally, the Project would continue to be required to implement mitigation measures to further reduce potential impacts to air quality. Despite substantial reductions as compared to the Project, impacts to air quality from implementation of this alternative remain significant due to inability to feasibly predict reductions in long-term operational (particularly mobile-source) emissions from required mitigation. Additionally, as a result of exceedance of population growth projections from the 2001 Clean Air Plan, the alternative would continue to be inconsistent with the 2001 Clean Air Plan, resulting in *significant and unavoidable* impacts.

Biological Resources

Impacts to biological resources under Alternative 2 would be substantially reduced as compared to the Project and would be similar to Alternative 1. This alternative would not include residential development (Villaggio or Madonna Froom Ranch) above the 150-foot elevation line and would substantially reduce the building footprint and required onsite construction and grading within areas supporting sensitive natural habitats, thereby greatly reducing potential impacts to sensitive habitats and species onsite. This alternative would completely remove development within the Upper Terrace and impacts to sensitive species, drainages, and onsite wetlands within this area would be substantially avoided and/or reduced. Alternative 2 would reserve the existing quarry area as open space, which may support enhanced biological productivity over time in this currently degraded area adjacent to Froom Creek. Secondary impacts of fire clearance on native habitats would also be greatly reduced as the urban-wildland interface would be decreased by approximately 50 percent due to building clustering and removal of development above the 150-foot elevation line. However, Froom Creek would continue to be realigned and restored under this alternative and major clearing of riparian vegetation along LOVR ditch would continue, which could result in potential impacts to sensitive riparian habitats and species. Additionally, residential units in the southwestern area of Lower Villaggio developed under this alternative would continue to impact habitat connectivity between Froom Creek and grassland within the Upper Terrace, as well as impacts to sensitive riparian and wetland species at the confluence of Drainages 1, 2, and 3. Implementation of mitigation measures described under Section 3.4, *Biological Resources,* as well as MM BIO-Alt. 1 would substantially reduce potential impacts to sensitive and protected species, onsite natural habitats, and ecotone connectivity. However, potentially impacts to the Calle Joaquin wetlands would continue to occur as a result of creek realignment and LOVR drainage frontage improvements. Therefore, impacts would remain *significant and unavoidable*.

Cultural and Tribal Cultural Resources

Impacts to cultural and tribal cultural resources under this alternative would be reduced, as avoidance of development within the Upper Terrace area of the Villaggio would decrease potential for impacts to known or potential archaeological sites. Site preparation and grading would still occur within areas containing sensitive cultural resources with potential for associated impacts, though required implementation of mitigation measures would reduce potential impacts during operation and construction of this alternative. Although appropriate mitigation measures would be required, relocation of dairy structures within

Froom Ranch would continue to have *significant and unavoidable* impacts on potentially significant historic resources. Overall impacts would be similar but slightly reduced as compared to the Project.

Geology and Soils

Under this alternative, impacts related to geology and soils would be similar to the Project due to similar construction activities and geologic hazards onsite. As under the Project, design and construction of proposed land uses under this alternative would be subject to the requirements and regulations of the CBC and the City Municipal Code to ensure structural integrity in seismically active areas. By locating development outside of fault setbacks and implementing the most current regulatory standards for structural design, impacts of structural failure and risks to life and property due to seismic shaking, seismic-related ground failure, and soil constraints or hazards under this alternative would be the same as compared to the Project, and potential impacts would remain *less than significant*.

Hazards, Hazardous Materials, and Wildfire

Under this alternative, impacts related to fire hazards, hazardous materials, and airport operations would be less than under the Project because of reduced construction activities due to substantial development clustering and smaller building footprints. Avoidance of development above the 150-foot elevation line within the Villaggio Upper Terrace and the northwestern portion of Madonna Froom Ranch would reduce urban-wildland interface by approximately 50 percent, reducing defensible space requirements and increasing the distance between proposed residential units and wildfires originating from western upland areas with very high fire hazard potential. Additionally, similar to the Project, this alternative would also be required to implement required mitigation measures that would decrease likelihood of wildfires, improve fire response evacuation, and ensure firefighters can attack fires encroaching on the Project site from the Irish Hills Natural Reserve. Potential impacts from hazardous materials and aircraft would not substantially vary from the Project due to similar construction activities and the amount and layout of development in relation to aircraft hazard areas. Impacts from hazardous materials and contamination during construction would be similar to the Project, and no new hazards due to use of hazardous materials or exposure to airport safety hazards would result from this alternative. However, as under the Project, Alternative 2 would be located in an area highly susceptible to potential fire hazards and impacts would remain *significant and unavoidable.*

Hydrology and Water Quality

Under this alternative, impacts related to hydrology and water quality would not substantially vary from the Project due to similar drainage improvements, including realignment and restoration of Froom Creek and installation of a new stormwater detention basin, as well as onsite retention features for water treatment. Development would be substantially more clustered than the Project and areas of impervious surfaces would decrease under this alternative (approximate 62.1 percent reduction compared to the Project). Further, this alternative would better retain natural watershed processes, particularly in the higher elevation areas of the watershed onsite due to lack of development within these areas compared to the Project. This alternative would continue to be required to comply with applicable local, regional, state, and federal water quality protection and stormwater management requirements, further reducing the potential for significant impacts. Similar to the Project, required mitigation measures would minimize potential impacts to hydrologic resources during construction and reduce potential erosion of the realigned Froom Creek that could result from storm events. Additionally, avoidance of development within the Upper Terrace would prevent impacts to Drainages 1, 2, and 3, as well as hydrologically connected habitats downstream including grasslands and federal jurisdiction wetlands. Similar to the Project, impacts would be *less than significant with mitigation*.

Land Use and Planning

Impacts under this alternative would be less than under the Project because, consistent with the requirements of the General Plan LUE, development would not occur above the 150-foot elevation line. By avoiding development in these upper elevations on site, this alternative would greatly improve consistency with adopted City policies. Required implementation measures would further increase habitat connectivity and compliance with Conservation and Open Space Policies 7.3.3, *Wildlife Habitat and Corridors,* and 7.7.7, *Preserve Ecotones.* Avoiding residential development above the 150-foot elevation line, including in the Upper Terrace of Villaggio and the northwestern portion of Madonna Froom Ranch, would minimize aesthetic impacts, as well as fire hazards, and would be consistent with the requirements of Hillside Planning Area policies in the City General Plan. As under the Project, this alternative would be required to implement mitigation measures to avoid significant impacts to the viability of the onsite agricultural easement. However, this alternative would continue to relocate structures within the historic Froom Ranch Dairy complex, resulting in the relocation and/or permanent loss of structures

composing a potential historic district despite implementation of mitigation measures and causing potential inconsistencies with COSE Policies 3.3.1, *Historic Preservation,* 3.3.3, *Historical Documentation,* and 3.3.4, *Changes to Historic Buildings*. Impacts would remain *significant and unavoidable*.

Noise

Under this alternative, construction and operational noise impacts would be incrementally less adverse when compared to the Project. Despite elimination of commercial land uses in Madonna Froom Ranch and implementation of applicable mitigation measures, development of residential units and realignment of Froom Creek would continue to cause construction noise levels that exceed City noise thresholds for sensitive receptors adjacent to the Project site. Required implementation of mitigation measures similar to those under the Project would reduce exposure of proposed residential units to noise levels above City thresholds, as would substantial reductions in commercial development. Impacts resulting from operations of the Alternative would therefore be incrementally less than under the Project and would remain less than significant with mitigation.

Population and Housing

Impacts to population and housing would be less than to the Project, as this alternative would develop a similar number of units but would not develop onsite commercial land uses. Assuming Citywide household size of 2.29 persons per household, this alternative would be expected to increase the City's population by approximately 1,384 persons, which is incrementally more than the Project. Assuming 550 square feet per job in planned commercial uses, this alternative would result in 182 fewer jobs than the Project, incrementally improving the City's existing jobs/housing imbalance by providing more housing compared to jobs onsite. Although this alternative would replace medium- high density units in Madonna Froom Ranch with high density units, potentially improving provision of workforce housing, this alternative would not result in additional affordable housing units as compared to the Project. As under the Project, impacts would be considered *less than significant*.

Public Services and Recreation

This alternative would result in decreased impacts to public services due to elimination of commercial land uses that would be developed under the Project. Population increases resulting from the alternative are expected to be similar, and corresponding increases in demand and associated potential for impacts on police, fire protection, and education

services and facilities would also be similar to the Project. Elimination of commercial land uses on site would also incrementally decrease demand on these services due to elimination of uses which generate greater demands for service. While dedicated parkland within the Project site would continue to be deficient to serve the anticipated increase in population, this alternative would be required to implement mitigation measures to ensure appropriate recreational facilities would be maintained within the City's Sphere of Influence, and impacts would continue to be *less than significant with mitigation*.

Transportation and Traffic

Alternative 2 would have slightly fewer traffic and transportation impacts compared to the Project. Although additional residential units would be anticipated to increase traffic, Alternative 2 would not develop commercial units within Madonna Froom Ranch (e.g. hotel, retail) that would also contribute to increased daily trips. This alternative would be required to comply with applicable local, regional, state, and federal transportation requirements, and would require implementation of applicable mitigation measures to further reduce potential impacts. However, as trip generation and demand for multi-modal transportation facilities is expected to be approximately similar to the Project, impacts to area roadways would continue to be considered *significant and unavoidable* under Alternative 2 in the near-term while the Prado Road Overpass is constructed. As under the Project, cumulative impacts would be considered *less than significant with mitigation* once the Prado Road Overpass is complete.

Utilities and Energy Conservation

Impacts to utilities would be less severe when compared to the Project, due to the elimination of onsite commercial land uses and reduction in the development footprint. Elimination of commercial land uses would also reduce impacts to utility services such as solid waste disposal and electricity. In addition, similar to the Project, this alternative would continue to comply with applicable design, engineering, and installation requirements and guidelines to increase energy efficiency and minimize environmental impacts to the maximum extent feasible. Applicable mitigation measures would also be required under this alternative, and impacts would continue to be considered *less than significant with mitigation*.

Mineral Resources

Impacts to mineral resources would be incrementally reduced under this alternative as under the Project. This alternative would designate the existing red rock quarry for Open

Space/Conservation, theoretically retaining available acreage for extraction of this resource within the County. However, mineral resource extraction is prohibited in the City's General Plan and would not be allowed following adoption of the FRSP. Therefore, impacts to mineral resources within the City would continue to be *less than significant*.

5.4.2.4 Alternative 3 – Minimum LUE-Compliant Project Alternative

Alternative 3 would be a low-build alternative with the most restricted area for development and a major redesign of key Project elements. Alternative 3 would substantially reduce the development capacity of the Project site to the minimum development allowed by the General Plan LUE. This alternative would be most closely aligned with the existing General Plan LUE performance standards and minimum development policy framework for the Project site with regard to the land use mix and allowable development levels. Alternative 3 would support 200 multiple family residential units, 50,000 sf of commercial uses and 3.0 acres of public facilities, but would not support development of a Life Plan Community. This development would be clustered in already-disturbed areas of the Project site on the northern side and below the 150-foot elevation line, which would avoid or minimize a range of environmental impacts identified in this EIR. Alternative 3 would reduce or change Project impacts through:

1. Residential development would be reduced to 200 units consistent with the minimum development performance standards of the LUE SP-3, Madonna on LOVR Specific Plan Area, from 582 units and 51 beds under the Project (an approximately 65.6 percent reduction). Residential uses would be confined to 10 acres that would be developed under R-3-SP Medium-High Density zoning at a maximum density of 20 units/acre;

2. Commercial development would be reduced to 50,000 sf consistent with the minimum development performance standards of the LUE SP-3, a reduction of 50 percent from the Project, with commercial uses limited to 2.5 acres compared to 3.1 acres under the Project;

3. The Villaggio Life Plan Community would no longer be developed, thereby avoiding a range of impacts associated with biological and cultural resources (particularly in the Upper Terrace), hydrology and water quality, and fire hazards but also not maximizing housing production to address jobs housing balance issues, particularly for senior housing, consistent with City Housing goals;

4. Froom Creek would not be realigned, thereby avoiding the potential impacts and benefits associated with this major element of the Project. The existing Irish Hills stormwater detention basin system would be retained and expanded or modified to accommodate any increases in runoff under this alternative. Internal drainage and stormwater improvements to slow and infiltrate runoff into the soil within developed areas would remain similar to the Project;

5. Road improvements, including Commercial Collectors A and B would remain similar to the Project, along with required widening of LOVR, with associated impacts to riparian and wetland habitats along LOVR ditch, but no local or private roads would be needed to serve Alternative 3;

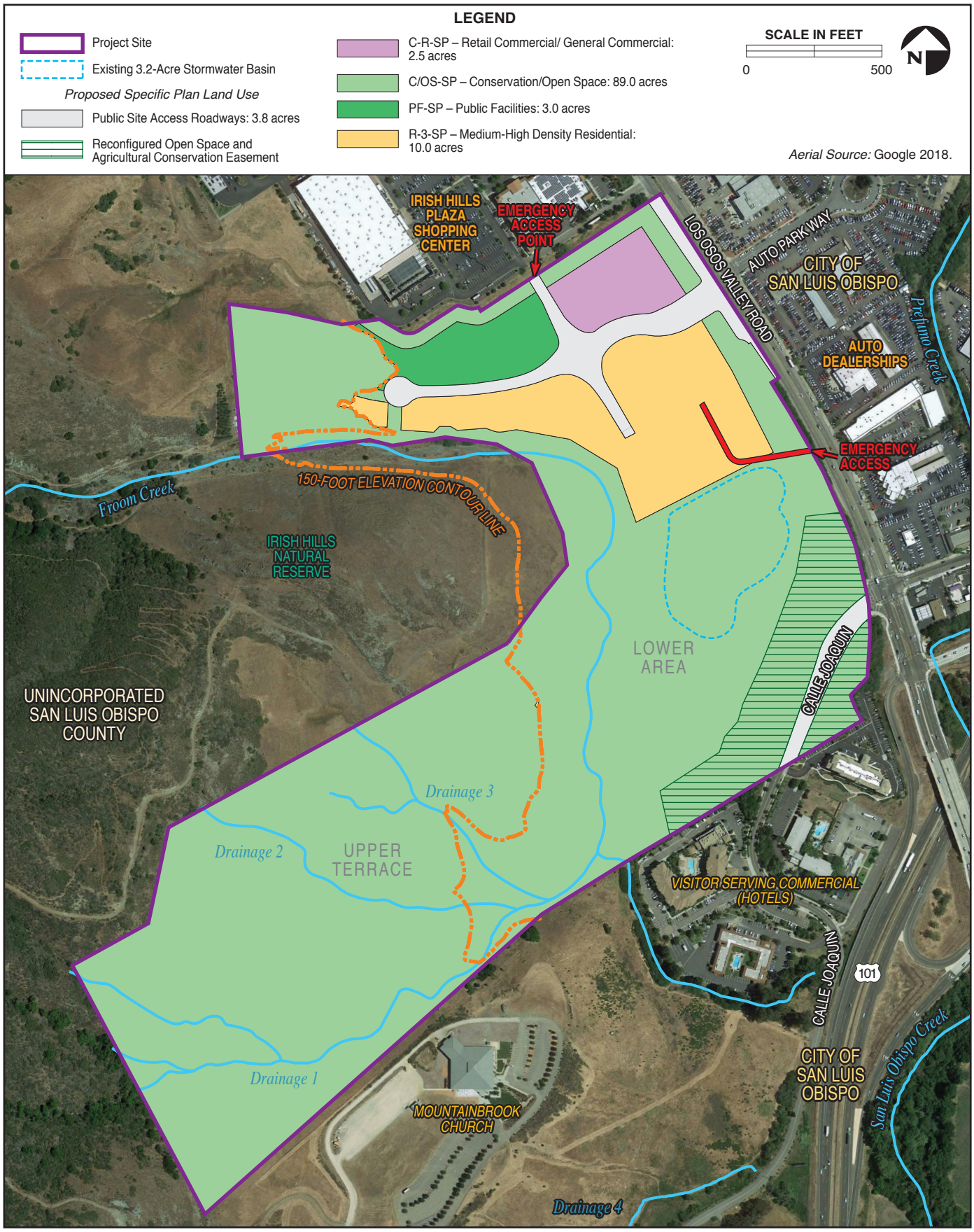
6. Consistent with the City's General Plan, all development would be confined to areas below 150-foot elevation;

7. Emergency access would be provided at only two different connections: 1) from the Irish Hills Plaza into Madonna Froom Ranch; and 2) from LOVR to the southern area of Madonna Froom Ranch.

8. Required discretionary actions would be similar to the proposed Project, while the construction phasing plan would be accelerated.

Land Use Plan and Site Design

Alternative 3 would maximize clustering of development compared to the Project and Alternatives 1 and 2, limiting residential and commercial land uses and associated roads and infrastructure to less than a 20-acre area of the Project site below 150-foot elevation (see Figure 5-5). Overall developed area would decrease by roughly 30 acres, compared to the Project, with 89 acres of the Project Site (81 percent) retained as Conservation/Open Space. Both the Upper Terrace and the majority of the lower area of Villaggio would remain as contiguous open space, substantially reducing direct and indirect habitat disturbance. The quarry on Madonna Froom Ranch adjacent to the Irish Hills Natural Reserve would also become open space under this alternative.



wood.

Alternative 3 Land Use Plan

FIGURE 5-5

Table 5-16. Summary of Alternative 3 Zoning and Land Uses

Proposed Zones	Acreage	Housing Units/ sf
R-3-SP Medium-High Density Residential	**10**	**200 multi-family units**
C-R-SP Retail-Commercial	**2.5**	**50,000 sf**
PF-SP Public Facilities	**3.0**	**--**
ADDITIONAL USES		
C/OS-SP Conservation/ Open Space	**88.9**	**--**
Designated Open Space	*81.8*	**--**
Reconfigured Agricultural Easement	*7.1*	**--**
Roadways	**5.6**	**--**
TOTAL	**109.7**	**200 units[1]** **50,000 sf commercial**

[1] Total matches minimum performance standards as allowed in Section 8.1.5 of the General Plan LUE. This total assumes all units planned within residential land uses.

Madonna Froom Ranch would continue to provide multi-family housing, but development would be contained within 10 acres of Medium-High Density Residential (R-3-SP) zoning designation, with a density of 20 units per acre under Alternative 3. A majority of these multi-family homes would be located away from the habitats and high fire hazards of the Irish Hills Natural Reserve. Approximately four acres would be located in an area along the northern bank of Froom Creek, which would provide somewhat of a fire buffer between this area and high fire hazards within the Irish Hills Natural Reserve.

Areas proposed for Medium-High Density Residential (R-3-SP) uses under Alternative 3 would be limited to existing disturbed areas on the northeastern portion of the site and outside of the existing onsite stormwater detention basin. Similar to the Project, the northwestern corner of the site would be designated for Retail-Commercial (C-R-SP) uses, but would only accommodate up to 50,000 sf. This alternative includes a trailhead park within 3.0 acres of Public Facilities (PF-SP) designated area in the same location as under the Project, but under the 150-foot elevation line. Areas within the quarry above the 150-foot elevation contour line adjacent to the Irish Hills Natural Reserve would be set aside as open space. These changes would ensure the land use plan better aligns with the policies of the City's General Plan regarding development above the 150-foot elevation contour. Since Alternative 3 would not involve development above the 150-foot elevation, this

alternative would not require a General Plan amendment to address this policy inconsistency associated with the Project.

Froom Creek would not be realigned and restored under Alternative 3 and stormwater management would be supported partially by existing onsite infrastructure, which may require upgrades or modifications to accommodate site development. The need for grading, retaining walls, and fencing would be substantially less severe when compared to the Project. Site disturbance would be limited to approximately 21.1 acres of relatively level terrain that would not require substantial excavations, barring potential low-lying retaining walls along Froom Creek, which is currently perched behind a manmade berm along the central portions of the site.

Circulation and Site Access

Similar to the Project, circulation under Alternative 3 would entail provision of public roadways within Madonna Froom Ranch (Collectors A and B). All development would be restricted to below the 150-foot elevation contour and would not extend substantially into the lower area of Villaggio; therefore, the road system would be reduced in length compared to the Project. Similar to the Project, Alternative 3 would have a primary entrance from LOVR at Auto Park Way. Public roadways would lead to the trailhead park and Madonna Froom Ranch neighborhoods. Major components of the Alternative 3 circulation system are similar to the Project and are summarized below:

1. A proposed signalized intersection with LOVR and proposed roadway to serve as the primary access to the Specific Plan area;
2. Widening of LOVR along a portion of the Project site's frontage;
3. Proposed internal roadway network consisting of public roads;
4. Proposed bicycle and pedestrian facilities on public roads;
5. Parking facilities to accommodate residents, employees, and visitors within the Specific Plan area; and
6. A new bus stop that would be integrated into the regional public transportation system.
7. Two separate emergency access points would be provided (see Figure 5-5) while the Mountainbrook Church emergency access road would be deleted.

Proposed Housing and Population

Alternative 3 would provide substantially fewer units than the Project. Under this alternative, 200 multi-family units would accommodate approximately 458 new residents, assuming 2.29 persons per household.

Analysis – Alternative 3 (Minimum LUE-Compliant Alternative)

Impacts under this alternative would be considerably less than that of the Project. Primary tradeoffs would consist of lower intensity buildout of both residential and commercial land uses under this alternative, as well as elimination of development above the 150-foot elevation line. Residential units would decrease by 378 units (65 percent) and commercial development area would decrease by 50,000 square feet (50 percent). Additionally, senior housing units would not be provided within a Life Plan Community. Froom Creek would not be realigned under this project, reducing potential impacts to noise and other affected resources; however, lack of realignment of the creek would not support restoration or improvement of the creek corridor to provide improved steelhead habitat or alleviate flood capacity constraints downstream at U.S. 101. Retaining the majority of the site as open space, including avoiding development above the 150-foot elevation line, would greatly decrease potential environmental impacts, including impacts to biology, aesthetics, and wildfire hazards.

Aesthetics and Visual Resources

Impacts to scenic resources onsite would be greatly decreased under this alternative as a result of reduced development, particularly in areas of higher elevation. Avoiding development above the 150-foot elevation would protect onsite scenic resources, including natural habitats, open grazing land, and serpentine rock outcroppings. Designation of the majority of the site as Conservation/Open Space would smooth visual transitions from rural landscapes to commercial and residential development, substantially reducing impacts to visual character of the Project site and surrounding area for viewers within the Irish Hills Natural Reserve as compared to the Project. Implementation of MM VIS-1, requiring vegetative screens for buildings and associated infrastructure, would ensure potential impacts to aesthetic character would be *less than significant*. Impacts to nighttime lighting and glare would also be reduced as compared to the project due to substantial reduction in development area and associated exterior lighting.

Agricultural Resources

The area impacted by development under this alternative would be substantially less severe when compared to the Project; this alternative would avoid development within the Upper Terrace and the majority of the lower portion of Villaggio. This alternative would result in greater protection of agricultural land currently used for grazing as open space, therefore, impacts to agricultural resources would be reduced compared to the Project. Impacts would remain *less than significant*.

Air Quality and GHG Emissions

Impacts to air quality and GHG emissions would be substantially reduced under this alternative, as overall commercial development would be reduced by half and residential development would be reduced by 378 units as compared to the Project. Grading required for building construction would be substantially lessened under this alternative, which would greatly decrease emissions from heavy construction equipment. This alternative would also reduce anticipated population increases by more than half, and corresponding reductions in vehicle trips associated with reductions in residential, commercial, and senior residential land uses. These reductions in development would also result in a decrease in emissions generated onsite. Additionally, this alternative would be required to implement applicable mitigation measures to further reduce potential impacts to air quality. As a result, impacts to air quality from construction and operation of this alternative are estimated to be lower than APCD thresholds and would no longer be considered significant. Similar to the determination in the LUCE Update EIR, implementation of the City's General Plan would not be consistent with the assumptions contained in the Clean Air Plan. Therefore, specific to consistency with the Clean Air Plan and potential impacts related to GHG emissions from mobile sources, it is expected Alternative 3 would result in *significant and unavoidable impacts.* All other air quality and GHG impacts are anticipated to be *less than significant with mitigation*.

Biological Resources

Impacts under this alternative would substantially reduce potential impacts to biological resources as compared to the Project. This alternative would not include development above the 150-foot elevation line or realignment of Froom Creek, and would substantially reduce the development area and required onsite construction grading as compared to the Project. Reduced development onsite would minimize impacts to sensitive species, drainages, and onsite wetlands that would occur under the Project, although there is

potential for sensitive-species to occur within the development footprint of Alternative 3. Development of areas below the 150-foot elevation line would be greatly limited west of Froom Creek, and habitat connectivity and ecotone protection would be substantially increased as compared to the Project. Additionally, this alternative would develop 14.7 acres of residential units within the lower area of Villaggio, as compared to 23.4 acres under the Project, preserving an additional 8.7 acres of sensitive grasslands onsite, including serpentine bunchgrass. Continued required implementation of mitigation measures as described under Section 3.4, Biological Resources, would further reduce potential impacts to sensitive and protected species and natural habitats onsite. However, although Froom Creek would not be realigned under this alternative, roadway improvements along LOVR would continue to result in significant impacts to a federal jurisdiction wetlands mapped within the LOVR ditch. Lack of realignment of Froom Creek would also not support improved steelhead habitat, as is proposed under the Project. With restoration requirements, impacts would be less than significant with mitigation.

Cultural and Tribal Cultural Resources

Impacts to cultural and tribal cultural resources under this alternative would be reduced, as the reduction in developed area within the Project site and a 278-unit reduction of residential units would decrease potential for incidental discovery and impacts. Site preparation and grading would still occur within areas containing sensitive cultural resources, though mitigation measures would be implemented to reduce potential impacts to less than significant during operation and construction of this alternative. Although mitigation measures would be implemented, relocation of dairy structures on the Froom Ranch to avoid fault lines would continue to have *significant and unavoidable* impacts on potentially significant historic resources.

Geology and Soils

Under this alternative, impacts related to geologic and soil resources would be less severe when compared to the Project due to reduced commercial and residential development and minimal geologic hazards onsite. As under the Project, design and construction of proposed land uses under this alternative would be subject to several requirements and regulations to ensure structural integrity in seismically active areas. Additionally, residential development would be reduced by 278 units and commercial land uses would be reduced by 50,000 square feet, lessening potential impacts to residents, employees, and consumers located onsite. By locating development outside of fault setbacks and implementing the most current industry standards for structural design, impacts of structural failure and risks

to life and property due to seismic shaking and seismic-related ground failure under this alternative would be reduced as compared to the Project, and potential impacts would remain *less than significant*.

Hazards, Hazardous Materials, and Wildfire

Under this alternative, impacts related to fire hazards, hazardous materials, and airport operations would be less than under the Project due to reduced construction activities associated with substantial development reductions and smaller building footprints. Reduction of development areas to already disturbed portions of the site in the northeast corner would reduce urban-wildland interface by approximately 75 percent, reducing defensible space requirements and increasing the distance between proposed residential units and wildfires originating from western upland areas with very high fire hazard potential. Additionally, similar to the Project, this alternative would also be required to implement required mitigation measures that would decrease likelihood of wildfires, improve fire response evacuation, and ensure firefighters can attack fires encroaching on the Project site from the Irish Hills Natural Reserve. Potential impacts from hazardous materials and aircraft would not substantially vary from the Project due to similar construction activities and the amount and layout of development in relation to aircraft hazard areas. Impacts from hazardous materials and contamination during construction would remain similar to the Project, and no new hazards due to use of hazardous materials or exposure to airport safety hazards would result from this alternative. However, as under the Project, Alternative 3 would be located in an area highly susceptible to potential fire hazards, particularly at the base of the Froom Creek watershed where steep slopes and prevailing winds increase potential for a fire in the Irish Hills to move towards the site, and impacts would remain *significant and unavoidable.*

Hydrology and Water Quality

Under this alternative, impacts related to hydrology and water quality would be less than those of the Project due to substantial reductions in development and retention of Froom Creek in its existing alignment onsite. This alternative would result in 21.1 acres of development, including 12.5 acres of residential and commercial uses, considerably decreasing impervious surfaces as compared to the Project. Decreased construction of pervious surfaces would increase groundwater recharge onsite and reduce the potential for erosion, stormwater runoff, and onsite flooding as compared to the Project. The existing onsite stormwater detention basin would continue to attenuate runoff from Irish Hills Plaza and would be upgraded or modified under Alternative 3 to support limited additional

development on the Project site. However, impacts to flooding are likely to be increased compared to the Project due to lack of proposed flood control improvements which would alleviate capacity constraints at the U.S. 101 box culvert. Therefore, capacity constraints would persist under this alternative, though this alternative would not contribute towards those existing impacts. Mitigation measures implemented under this alternative would continue to minimize potential impacts to hydrologic resources during construction. Additionally, avoidance of development within the Upper Terrace would reduce the potential for pollutants to enter Drainages 1, 2, or 3 and other hydrologically connected sensitive habitats onsite. Therefore, impacts would be *less than significant with mitigation*.

Land Use and Planning

Impacts under this alternative would be considerably less than under the Project, as development would not occur above the 150-foot elevation line. By avoiding development within the Upper Terrace and west of Froom Creek, this alternative would eliminate impacts to serpentine native bunchgrass grassland habitats and minimize impacts to springs, seeps, and wetlands along Drainages 1, 2 and 3, as well as associated impacts to 12 special status plant species. As a result, this alternative would comply with the General Plan, including COSE Policies 7.3.1, *Protect Listed Species*, and 7.3.2, *Protect Species of Local Concern.* Retaining the majority of the site as open space would minimize aesthetic impacts and would be consistent with Hillside Planning Area policies in the City's General Plan. However, this alternative would continue to relocate the historic Froom Ranch Dairy complex to preserve onsite historic structures and remove them from identified fault hazard areas, resulting in permanent loss of structures composing a potential historic district despite implementation of mitigation measures and causing potential inconsistencies with COSE Policies 3.3.1, *Historic Preservation,* 3.3.3, *Historical Documentation,* and 3.3.4, *Changes to Historic Buildings*. Impacts would remain *significant and unavoidable* due to inconsistency with City policies and regulations.

Noise

Under this alternative, construction and operational noise impacts would be substantially less severe when compared to the Project. Construction duration would be much shorter than the Project and there would be no overlap in phases. All construction equipment would be isolated on the northern side of the site, well away from sensitive receptors in the adjacent hotel properties and Mountainbrook Church to the south. This alternative would substantially reduce overall commercial and residential land uses as compared to the

Project and would continue to implement all applicable mitigation measures. Noise impacts would be less than significant with mitigation.

Population and Housing

Impacts to population and housing would be less severe when compared to the Project, as the alternative would develop 378 less residential units and 50,000 square feet less commercial land uses. Assuming Citywide household size of 2.29 persons per household, this alternative would result in housing for approximately 458 people, or 866 less people than under the Project. This alternative would locate all residences within medium-high density residential land uses, and senior living units would not be produced. Additionally, this alternative would be expected to result in 91 less jobs than under the Project. Given this alternative does not proposed a Life Community Plan, the development of 200 residential units would result in an increase in housing that would count towards the City's housing supply. In compliance with City requirements, the additional 26 multi-family residential units counting towards City housing supply would result in provision of additional affordable housing units that would be constructed under inclusionary housing requirements. Impacts would continue to be considered *less than significant*.

Public Services and Recreation

This alternative would result in decreased impacts to public services due to substantial reduction of commercial and residential land uses as compared to the Project. Residential population resulting from the alternative would be substantially reduced for this alternative, and corresponding increases in demand on police, fire protection, and education services and facilities would also be reduced. Reduction of commercial land uses on site by 50 percent would further reduce onsite population and decreased demand on these services. Given elimination of senior living units and associated recreational amenities, it would be reasonable to anticipate increased per capita demand for parkland, although overall population on the Project site would be substantially reduced compared to the Project. While dedicated parkland within the Project site would continue to be deficient to serve the expected increase in population and would require payment of in-lieu fees, this alternative would continue to implement mitigation measures ensuring appropriate recreational facilities would be maintained within the City's Sphere of Influence, and impacts would continue to be considered *less than significant with mitigation*.

Transportation and Traffic

Alternative 3 would have substantially reduced impacts to transportation as compared to the Project, as the development footprint would be considerably minimized, and trips would be reduced. This alternative would reduce residential units by 65 percent and commercial square footage by 50 percent compared to the Project. This large reduction in development footprint would be significantly lower anticipated addition of trips to internal and area roadways. Additionally, this alternative is consistent with the General Plan LUE and the environmental impact analysis conducted in the LUCE Update EIR (City of San Luis Obispo 2014). Finally, this alternative would comply with all applicable local, regional, state, and federal requirements, as well as applicable mitigation measures. Therefore, impacts under this alternative would be considered *less than significant*.

Utilities and Energy Conservation

Impacts to utilities would be less severe when compared to the Project, due to the overall substantial reductions of onsite commercial and residential land uses and reduction in the development footprint. By reducing urban development onsite, this alternative would considerably reduce potential demands for water, wastewater treatment, solid waste disposal, and energy. Reduction of commercial land uses by 50 percent and residential units by 378 units would considerably reduce impacts to utility services. In addition to utilization of appropriate mitigation measures, this alternative would continue to comply with applicable design, engineering, and installation requirements and guidelines to increase energy efficiency and minimize environmental impacts to the maximum extent feasible. As a result, impacts would continue to be *less than significant with mitigation* under this alternative.

Mineral Resources

Impacts to mineral resources would be incrementally reduced under this alternative as under the Project. The Alternative would designate the existing red rock quarry for Open Space/Conservation, theoretically retaining available acreage for extraction of this resource within the County. However, mineral resource extraction is prohibited under the City and would not be allowed following adoption of the FRSP. Therefore, impacts to mineral resources within the City would continue to be considered *less than significant*.

5.5 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives shall identify an environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the Project site and its surrounding environment. Table 5-17 summarizes the environmental advantages and disadvantages associated with the proposed Project and the four analyzed alternatives. Although the No Project Alternative would result in the least amount of impacts, CEQA Guidelines section 15126.6 states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

Although the No Project Alternative would result in the least amount of impacts, this alternative would not meet most Project objectives. Given this, Alternative 1 is considered to be the environmentally superior alternative since impacts would be reduced for many issue areas and all Project objectives would be met, as described below. Alternative 1 would substantially reduce impacts as compared to the Project in the following resource areas: aesthetics and visual resources; biological resources; cultural and tribal cultural resources; hazards, hazardous materials, and wildfires; and land use and planning. For instance, avoidance of development within the Upper Terrace area of Villaggio would greatly eliminate impacts to biological resources, including serpentine native bunchgrass grassland habitats, and would minimize impacts to springs, seeps, and wetland habitats along Drainages 1, 2, and 3, as well as associated impacts to 12 special status plant species. Despite substantial reductions to many impacts under Alternative 1 as compared to the Project, Alternative 1 would continue to result in significant and unavoidable impacts to air quality and greenhouse gases; biological resources; historic resources; hazards, hazardous materials, and wildfires; land use and planning; noise; and transportation and traffic.

Alternative 1 would also achieve all of the Project objectives. This alternative is largely consistent with the General Plan LUE, and would develop a mix of commercial, residential, and open space/recreation uses on the Project site. A variety of housing opportunities would be available, including affordable housing as well as potentially more affordable, higher density multi-family housing opportunities and 404 residential units for seniors in a Life Plan Community. The Project site would provide additional opportunities to access the Irish Hills Natural Reserve system, as well as new public parkland within the Project

site that would be located adjacent to the Irish Hills Natural Reserve. Avoidance of development within the Upper Terrace area preserves sensitive plant and wildlife species, including the state- and federally-endangered Chorro Creek bog thistle, as well as important drainages and wetlands within this area. Additionally, realignment of Froom Creek under Alternative 1 would improve stormwater conveyance and create riparian habitat, enhancing fish habitat, and biological resource value. Alternative 1 would be similar to the Project in its contribution to the regional transportation system and its adherence to sustainable development practices and design features. Therefore, this alternative is considered to be the environmentally superior alternative over other alternatives, as shown in Table 5-17.

Table 5-17. Impact Comparison of Alternatives to the Proposed Project

Issue Area	No Project	Alternative 1 – Clustered Development Below the 150-Foot Elevation Alternative (Actionable Alternative)	Alternative 2 – Residential Development Project Alternative	Alternative 3 – Minimum LUE-Compliant Project Alternative
Aesthetics and Visual Resources	Less	Less	Less	Less
Agricultural Resources	Less	Similar	Similar	Less
Air Quality and GHG Emissions	Less	Similar	Similar	Less
Biological Resources	Less	Less	Less	Less
Cultural and Tribal Resources	Greater	Less	Less	Less
Geology and Soils	Less	Similar	Similar	Similar
Hazards, Hazardous Materials, and Wildfires	Less	Less	Less	Less
Hydrology and Water Quality	Less	Similar	Similar	Less
Land Use and Planning	Less	Less	Less	Less
Noise	Less	Less	Less	Less
Population and Housing	Greater	Similar	Similar	Less
Public Services	Less	Similar	Similar	Less
Transportation and Traffic	Less	Similar	Similar	Less
Utilities and Energy Conservation	Less	Similar	Similar	Less
Mineral Resources	Less	Similar	Similar	Similar
Project Objectives Met?	No	Yes	Partially	Partially

6.0 LIST OF PREPARERS

City of San Luis Obispo

Michael Codron	Director of Community Development
Doug Davidson	Deputy Director
Tyler Corey	Principal Planner
Robert Hill	Natural Resources Manager
Shawna Scott	Senior Planner
Luke Schwartz	Transportation Planning/Engineering
Christopher Read	Sustainability Manager
Emily Creel	SWCA Environments Consultants, Contract City Planner

Wood Environment & Infrastructure Solutions, Inc.

Dan Gira	Project Principal
Erika Leachman	Project Manager
Taylor Lane	Deputy Project Manager
Julia Pujo	Deputy Project Manager
Linn Zukor	QA/QC
Doug McFarling	QA/QC
Aaron Johnson	GIS Specialist
Angie Harbin-Ireland	Senior Biologist
David King	Biologist
John Chestnut	Botanist
Brian Cook	Senior Noise Specialist
David Stone	Cultural Resources Specialist
Keri Gannon	Water Resources Specialist
Matthew Sauter	Paleontologist
Taylor Lane	CEQA Air Quality Specialist
Matt Buggert	Lead Environmental Analyst
Aidan Patterson	Environmental Analyst
Kaylan Lamb	Environmental Analyst
Rosann Malloch	Project Administrator
Rita Samaniego	Administrative Assistant
Janice Depew	Word Processor

Applied Earthworks

Barry Price	Principal

Graphics Consultant

Deirdre Stites	Graphics Specialist

TJKM Traffic Consultants

Ruta Jariwala	Principal

VIZf/x

Robert Staehle	Principal / Architect

7.0 REFERENCES AND PERSONS OR ORGANIZATIONS CONTACTED

SECTION 1.0 INTRODUCTION

City of San Luis Obispo. 2014. Land Use and Circulation Elements Update EIR.

SECTION 3.1 AESTHETICS AND VISUAL RESOURCES

California Department of Transportation (Caltrans). 2017. *Scenic Highways. Caltrans*. Accessed: 12 June 2018. Retrieved from: http://www.dot.ca.gov/design/lap/livability/scenic-highways/

City of San Luis Obispo. 2006. General Plan - Conservation and Open Space Element.

——. 2010. *Community Design Guidelines*. Retrieved from: http://www.slocity.org/home/showdocument?id=2104. Accessed: February 2016

——. 2014. General Plan - Circulation Element. City of San Luis Obispo - General Plan. Accessed: 12 June 2018. Retrieved from: http://www.slocity.org/home/showdocument?id=6637

——. 2015. *Zoning Regulations*. Available at: http://www.slocity.org/home/showdocument?id=5861. Accessed: April 2016.

SECTION 3.2 AGRICULTURAL RESOURCES

California Department of Conservation. 1997. "California Agricultural Land Evaluation and Site Assessment (LESA) Model."

———. 2016. "FMMP- Important Farmland Map Categories." 2016. http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx.

California Department of Conservation, Division of Land Resource Protection. 2012. "Table A-31 San Luis Obispo County 2010-2012 Land Use Conversion." https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanLuisObispo.aspx.

———. 2014. "Table A-31 San Luis Obispo County 2012-2014 Land Use Conversion." https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanLuisObispo.aspx.

———. 2016. "Table A-31 San Luis Obispo County 2014-2016 Land Use Conversion." https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanLuisObispo.aspx.

City of San Luis Obispo. 2014. "Land Use and Circulation Elements Update EIR." http://www.slocity.org/home/showdocument?id=6723.

County of San Luis Obispo. 2017. "2017 Annual Crop Report." https://www.slocounty.ca.gov/getattachment/597e9e60-dc50-4d7e-9fe0-d2f8a80f8874/Crop-Report-2017.aspx.

Natural Resources Conservation Service (NRCS). 2016. "Soil Classification in the Online Web Soil Survey," 2016.

———. 2018. "Natural Resources Conservation Service - Web Soil Survey - San Luis Obispo County, California, Coastal Part (CA664)." 2018. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

SECTION 3.3 AIR QUALITY

Association of Environmental Professionals (AEP). 2016. "Final White Paper - Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets in California." https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf.

Air Resources Board (ARB). 2007. "Press Release: 2007-12-06 Air Board Passes Two Major Building Blocks in State's Effort to Fight Global Warming." 2007. http://www.arb.ca.gov/newsrel/nr120607.htm.

———. 2008. "Climate Change Scoping Plan."

California Department of Finance. 2018. "E-1 Population Estimates for Cities, Counties, and the State — January 1, 2017 and 2018." 2018. http://dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.

California Natural Resources Agency. 2009. "California Climate Adaptation Strategy." 2009. http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf.

———. 2018. "California's Fourth Climate Change Assessment: Central Coast Region Report." http://www.climateassessment.ca.gov/about/.

California Air Resources Board (CARB). 2017. "The 2017 Climate Change Scoping Plan Update." 2017. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

———. 2018. "Quality Assurance Air Monitoring Site Information - San Luis Obispo-Higuera Street." California Air Resources Board. 2018. https://www.arb.ca.gov/qaweb/site.php?s_arb_code=40836.

———. 2019. "Air Quality Data (PST) Query Tool." California Air Resources Board. 2019. https://www.arb.ca.gov/aqmis2/aqdselect.php.

City of San Luis Obispo. 2012. "Climate Action Plan." https://www.slocity.org/government/department-directory/city-administration/office-of-sustainability/climate-action/climate-action-plan-1949.

———. 2014. “General Plan Ch1 - Land Use Element.”

———. 2018. “Council Agenda Report - September 18, 2018: Climate Action Plan Update Status Report, Greenhouse Gas Emissions Inventory Update, and Direction on GHG Reduction Targets Study Session.” http://opengov.slocity.org/weblink/DocView.aspx?dbid=1&id=83887&page=1&cr=1.

San Luis Obispo APCD. 2012. “CEQA Air Quality Handbook.” 12.10.2015.

San Luis Obispo County Air Pollution Control District (SLO County APCD). 2001. “Clean Air Plan.”

———. 2012. “CEQA Air Quality Handbook - A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review.” https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20November%202018%29_LinkedwithMemo.pdf.

———. 2019. “San Luis Obispo County Attainment Status.” 2019. https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/AttainmentStatus29January2019.pdf.

San Luis Obispo Council of Governments (SLOCOG). 2017. “2050 Regional Growth Forecast for San Luis Obispo County.” SLOCOG - Regional Growth Forecasts. 2017. https://www.dropbox.com/s/5tl8ia0j8zixrry/2050RegionalGrowthForecast_01FullReport_RevDec2017.pdf?dl=0.

United States Energy Information Administration (U.S. EIA). 2017. “U.S. Energy Information Administration (EIA) - State Carbon Dioxide Emissions Data Summary - Data for 2015 - Released October 2017.” 2017. https://www.eia.gov/environment/emissions/state/.

———. 2018. “Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016 Full Report.” 2018. https://www.epa.gov/ghgemissions/draft-inventory-us-greenhouse-gas-emissions-and-sinks-1990-2016.

Western Regional Climate Center. 2016. “Monthly Climate Summary - San Luis Obispo.” 2016. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7851.

SECTION 3.4 BIOLOGICAL RESOURCES

California Department of Fish and Wildlife (CDFW). 2014. *California Natural Diversity Database (CNDDB) Rarefinder* (version 5).

City of San Luis Obispo. 2006. “General Plan - Conservation and Open Space Element.”

———. 2019. "Conservation Efforts Lead to the Discovery of a New Plant Species." April 23, 2019. https://www.slocity.org/Home/Components/News/News/6698/17.

California Native Plant Society (CNPS). 2018a. "CNPS Rare Plant Ranks | California Native Plant Society." California Native Plant Society. 2018. https://www.cnps.org/rare-plants/cnps-rare-plant-ranks.

———. 2018b. "Inventory of Rare and Endangered Plants of California (Online Edition, v8-03 0.39)." 2018. http://www.rareplants.cnps.org/.

County of San Luis Obispo Fire Department. 2018. "Historic Fire Map - California." http://slocountyfire.org/firehistory/.

National Marine Fisheries Service (NMFS). 2007. "2007 Federal Recovery Outline for the Distinct Population Segment of Southern California Coast Steelhead." 2007. http://friendsofventurariver.org/wp-content/themes/client-sites/venturariver/docs/fed-recovery-outline-so-cal-coast-steelhead-2007-final.pdf.

U.S. Fish and Wildlife Service (USFWS). 2018. "Environmental Conservation Online System - Online Mapper." U.S. Fish and Wildlife Service - Environmental Conservation Online System. 2018. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77.

SECTION 3.5 CULTURAL AND TRIBAL RESOURCES

City of San Luis Obispo. 2009. Archaeological Resource Preservation Program Guidelines. Community Development Department. October.

Chattel, Inc. 2018. Froom Ranch, 12165 Los Osos Valley Road, San Luis Obispo, California Linear Rock Features Historical Resource Evaluation.

Condor Country Consulting, Inc. 2018. Froom Ranch Limited Phase II Cultural Resources Assessment, Froom Ranch Storm Water Basin, County of San Luis Obispo, , California. Prepared for FirstCarbon Solutions and John Madonna Construction Company. September 17.

FirstCarbon Solutions. 2015. Froom Ranch Specific Plan Cultural Resource Assessment, San Luis Obispo, San Luis Obispo County, California. Prepared for John Madonna Construction Company. February 20. Revised July 21, 2017.

———. 2017. Froom Ranch Specific Plan Historic Resource Assessment, San Luis Obispo, San Luis Obispo County, California. Prepared for John Madonna Construction Company. February 20. Revised July 21, 2017.

———. 2018. Froom Ranch Retention Basin and Land Exchange Areas Supplemental Phase 1 Cultural Resources Report, San Luis Obispo County, California. Prepared for John Madonna Construction Company. August 10.

United States Department of the Interior. 1991. National Register Bulletin 15. How to Apply the National Register Criteria for Evaluation. U.S. Government Printing Office: Washington, D.C.

Weeks, Kay D. and Grimmer, Anne E. 1995. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings. U.S. Department of the Interior National Parks Service, Technical Preservation Services.

Wiegers, M.O. and C.I. Gutierrez. 2010. Geologic Map of the San Luis Obispo 7.5' Quadrangle, San Luis Obispo County, California: A Digital Database. California Department of Conservation – California Geological Survey.

SECTION 3.6 GEOLOGY AND SOILS

California Department of Conservation. 2010. "Geologic Map of the San Luis Obispo 7.5' Quadrangle." file:///C:/Users/taylor.lane/Downloads/SanLuisObispo24k_preliminary.pdf.

City of San Luis Obispo. 2000. "General Plan - Safety Element."

Dibblee, Thomas W., Jr. 2004. "Geologic Map of the San Luis Obispo Quadrangle."

Earthquake Track. 2018. "Recent Earthquakes Near San Luis Obispo, California, United States." 2018. https://earthquaketrack.com/us-ca-san-luis-obispo/recent?mag_filter=5.

Federal Emergency Management Agency (FEMA). 2011. "Possible Explanations for 'Extent' for Expansive Soils. "

GeoSolutions, Inc. 2017. "Preliminary Engineering Geology Investigation - Froom/El Villaggio Specific Plan APNs: 067-241-030 and -031 Project SL09734-1 April 14, 2017."

Jefferson, G.T., H.L.Fierstine, J.R.Wesling, and T.L. Ku. 1992. Pleistocene Terrestrial Vertebrates from near Point San Luis, and Other Localities in San Luis Obispo County, California. Bulletin of the Southern California Academy of Sciences Vol 9, No. 1, pp. 26-38.

National Aeronautics and Space Administration (NASA). 2016. "San Joaquin Valley Is Still Sinking." 2016. https://earthobservatory.nasa.gov/IOTD/view.php?id=89761.

NRCS. 2018. "Natural Resources Conservation Service - Web Soil Survey - San Luis Obispo County, California, Coastal Part (CA664)." 2018. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

San Luis Obispo County Department of Public Works (SLO County DPW). 2016. "San Luis Obispo County Department of Public Works & Transportation - Interactive Data Viewer." 2016. http://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PW_SGMA/viewers/PW_Viewer/virtualdirectory/Resources/Config/Default&LayerTheme=3.

Scott, E., and K. Springer. 2003. "CEQA and Fossil Presrvation in Southern California."

Society of Vertebrate Paleontology. 2010. "Standard Procedures For the Assessment and Mitigation of Adverse Impacts to Paleontological Resources." 2010. http://vertpaleo.org/The-Society/Governance-Documents/SVP_Impact_Mitigation_Guidelines.aspx.

University of California Museum of Paleontology (UCMP). 2018. Vertebrate Paleontology Collections Database. Retrieved April 20 and May 1, 2018.

SECTION 3.7 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

Barros, Ana M.G., Jose M.C. Pereira, Max A. Moritz, and Scott L. Stephens. 2013. "Spatial Characterization of Wildfire Orientation Patterns in California. Forests 2013, 4; Pp 197-217." 2013. http://nature.berkeley.edu/moritzlab/docs/Barros_etal_Forests_2013.pdf.

California Department of Forestry and Fire Protection (CALFIRE). 2007. "Draft Fire Hazard Severity Zones in Local Responsibility Areas." http://frap.fire.ca.gov/webdata/maps/san_luis_obispo/fhszl06_1_map.40.pdf.

California Department of Conservation. 2016. "Office of Mine Reclamation - Mines On Line (MOL)." 2016. https://maps.conservation.ca.gov/mol/index.html.

City of San Luis Obispo. 2014. "City of San Luis Obispo General Plan - Chapter 5 Safety." 2014. http://www.slocity.org/home/showdocument?id=6645.

Cohen, J.D. 1999. "Reducing the Wildland Fire Threat to Homes: Where and How Much."

County of Los Angeles. 2011. "Final Environmental Impact Report for the Pepperdine University Campus Life Project. Pepperdine University, Malibu, CA." 2011. http://planning.lacounty.gov/assets/upl/case/project_r2007-03064_feir.pdf.

County of San Luis Obispo Fire Department. 2018. "Historic Fire Map - California." http://slocountyfire.org/firehistory/.

Department of Toxic Substances Control (DTSC). 2018. "EnviroStor." Department of Toxic Substances Control EnviroStor. 2018. https://www.envirostor.dtsc.ca.gov/public/.

Fire Resource and Assessment Program. 2017. "Fire Perimeters - CAL FIRE; USFW; NPS; BLM." 2017. http://slocountyfire.org/firehistory/.

Grisanti & & Associates. 2011. "Priliminary Site Assessment - Avila Ranch Property."

Hubbard, T.W. 1986. "Stand Age and Growth Dynamics in Chamise Chaparral. Masters Thesis. San Diego State University, San Diego, California."

Johnson Aviation. 2014. "Airport Land Use Compatibility Report."

Keeley, Jon, and Mark Borchert. 2005. "Rapid Assessment Reference Condition Model - California Chaparral."

Larigauderie, A., T.W. Hubbard, and H.D. Stafford. 1990. "Growth Dynamics of Two Chaparral Shrub Species with Time After Fire. Madrono 37: p.225-236."

Los Angeles County Fire Department. 2012. "County of Los Angeles Fire Department Strategic Fire Plan." 2012. http://cdfdata.fire.ca.gov/fire_er/fpp_planning_plans_details?plan_id=150.

San Luis Obispo County Airport Land Use Commission (SLO County ALUC). 2005. "Airport Land Use Plan for the San Luis Obispo County Regional Airport." San Luis Obispo County Regional Airport - Airport Land Use Commission. 2005. https://www.sloairport.com/wp-content/uploads/2016/10/ALUP_TXT.pdf.

State Water Resources Control Board (SWRCB). 2018. "GeoTracker." State Water Resources Control Board GeoTracker. 2018. https://geotracker.waterboards.ca.gov/.

U.S. Forest Service. 2000. "Mangan, R.J. Improving Firefighter Safety in the Wildland-Urban Intermix."

———. 2012. "Effects of Climatic Variability and Change on Forest Ecosystems: A Comprehensive Science Synthesis for the U.S. Forest Sector - Risk Assessment for Wildfire in the Western United States | Publications | SRS Https://Www.fs.fed.us/Pnw/Pubs/pnw_gtr870/pnw_gtr870_011.pdf." 2012. https://www.srs.fs.usda.gov/pubs/42610.

Western Regional Climate Center. 2018. "Prevailing Wind Direction." 2018. https://wrcc.dri.edu/Climate/comp_table_show.php?stype=wind_dir_avg.

SECTION 3.8 HYDROLOGY AND WATER QUALITY

Balance Hydrologics, Inc. 2005. Hydrologic Monitoring Plan for Sustaining a Separated Wetland Near Calle Joaquin, San Luis Obispo, California.

Central Coast Regional Water Quality Control Board (Central Coast RWQCB). 2017. Water Quality Control Plan for the Central Coast Basin, September 2017 Edition. California Water Boards. https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/docs2017/2017_basin_plan_r3_complete.pdf, accessed May 29, 2018.

City of San Luis Obispo. 2003. Waterway Management Plan - San Luis Obispo Creek Watershed. http://www.slocity.org/government/department-directory/public-works/documents-online/waterway-management-plan, accessed April 21, 2016.

Land Conservancy of San Luis Obispo County. 2002. San Luis Obispo Creek Watershed Enhancement Plan. http://www.coastalrcd.org/images/cms/files/SLO%20Creek%20Watershed%20Enhancement%20Plan.pdf, accessed May 29, 2018.

San Luis Obispo Watershed Project (SLO Watershed Project). 2014. San Luis Obispo Creek Watershed. SLO Watershed Project. http://www.slowatershedproject.org/reports/snapshots/Snapshot-South-County-San-Luis-Obispo-Creek-Watershed.pdf, accessed May 29, 2018.

SWRCB. 2018. Geotracker. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=san+luis+obispo, accessed June 8, 2018.

Wood. 2019. Email communication with Tyler Marley, Water Resources Engineer. April 10.

SECTION 3.9 LAND USE

City of San Luis Obispo. 1996. “General Plan - Noise Element.” http://www.slocity.org/home/showdocument?id=6643.

———. 2006. “General Plan - Conservation and Open Space Element.”

———. 2014a. “General Plan - Circulation Element.” City of San Luis Obispo - General Plan. 2014. http://www.slocity.org/home/showdocument?id=6637.

———. 2014b. “General Plan - Land Use Element.” http://www.slocity.org/home/showdocument?id=6635.

———. 2014c. “General Plan - Safety.” 2014. http://www.slocity.org/home/showdocument?id=6645.

———. 2015. “General Plan - Housing Element.” 2015. http://www.slocity.org/home/showdocument?id=5204.

———. 2018. “General Plan - Water and Wastewater Management Element.” 2018. https://www.slocity.org/home/showdocument?id=22356.

City of San Luis Obispo, and County of San Luis Obispo. 2013. *Tank Farm EIR*.

County of San Luis Obispo. 2019. “San Luis Obispo County General Plan - Land Use Ordinance.” https://www.slocounty.ca.gov/getattachment/6d93f812-df15-4203-b033-7d802c5c9cf0/Inland-Land-Use-Ordinance-(Title-22).aspx.

Johnson Aviation. 2014. “Airport Land Use Compatibility Report.”

SLO County ALUC. 2005. “Airport Land Use Plan for the San Luis Obispo County Regional Airport.” San Luis Obispo County Regional Airport - Airport Land Use Commission. 2005. https://www.sloairport.com/wp-content/uploads/2016/10/ALUP_TXT.pdf.

SECTION 3.10 NOISE

Caltrans. 1998. “Technical Noise Supplement.” http://www.dot.ca.gov/hq/env/noise/pub/Technical%20Noise%20Supplement.pdf.

———. 2013. “Transportation and Construction Vibration Guidance Manual.” http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.

———. 2017. "2017 Traffic Volumes: Route 101." https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-101.

City of San Luis Obispo. 1996. “General Plan Ch4 - Noise Element.”

———. 2008. “City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12.060.” http://www.codepublishing.com/CA/SanLuisObispo/#!/SanLuisObispo09/SanLuisObispo0912.html#9.12.060.

———. 2014. “Land Use and Circulation Elements Update EIR.” http://www.slocity.org/home/showdocument?id=6723.

Harris Miller & Hanson Inc. 2006. “Transit Noise and Vibration Impact Assessment.” May 2006. http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf.

Holzman, David C. 2011. “Vehicle Motion Alarms: Necessity, Noise Pollution, or Both?” *Environmental Health Perspectives* 119 (1): A30–33.

Lord and Taubitz. 2017. “Acoustics Assessment for Froom Ranch Project.” 45 dB Acoustics Consulting.

Personal communication with Manager. 2019a. “Phone Call with TJ Maxx Manager.”

———. 2019b. “Phone Call with Home Depot Manager.”

Personal communication with Receiving Department employee. 2019. “Phone Call with Whole Foods Receiving Department Employee.”

SLO County ALUC. 2005. “Airport Land Use Plan for the San Luis Obispo County Regional Airport.” https://www.sloairport.com/airport-land-use-commission-aluc/.

U.S. Department of Transportation. 2006. "Roadway Construction Noise Model - RCNM Version 1.1."

———.2012. “High-Speed Ground Transportation Noise and Vibration Impact Assessment, Final Report.”

———. 2013. “Construction Noise Handbook.” https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm.

SECTION 3.11 POPULATION AND HOUSING

California Department of Finance. 2019. “E-1 Population Estimates for Cities, Counties, and the State - January 1, 2018 and 2019.” http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/.

California Employment Development Department. 2018a. “Labor Force and Unemployment Rate for Cities and Census Designated Places.” July 2018. https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html.

———. 2018b. “Unemployment Data in California.” September 2018. https://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html.

City of San Luis Obispo. 2014a. “General Plan Ch1 - Land Use Element.”

———. 2014b. “Land Use and Circulation Elements Update EIR.” http://www.slocity.org/home/showdocument?id=6723.

———. 2015. “General Plan - Housing Element.” 2015. http://www.slocity.org/home/showdocument?id=5204.

———. 2018. “General Plan Annual Report 2018.” https://www.slocity.org/home/showdocument?id=22768.

———. 2019. "2019 Affordable Housing Standards - Effective July 1, 2019." 2019. https://www.slocity.org/home/showdocument?id=23428.

San Luis Obispo Chamber of Commerce. 2018. "San Luis Obispo Chamber of Commerce, Major Employers." September 2018. https://slochamber.org/our-community/community-profile/major-employers/.

SLOCOG. 2011. "San Luis Obsipo County 2040 Population, Housing, and Employment Forecast." http://www.slocog.org/sites/default/files/San%20Luis%20Obispo%20County%202040%20Population%20Housing%20Employment%20Forecast.PDF.

———. 2017. "2050 Regional Growth Forecast for San Luis Obispo County." SLOCOG - Regional Growth Forecasts. 2017. https://www.dropbox.com/s/5tl8ia0j8zixrry/2050RegionalGrowthForecast_01FullReport_RevDec2017.pdf?dl=0.

U.S. Census Bureau. 2017. "San Luis Obispo County/City 2013-2017 American Community Survey 5-Year Estimates." https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2017/.

U.S. Department of Housing and Urban Development. 2017. "FY 2017 LMISD Local Governments by State, Based on 2006-2010 American Community Survey." 2017. https://www.hudexchange.info/programs/acs-low-mod-summary-data/acs-low-mod-summary-data-local-government/.

SECTION 3.11 PUBLIC SERVICES AND RECREATION

American Association of Retired Persons (AARP). 2016. "Age-Friendly Atlanta Action Plan 2014-2016." 2016. https://www.aarp.org/content/dam/aarp/livable-communities/documents-2016/Age-Friendly%20Atlanta%20Action%20Plan.pdf.

California Department of Education. 2018. "Enrollment for Charter and Non-Charter Schools - San Luis Coastal Unified District (CA Dept of Education)." 2018. https://dq.cde.ca.gov/dataquest/dqcensus/EnrCharterLevels.aspx?cds=4068809&agglevel=district&year=2017-18.

Chief Keith Aggson. 2019. Froom Ranch Specific Plan ADEIR - Fire Protection Services SectionEmail.

City of Buellton. 2013. "Meritage Senior Living Project Final Subsequent Environmental Impact Report." 2013. https://www.cityofbuellton.com/files/Environmental%20Documents/0629B-Meritage%20Senior%20Living%20Project%20FEIR%20Vol%20I.pdf.

City of Los Angeles. 2003. "Draft Master Environmental Impact Report for Corbin and Nordhoff Redevelopment Project." 2003. https://planning.lacity.org/eir/Corbin_Nordhoff/MEIR/index.htm.

———. 2008. "La Cienega Eldercare Facility Project Draft Environmental Impact Report." 2008. https://planning.lacity.org/eir/CienegaElderCare/DEIR/DEIR%20Sections/IV.L.%20Recreation.pdf.

City of Sacramento. 2016. "Sacramento Senior Living [P15-041]." 2016. https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Environmental-Impact-Reports/RevisedSacSeniorLiving_DraftISMND_050416.pdf?la=en.

City of San Luis Obispo. 2018. "Fire Department Summary." 2018. http://www.slocity.org/government/department-directory/fire-department.

———. 2019. "San Luis Obispo Parks + Recreation Master Plan Community Needs Assessment."

City of San Luis Obispo Police Department (SLOPD). 2017. "San Luis Obispo Police Annual Report 2016." 2017. http://www.slocity.org/home/showdocument?id=16481.

———. 2018. "About the Department | City of San Luis Obispo, CA." 2018. http://www.slocity.org/government/department-directory/police-department/about-the-department.

County of Monterey. 2018. "Monterey County, CA : River View at Las Palmas Assisted Living Senior Facility." 2018. http://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/river-view-at-las-palmas-assisted-living-senior-facility.

Governing. 2016. "FBI's Uniform Crime Report Data." 2016. http://www.governing.com/gov-data/safety-justice/police-officers-per-capita-rates-employment-for-city-departments.html.

Personal Communication With SLOFD Fire Chief. 2018. "Phone Call with SLOFD Fire Chief Garret Olson."

Personal Communication with SLOPD Watch Officer. 2018. "Phone Call with Jeff Booth, Sergeant with the Police Department - August 1, 2018."

San Luis Coastal Unified School District (SLCUSD). 2015. "San Luis Coastal Unified School District Enrollment Projections Capacity Analysis 2014/15 Update."

———. 2018. "Developer Fees." 2018. http://www.slcusd.org/department-page.php?id=38.

———. 2019. "San Luis Coastal USD SchoolSite Locator." SchoolSite Locator. 2019. http://apps.schoolsitelocator.com/?districtcode=00200.

Town of Windham. 2008. "Impact Fees for Public Facilities." http://www.nhctap.com/documents/ctap/products/Windham/Impact%20Fee%20Study%20for%20Safety%20Facilities.pdf.

U.S. Department of Health and Human Services. 2018. "Healthy Aging." 2018. https://www.hhs.gov/aging/healthy-aging/index.html#active.

SECTION 3.13 TRANSPORTATION AND TRAFFIC

Caltrans. 2002. "Guide for Preparation of Traffic Impact Studies." https://nacto.org/docs/usdg/guide_preparation_traffic_impact_studies_caltrans.pdf.

Transportation Research Board. 2010. "Highway Capacity Manual."

SECTION 3.14 UTILITIES AND ENERGY CONSERVATION

Bureau of Transportation Statistics. 2016. "National Transportation Statistics | Bureau of Transportation Statistics." 2016. https://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/index.html#chapter_4.

California Department of Resources Recycling and Recovery (CalRecycle). 2013a. "Commercial Sector: Estimated Solid Waste Generation Rates." 2013. http://www.calrecycle.ca.gov/wastechar/wastegenrates/Commercial.htm.

———. 2013b. "Residential Developments: Estimated Solid Waste Generation Rates." 2013. http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm.

———. 2013c. "Service Sector: Estimated Solid Waste Generation Rates." 2013. http://www.calrecycle.ca.gov/wastechar/wastegenrates/Service.htm.

———. 2018. "Solid Waste Facility Listing/Details Page - Cold Canyon Landfill, Inc. (40-AA-0004)." 2018. http://www.calrecycle.ca.gov/SWFacilities/Directory/40-AA-0004/Detail/.

———. 2019a. "Countywide, Regionwide, and Statewide Jurisdiction Diversion / Disposal Progress Report." 2019. https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DiversionDisposal.

———. 2019b. "SWIS Facility/Site Search." 2019. https://www2.calrecycle.ca.gov/swfacilities/Directory/40-AA-0004/Index.

Caltrans. 2016. "San Luis Obispo County Transportation Quick Facts."

———. 2017. "California Transportation Quick Facts - 2017." http://www.dot.ca.gov/drisi/library/qf/qf2017.pdf.

California Energy Commission (CEC). 2015. "California's Major Sources of Energy." 2015. http://energyalmanac.ca.gov/overview/energy_sources.html.

———. 2018. "California Energy Consumption Database." California Energy Commission. 2018. http://ecdms.energy.ca.gov/.

———. 2019a. "California Gasoline Data, Facts, and Statistics." 2019. https://www.energy.ca.gov/almanac/transportation_data/gasoline/.

———. 2019b. "Energy Consumption Database - Electricity Consumption (GWh) and Natural Gas Consumption (Millions of Therms)." 2019. http://www.ecdms.energy.ca.gov/.

———. 2019c. "Total System Electric Generation." 2019. https://ww2.energy.ca.gov/almanac/electricity_data/total_system_power.html.

City of San Luis Obispo. 2010. "Urban Water Management Plan (UWMP)." 2010. http://www.slocity.org/home/showdocument?id=6369.

———. 2012. "Climate Action Plan 2012 - Resolution No. 10388 - Community Development Department." 2012. http://www.slocleanair.org/images/cms/upload/files/SLO_CAP_WEb.pdf.

———. 2014a. "Background Report: Circulation." https://www.slocity.org/home/showdocument?id=6737.

———. 2014b. "Land Use and Circulation Elements Update EIR." http://www.slocity.org/home/showdocument?id=6723.

———. 2014c. "Sewer System Management Plan Update." 2014. http://www.slocity.org/home/showdocument?id=6347.

———. 2015b. "Final WRRF Facilities Plan." 2015. http://opengov.slocity.org/weblink8/1/doc/43362/Page1.aspx.

———. 2015c. "Waste Resources Recovery Facility Project Final EIR." http://www.slocity.org/Home/ShowDocument?id=10532.

———. 2015d. "Water Master Plan." https://www.slocity.org/home/showdocument?id=6439.

———. 2016a. "2015 Urban Water Management Plan." 2016. https://www.slocity.org/home/showdocument?id=13618.

———. 2016b. "2015 Water Resources Status Report."

———. 2016c. "Draft 2015 Urban Water Management Plan and 2016 Amendments to Water and Wastewater Management Element." 2016. http://www.slocity.org/Home/ShowDocument?id=9995.

———. 2017a. "2017 Water Resources Status Report - For the Time Period October 1, 2016 through September 30, 2017." 2017. https://www.slocity.org/Home/ShowDocument?id=17651.

———. 2017b. "Avila Ranch Final EIR." 2017. http://www.slocity.org/government/department-directory/community-development/documents-online/environmental-review-documents/avila-ranch-final-eir.

———. 2017c. "Recylced Water Master Plan." https://www.slocity.org/home/showdocument?id=14955.

———. 2018a. "2018 Water Resources Status Report." https://www.slocity.org/Home/ShowDocument?id=22442.

———. 2018b. "Garbage & Recycling - Solid Waste Disposal." 2018. http://www.slocity.org/government/department-directory/utilities-department/garbage-recycling/solid-waste.

———. 2018c. "General Plan - Water and Wastewater Management Element." 2018. https://www.slocity.org/home/showdocument?id=22356.

———. 2018d. "Water Sources." 2018. http://www.slocity.org/government/department-directory/utilities-department/water/water-sources.

———. 2019a. "2019 Sewer System Management Plan Update." https://www.slocity.org/home/showdocument?id=6347.

———. 2019b. "Draft 2016 Community Greenhouse Gas Emissions Inventory Update." https://www.slocity.org/home/showdocument?id=23298.

———. 2019c. "Inflow and Infiltration." 2019. https://form.jotformpro.com/63327044468963.

———. 2019d. "Water Resource Recovery Facility (WRRF) Project." May 8, 2019. https://www.slocity.org/government/department-directory/utilities-department/wastewater/wastewater-treatment/wrrf-upgrade-project.

Monterey Bay Community Power (MBCP). 2019. "Monterey Bay Community Power 2018 Power Content Label." https://www.mbcommunitypower.org/wp-content/uploads/2019/09/MBCP-2018-PCL_MBchoice-and-MBprime.pdf.

Personal Communication with Jennifer Metz, City of San Luis Obispo Utilities Department. 2019. "Email communication with Jennifer Metz, City of San Luis Obispo."

Pacific Gas and Electric Company (PG&E). 2018a. "PG&E 2017 Power Content."

———. 2018b. "PG&E Overview." Pacific Gas and Electric Company - PG&E Overview. 2018. http://www.pgecorp.com/corp_responsibility/reports/2015/bu01_pge_overview.jsp.

SLOCOG. 2010. "SB 375 Regional Greenhouse Gas Emissions Reductions Target-Setting Report for the San Luis Obispo Region." https://www.arb.ca.gov/cc/sb375/mpo/slocog/slocogreport52110.pdf.

Southern California Gas Company (SoCalGas). 2019. "Company Profile | SoCalGas." Southern California Gas Company - Company Profile. 2019. https://www.socalgas.com/about-us/company-profile.

U.S. Census Bureau. 2019a. "QuickFacts: California." 2019. https://www.census.gov/quickfacts/ca.

———. 2019b. "San Luis Obispo City California QuickFacts from the US Census Bureau." 2019. https://www.census.gov/quickfacts/CA.

Water Systems Consulting, Inc. 2015. "Wastewater Collection System Infrastructure Renewal Strategy." 2015. http://www.slocity.org/home/showdocument?id=6504.

SECTION 3.15 MINERAL RESOURCES

California Department of Conservation. 1989. "Special Report 162 - 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."

———. 2017a. "2017 Mining Operation Annual Report for CA Mine ID # 91-40-0024."

———. 2017. "Mines Online Interactive Web Map." https://maps.conservation.ca.gov/mol/index.html.

———. 2017b. "SMGB Designation Report No. 15 - State Mining and Geology Board Designation of Regionally Significant Aggregate Resources in the San Luis Obispo-Santa Barbara Production-Consumption Region." https://www.conservation.ca.gov/smgb/reports/Documents/Designation_Reports/Designation-Report-15-SLO-SB.pdf.

California Geological Survey. 2011. "Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo-Santa Barbara Production-Consumption Region, California."

City of San Luis Obispo. 2006. "General Plan - Conservation and Open Space Element."

Cody Scheel, San Luis Obispo County Planner. 2019. Phone Call with Cody Scheel, San Luis Obispo County Planner County Planner.

County of San Luis Obispo. 2010. "Conservation and Open Space Element."

FirstCarbon Solutions, and Chattel, Inc. 2017. "Froom Ranch Specific Plan Historic Resource Assessment. Revised."

SECTION 5.0 ALTERNATIVES

SLO County ALUC. 2005. Airport Land Use Plan for the San Luis Obispo County Regional Airport.

——. 2014. Airport Land Use Commission Agenda Item 1 July 16, 2014.

Central Coast Transportation Consulting. 2016. Avila Ranch Draft Transportation Impact Study.

Wood Environment &
Infrastructure Solutions, Inc.
104 West Anapamu Street, Suite 204A
San Luis Obispo, California 93101